

IBM i  
Version 7.2

*Database  
SQL messages and codes*



**Note**

Before using this information and the product it supports, read the information in [“Notices” on page 283.](#)

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# Contents

- SQL messages and codes..... 1**
  - What's new for IBM i 7.2.....1
  - PDF file for SQL messages and codes..... 1
  - SQLCODE and SQLSTATE concepts.....1
  - Listing of SQLSTATE class codes..... 3
  - Listing of SQLSTATE values..... 5
  - SQL message concepts.....33
  - Listing of SQL messages..... 34
  
- Notices.....283**
  - Trademarks..... 284
  - Terms and conditions..... 284



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# SQL messages and codes

Use this topic collection to find descriptions of codes and messages returned when using SQL with Db2® for i. This topic contains listings of SQLCODEs, SQLSTATEs, class codes, and SQL messages.

**Note:** By using the code examples, you agree to the terms of the [“Code license and disclaimer information”](#) on page 281.

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## What's new for IBM i 7.2



Read about new or significantly changed information for the SQL messages and codes topic collection.

### New messages and codes added

Several additions were made to the [“Listing of SQLSTATE values”](#) on page 5 and the [Listing of SQL messages](#).

### How to see what's new or changed

To help you see where technical changes have been made, this information uses:

- The  image to mark where new or changed information begins.
- The  image to mark where new or changed information ends.

In PDF files, you might see revision bars (|) in the left margin of new and changed information.

To find other information about what's new or changed this release, see the [Memo to users](#).

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## PDF file for SQL messages and codes

You can view and print a PDF file of this information.


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## SQLCODE and SQLSTATE concepts

This reference provides a list of SQLCODEs and their associated SQLSTATEs. In this reference, you can find instructions for finding a SQLCODE in the message file along with the text for these messages.

SQLCODEs and SQLSTATEs are returned in the SQLCA structure or through the GET DIAGNOSTICS statement. SQLSTATE is the preferred standard return code. It provides application programs with return

codes for common error conditions found among the DB2 products. SQLSTATEs are particularly useful when handling errors in distributed SQL applications.

## SQLCODE

An SQLCODE is a return code. The return code is sent by the database manager after completion of each SQL statement.

Each SQLCODE that is recognized by a Db2 for i application server has a corresponding message in the message file QSQLMSG. The message identifier for any SQLCODE is constructed by appending the absolute value (5 digits) of the SQLCODE to SQ and changing the third character to L if the first character of the SQLCODE is 0. For example, if the SQLCODE is 30070, the message identifier is SQ30070. If the SQLCODE is -0204, the message identifier is SQL0204. Lastly, if the SQLCODE is a 3-digit positive number, a zero is added before the first digit. For example, if the SQLCODE is 551, the message identifier is SQL0551.

## SQLSTATE

SQLSTATE provides application programs with common return codes for success, warning, and error conditions that are found among the DB2 products. SQLSTATE values are particularly useful when handling errors in distributed SQL applications. SQLSTATE values are consistent with the SQLSTATE specifications that are contained in the SQL 1999 standard.

An SQLSTATE value is a return code that indicates the outcome of the most recently executed SQL statement. The mechanism used to access SQLSTATE values depends on where the SQL statement is executed. In Java™, SQLSTATE values are returned by using the `getSQLState()` method. In SQL functions, SQL procedures, SQL triggers, and embedded applications other than Java, SQLSTATE values are returned in the following ways:

- The last five bytes of the SQLCA
- A stand-alone SQLSTATE variable
- The GET DIAGNOSTICS statement

SQLSTATE values are designed so that application programs can test for specific conditions or classes of conditions.

SQLSTATE values are comprised of a two-character class code value, followed by a three-character subclass code value. Class code values represent classes of successful and unsuccessful completion conditions. If you want to use SQLSTATE as the basis of your application's return codes, you can define your own SQLSTATE classes or subclasses using the following guidelines:

- SQLSTATE classes that begin with the characters 7 through 9 or I through Z can be defined. Within these classes, any subclass can be defined.
- SQLSTATE classes that begin with the characters 0 through 6 or A through H are reserved for the database manager. Within these classes, subclasses that begin with the characters 0 through H are reserved for the database manager. Subclasses that begin with the characters I through Z can be defined.

The class code of an SQLSTATE value indicates whether the SQL statement was executed successfully (class codes 00 and 01) or unsuccessfully (all other class codes).

SQLSTATE is related to SQLCODE. Every SQLSTATE has one or more SQLCODEs associated with it. An SQLSTATE can refer to more than one SQLCODE.

## SQLSTATEs returned from application servers that are not Db2 for i

When an SQLSTATE other than 00000 is returned from an application server that is not Db2 for i, Db2 for i attempts to map the SQLSTATE to a Db2 for i SQLCODE and message with the following results:

- If the SQLSTATE is not recognized by Db2 for i, the common message for the class is issued.
- If the SQLSTATE and SQLCODE correspond to a single Db2 for i SQLCODE, Db2 for i attempts to convert the returned tokens into the replacement data that the SQL message expects. If an error occurs while converting the tokens, the following results occur:
  - The tokens are returned without conversion in the SQLERRM field of the SQLCA or in the SQL diagnostics area.
  - A common message for the class code of the SQLSTATE is issued.

### Related reference

[Listing of SQLSTATE class codes](#)

This table provides a list of general SQLSTATE classes. Each class links to a list of the more specific SQLSTATE codes that comprise that class.

[Listing of SQLSTATE values](#)

The tables in this topic provide descriptions of SQLSTATE codes that can be returned to applications by DB2 for i. The tables include SQLSTATE values, their meanings, and their corresponding SQLCODE values.

[SQL message finder](#)

## Listing of SQLSTATE class codes

This table provides a list of general SQLSTATE classes. Each class links to a list of the more specific SQLSTATE codes that comprise that class.

| Class code | Meaning                                | Subcodes                            |
|------------|--|-------------------------------------|
| 00         | Unqualified Successful Completion      | <a href="#">Table 2 on page 5</a>   |
| 01         | Warning                                | <a href="#">Table 3 on page 6</a>   |
| 02         | No Data                                | <a href="#">Table 4 on page 8</a>   |
| 07         | Dynamic SQL Error                      | <a href="#">Table 5 on page 9</a>   |
| 08         | Connection Exception                   | <a href="#">Table 6 on page 9</a>   |
| 09         | Triggered Action Exception             | <a href="#">Table 7 on page 10</a>  |
| 0A         | Feature Not Supported                  | <a href="#">Table 8 on page 10</a>  |
| 0E         | Invalid Schema Name List Specification | <a href="#">Table 9 on page 10</a>  |
| 0F         | Invalid Token                          | <a href="#">Table 10 on page 10</a> |
| 0K         | Resignal When Handler Not Active       | <a href="#">Table 11 on page 10</a> |

| <i>Table 1. SQLSTATE Class Codes (continued)</i> |   |                                     |
|--|---|-------------------------------------|
| <b>Class code</b>                                | <b>Meaning</b>                                  | <b>Subcodes</b>                     |
| 0N   | SQL/XML Mapping Error                           | <a href="#">Table 12 on page 10</a> |
| 0W   | Prohibited Statement Encountered During Trigger | <a href="#">Table 13 on page 10</a> |
| 0Z   | Diagnostics Exception                           | <a href="#">Table 14 on page 11</a> |
| 10   | XQuery Error                                    | <a href="#">Table 15 on page 11</a> |
| 20   | Case Not Found for Case Statement               | <a href="#">Table 16 on page 11</a> |
| 21   | Cardinality Violation                           | <a href="#">Table 17 on page 12</a> |
| 22   | Data Exception                                  | <a href="#">Table 18 on page 12</a> |
| 23   | Constraint Violation                            | <a href="#">Table 19 on page 14</a> |
| 24   | Invalid Cursor State                            | <a href="#">Table 20 on page 14</a> |
| 25   | Invalid Transaction State                       | <a href="#">Table 21 on page 15</a> |
| 26   | Invalid SQL Statement Identifier                | <a href="#">Table 22 on page 15</a> |
| 27   | Triggered Data Change Violation                 | <a href="#">Table 23 on page 15</a> |
| 28   | Invalid Authorization Specification             | <a href="#">Table 24 on page 16</a> |
| 2D   | Invalid Transaction Termination                 | <a href="#">Table 25 on page 16</a> |
| 2E   | Invalid Connection Name                         | <a href="#">Table 26 on page 16</a> |
| 2F   | SQL Function Exception                          | <a href="#">Table 27 on page 16</a> |
| 33   | Invalid SQL Descriptor Name                     | <a href="#">Table 28 on page 16</a> |
| 34   | Invalid Cursor Name                             | <a href="#">Table 29 on page 16</a> |
| 35   | Invalid Condition Number                        | <a href="#">Table 30 on page 17</a> |
| 36   | Cursor Sensitivity Exception                    | <a href="#">Table 31 on page 17</a> |
| 38   | External Function Exception                     | <a href="#">Table 32 on page 17</a> |



| <i>Table 1. SQLSTATE Class Codes (continued)</i> |   |                     |
|--|---|---------------------|
| <b>Class code</b>                                | <b>Meaning</b>                                  | <b>Subcodes</b>     |
| 39   | External Function Call Exception                | Table 33 on page 17 |
| 3B   | Savepoint Exception                             | Table 34 on page 18 |
| 3C   | Ambiguous Cursor Name                           | Table 35 on page 18 |
| 42   | Syntax Error or Access Rule Violation           | Table 36 on page 18 |
| 44   | WITH CHECK OPTION Violation                     | Table 37 on page 28 |
| 46   | Java Errors                                     | Table 38 on page 28 |
| 51   | Invalid Application State                       | Table 39 on page 29 |
| 53   | Invalid Operand or Inconsistent Specification   | Table 40 on page 29 |
| 54   | SQL or Product Limit Exceeded                   | Table 41 on page 30 |
| 55   | Object Not in Prerequisite State                | Table 42 on page 31 |
| 56   | Miscellaneous SQL or Product Error              | Table 43 on page 31 |
| 57   | Resource Not Available or Operator Intervention | Table 44 on page 32 |
| 58   | System Error                                    | Table 45 on page 33 |
| 5U   | Common Utilities and Tools                      | Table 46 on page 33 |

## Listing of SQLSTATE values

The tables in this topic provide descriptions of SQLSTATE codes that can be returned to applications by DB2 for i. The tables include SQLSTATE values, their meanings, and their corresponding SQLCODE values.

| <i>Table 2. Class Code 00: Unqualified Successful Completion</i> |   |                       |
|--|---|-----------------------|
| <b>SQLSTATE Value</b>  | <b>Meaning</b>  | <b>SQLCODE Values</b> |
| 00000  | Execution of the operation was successful and did not result in any type of warning or exception condition. | +000                  |

| <i>Table 3. Class Code 01: Warning</i> |   |                          |
|--|---|--------------------------|
| <b>SQLSTATE Value</b>                  | <b>Meaning</b>  | <b>SQLCODE Values</b>    |
| 01xxx                                  | Valid warning SQLSTATEs returned by an SQL routine. Also used for RAISE_ERROR and SIGNAL.   | +438                     |
| 01002                                  | A DISCONNECT error occurred.  | +596                     |
| 01003                                  | Null values were eliminated from the argument of an aggregate function.   | +000                     |
| 01004                                  | The value of a string was truncated when assigned to another string data type with a shorter length.                              | +000, +445, +802, +20141 |
| 01005                                  | Insufficient number of entries in an SQLDA.   | +239                     |
| 01006                                  | A privilege was not revoked.  | +569                     |
| 01007                                  | A privilege was not granted.  | +570                     |
| 01009                                  | The search condition is too long for the information schema.  | +177                     |
| 0100A                                  | The query expression of the view is too long for the information schema.  | +178                     |
| 0100C                                  | One or more ad hoc result sets were returned from the procedure.  | +466                     |
| 0100D                                  | The cursor that was closed has been reopened on the next result set within the chain.   | +467                     |
| 0100E                                  | The procedure returned too many result sets.  | +464, +20206             |
| 01503                                  | The number of result columns is larger than the number of variables provided.   | +000, +030               |
| 01504                                  | The UPDATE or DELETE statement does not include a WHERE clause.   | +000, +088               |
| 01505                                  | The statement was not executed because it is unacceptable in this environment.  | +084, +143               |
| 01506                                  | An adjustment was made to a DATE or TIMESTAMP value to correct an invalid date resulting from an arithmetic operation.            | +000                     |
| 01515                                  | The null value has been assigned to a variable, because the non-null value of the column is not within the range of the variable. | +304                     |
| 01517                                  | A character that could not be converted was replaced with a substitute character.   | +335                     |
| 01519                                  | The null value has been assigned to a variable, because a numeric value is out of range.  | +802                     |
| 01520                                  | The null value has been assigned to a variable, because the characters cannot be converted.                                       | +331                     |
| 01522                                  | The local table or view name used in the CREATE ALIAS statement is undefined.   | +403                     |
| 01526                                  | Isolation level has been escalated.   | +595                     |
| 01527                                  | A SET statement references a special register that does not exist at the AS.  | +799                     |
| 01528                                  | WHERE NOT NULL is ignored, because the index key cannot contain null values.  | +645                     |
| 01532                                  | An undefined object name was detected.  | +204                     |
| 01534                                  | The string representation of a datetime value is invalid.   | +180, +181               |

Table 3. **Class Code 01: Warning** (continued)

| <b>SQLSTATE Value</b> | <b>Meaning</b>  | <b>SQLCODE Values</b>    |
|-----------------------|---|--------------------------|
| 01535                 | An arithmetic operation on a date or timestamp has a result that is not within the valid range of dates.  | +183                     |
| 01536                 | During remote bind where existence checking is deferred, the server-name specified does not match the current server.   | +114                     |
| 01539                 | Connection is successful but only SBCS characters should be used.   | +863                     |
| 01542                 | Authorization ID does not have the privilege to perform the operation as specified.   | +552                     |
| 01544                 | The null value has been assigned to a variable, because a substring error occurred; for example, an argument of SUBSTR is out of range.   | +138                     |
| 01545                 | An unqualified column name has been interpreted as a correlated reference.  | +012                     |
| 01547                 | A mixed data value is improperly formed.  | +191, +304, +802         |
| 01548                 | The authorization ID does not have the privilege to perform the specified operation on the identified object.   | +551                     |
| 01557                 | Too many variables have been specified on SELECT INTO or FETCH.   | +326                     |
| 01564                 | The null value has been assigned to a variable, because division by zero occurred.  | +802                     |
| 01565                 | The null value has been assigned to a variable, because a miscellaneous data exception occurred. For example, the character value for the CAST, DECIMAL, FLOAT, or INTEGER scalar function is invalid; a floating-point NAN (not a number); invalid data in a packed decimal field; or a mask mapping error was detected. | +304, +420, +802, +20365 |
| 01567                 | The table was created but not journaled.  | +7905                    |
| 01587                 | The unit of work was committed or rolled back, but the outcome is not fully known at all sites.   | +990                     |
| 01593                 | An ALTER TABLE may cause data truncation.   | +460                     |
| 01594                 | Insufficient number of entries in an SQLDA for ALL information (i.e. not enough descriptors to return the distinct name).   | +237                     |
| 01614                 | There are fewer locators than the number of result sets.  | +494                     |
| 01623                 | The value of DEGREE is ignored.   | +1530                    |
| 01627                 | The DATALINK value may not be valid because the table is in reconcile pending or reconcile is not a possible state.   | +360                     |
| 01634                 | The distinct data type name is too long and cannot be returned in the SQLDA. The short name is returned instead.  | +7036                    |
| 01643                 | Assignment to SQLCODE or SQLSTATE variable does not signal a warning or error.  | +385                     |
| 01646                 | A result sets could not be returned because the cursor was closed.  | +7050                    |
| 01647                 | A DB2SQL BEFORE trigger changed to DB2ROW.  | +7051                    |
| 01658                 | Binary data is invalid for DECRYPT_CHAR and DECRYPT_DB.   | +20224                   |

| <i>Table 3. Class Code 01: Warning (continued)</i> |  |                       |
|--|--|-----------------------|
| <b>SQLSTATE Value</b>                              | <b>Meaning</b>   | <b>SQLCODE Values</b> |
| 01660  | The routine was created but a restore will not update the catalog.   | +7909                 |
| 01662  | Release record option ignored on CLOSE.  | +30107                |
| 01676  | Transfer operation ignored since the authorization ID is already the owner of the database object.   | +20341                |
| 01680  | The option is not supported in the context in which it was specified.  | +20367                |
| 01685  | An invalid use of a NOT DETERMINISTIC or EXTERNAL ACTION function was detected.  | +583                  |
| 01687  | A database resource was not available. Processing continues.   | +904                  |
| 0168C  | A decimal float operation produced an inexact result.  | +364                  |
| 0168D  | A decimal floating point operation was invalid.  | +364                  |
| 0168E  | A decimal float operation produced an overflow or underflow.   | +364                  |
| 0168F  | A decimal float operation produced division by zero.   | +364                  |
| 0168G  | A decimal float operation produced a subnormal number.   | +364                  |
| 0168I  | The SQL statement does conform to the specified flagging level.  | +362                  |
| 0168P  | An associated mixed or graphic CCSID does not exist for the default job CCSID.   | +20446                |
| 0168R  | The text index may be out of date.   | +20455                |
| 0168U  | Result sets will not be returned to the client because the procedure was called directly or indirectly from a function or trigger.                         | +20463                |
| 01693  | PROGRAM TYPE SUB changed to PROGRAM TYPE MAIN.   | +7057                 |
| 01698  | Permissions or masks of a materialized query table might require changes as a result of changes to permissions or masks of the table on which it is based. | +20538                |
| 01Hxx  | Valid warning SQLSTATEs returned by a user-defined function, external procedure CALL, or command invocation.   | +462                  |

| <i>Table 4. Class Code 02: No Data</i> |   |                       |
|--|---|-----------------------|
| <b>SQLSTATE Value</b>                  | <b>Meaning</b>  | <b>SQLCODE Values</b> |
| 02000                                  | One of the following exceptions occurred: <ul style="list-style-type: none"> <li>• The result of the SELECT INTO statement or the subselect of the INSERT statement was an empty table.</li> <li>• The number of rows identified in the searched UPDATE or DELETE statement was zero.</li> <li>• The position of the cursor referenced in the FETCH statement was after the last row of the result table.</li> <li>• The fetch orientation is invalid.</li> </ul> | +100                  |
| 02001                                  | No additional result sets returned.   | +387                  |

| <i>Table 4. Class Code 02: No Data (continued)</i> |  |                       |
|--|--|-----------------------|
| <b>SQLSTATE Value</b>                              | <b>Meaning</b>   | <b>SQLCODE Values</b> |
| 02503  | The procedure identified in an ALLOCATE CURSOR statement did not return hoc result sets. | +482                  |
| 02505  | The GET DESCRIPTOR VALUE is greater than COUNT.  | +20298                |

| <i>Table 5. Class Code 07: Dynamic SQL Error</i> |   |                       |
|--|---|-----------------------|
| <b>SQLSTATE Value</b>                            | <b>Meaning</b>  | <b>SQLCODE Values</b> |
| 07001  | The number of variables is not correct for the number of parameter markers.                               | -313                  |
| 07002  | The call parameter list or control block is invalid.  | -804                  |
| 07003  | The statement identified in the EXECUTE statement is a select-statement, or is not in a prepared state.   | -518                  |
| 07004  | The USING clause or INTO clause is required for dynamic parameters.                                       | -313                  |
| 07005  | The statement name of the cursor identifies a prepared statement that cannot be associated with a cursor. | -517                  |
| 07006  | An input variable, transition variable, or parameter marker cannot be used, because of its data type.     | -301                  |
| 07008  | The descriptor count is invalid.  | -074                  |
| 07009  | The descriptor index is invalid.  | -075                  |
| 0700C  | Undefined DATA value.   | -822                  |
| 0700E  | Invalid LEVEL specified in SET DESCRIPTOR statement.  | -804                  |
| 0700F  | Invalid DATETIME_INTERVAL_CODE specified in SET DESCRIPTOR statement.                                     | -804                  |

| <i>Table 6. Class Code 08: Connection Exception</i> |  |                                |
|---|--|--------------------------------|
| <b>SQLSTATE Value</b>                               | <b>Meaning</b>   | <b>SQLCODE Values</b>          |
| 08001   | The connection was unable to be established to the application server or other server. | -30080, -30081, -30082, -30089 |
| 08002   | The connection already exists.   | -842                           |
| 08003   | The connection does not exist.   | -843, -900                     |
| 08004   | The application server rejected establishment of the connection.                       | -30060, -30061                 |
| 08501   | A DISCONNECT is not allowed when the connection uses an LU6.2 protected conversation.  | -858                           |

| <i>Table 7. Class Code 09: Triggered Action Exception</i> |                                   |                       |
|---|-----------------------------------|-----------------------|
| <b>SQLSTATE Value</b>                                     | <b>Meaning</b>                    | <b>SQLCODE Values</b> |
| 09000   | A triggered SQL statement failed. | -723                  |

| <i>Table 8. Class Code 0A: Feature Not Supported</i> |  |                       |
|--|--|-----------------------|
| <b>SQLSTATE Value</b>                                | <b>Meaning</b>   | <b>SQLCODE Values</b> |
| 0A001  | The CONNECT statement is invalid, because the process is not in the connectable state. | -752                  |

| <i>Table 9. Class Code 0E: Invalid Schema Name List Specification</i> |                                  |                       |
|---|----------------------------------|-----------------------|
| <b>SQLSTATE Value</b>   | <b>Meaning</b>                   | <b>SQLCODE Values</b> |
| 0E000   | The path name list is not valid. | -329                  |

| <i>Table 10. Class Code 0F: Invalid Token</i> |   |                       |
|---|---|-----------------------|
| <b>SQLSTATE Value</b>                         | <b>Meaning</b>  | <b>SQLCODE Values</b> |
| 0F001   | The locator value does not currently represent any value. | -423                  |

| <i>Table 11. Class Code 0K: Resignal When Handler Not Active</i> |  |                       |
|--|--|-----------------------|
| <b>SQLSTATE Value</b>  | <b>Meaning</b>                                     | <b>SQLCODE Values</b> |
| 0K000  | A RESIGNAL was issued but a handler is not active. | -787                  |

| <i>Table 12. Class Code 0N: SQL/XML Mapping Error</i> |  |                       |
|---|--|-----------------------|
| <b>SQLSTATE Value</b>                                 | <b>Meaning</b>   | <b>SQLCODE Values</b> |
| 0N002   | A character cannot be mapped to a valid XML character. | -20377                |

| <i>Table 13. Class Code 0W: Prohibited Statement Encountered During Trigger</i> |  |                       |
|---|--|-----------------------|
| <b>SQLSTATE Value</b>   | <b>Meaning</b>                             | <b>SQLCODE Values</b> |
| 0W000   | The statement is not allowed in a trigger. | -751                  |

| <b>SQLSTATE Value</b> | <b>Meaning</b>   | <b>SQLCODE Values</b> |
|-----------------------|--|-----------------------|
| 0Z001                 | Maximum number of stacked diagnostics areas exceeded.    | -20226                |
| 0Z002                 | Stacked diagnostics accessed without and active handler. | -20228                |

| <b>SQLSTATE Value</b> | <b>Meaning</b>   | <b>SQLCODE Values</b>                  |
|-----------------------|--|--|
| 10501                 | An XQuery expression is missing the assignment of a static or dynamic context component. | -16000, -16001                         |
| 10502                 | An error was encountered in the prolog of an XQuery expression.                          | -16048                                 |
| 10503                 | A duplicate name was defined in an XQuery or XPath expression.                           | -16023, -16024                         |
| 10504                 | An XQuery namespace declaration specified an invalid URI.                                | -16036                                 |
| 10505                 | A character, token or clause is missing or invalid in an XQuery expression.              | -16002, -16007                         |
| 10506                 | An XQuery expression references a name that is not defined.                              | -16005, -16009                         |
| 10507                 | A type error was encountered processing an XPath or XQuery expression.                   | -16003, -16011, -16012, -16020, -16022 |
| 10509                 | An unsupported XQuery language feature is specified.                                     | -16031                                 |
| 10601                 | An arithmetic error was encountered processing an XQuery function or operator.           | -16046, -16047                         |
| 10602                 | A casting error was encountered processing an XQuery function or operator.               | -16049, -16051, -16052                 |
| 10605                 | A datetime error was encountered processing an XQuery function or operator.              | -16055, -16056, -16057                 |
| 10608                 | An error was encountered in the argument of an XQuery function or operator.              | -16038, -16041, -16061, -16066         |
| 10609                 | A regular expression error was encountered processing an XQuery function or operator.    | -16067, -16068, -16069                 |

| <b>SQLSTATE Value</b> | <b>Meaning</b>                                 | <b>SQLCODE Values</b> |
|-----------------------|--|-----------------------|
| 20000                 | The case was not found for the CASE statement. | -773                  |

| <i>Table 17. Class Code 21: Cardinality Violation</i> |   |                       |
|---|---|-----------------------|
| <b>SQLSTATE Value</b>                                 | <b>Meaning</b>  | <b>SQLCODE Values</b> |
| 21000   | The result of a SELECT INTO, scalar fullselect, or subquery of a basic predicate is more than one value.                          | -811                  |
| 21506   | The same row of the target table was identified more than once for an update, delete, or insert operation of the MERGE statement. | -788                  |

| <i>Table 18. Class Code 22: Data Exception</i> |   |                                |
|--|---|--------------------------------|
| <b>SQLSTATE Value</b>                          | <b>Meaning</b>  | <b>SQLCODE Values</b>          |
| 22001  | Character data, right truncation occurred; for example, an update or insert value is a string that is too long for the column, or a datetime value cannot be assigned to a variable, because it is too small. | -302, -303, -404, -433, -802   |
| 22002  | A null value, or the absence of an indicator parameter was detected; for example, the null value cannot be assigned to a variable, because no indicator variable is specified.                                | -305                           |
| 22003  | A numeric value is out of range.  | -302, -304, -406, -446, -802   |
| 22004  | A null value is not allowed.  | -087, -305                     |
| 22005  | An error occurred on assignment.  | -076                           |
| 22006  | The fetch orientation is invalid.   | -231                           |
| 22007  | An invalid datetime format was detected; that is, an invalid string representation or value was specified.  | -180, -181, -20447, -20448     |
| 22008  | Datetime field overflow occurred; for example, an arithmetic operation on a date or timestamp has a result that is not within the valid range of dates.   | -183                           |
| 2200E  | Null value in array target.   | -20439                         |
| 2200L  | The XML value is not a well-formed document with a single root element.   | -20345                         |
| 2200M  | The XML document is not valid.  | -16104, -16168, -20398, -20400 |
| 2200S  | The XML comment is not valid.   | -20331                         |
| 2200T  | The XML processing instruction is not valid.  | -20332                         |
| 2200W  | An XML value contained data that could not be serialized.   | -20412                         |
| 22010  | Invalid indicator parameter value.  | -363                           |
| 22011  | A substring error occurred; for example, an argument of SUBSTR or SUBSTRING is out of range.  | -138                           |
| 22012  | Division by zero is invalid.  | -802                           |
| 22018  | The character value for a CAST specification or cast scalar function is invalid.  | -420                           |
| 22019  | The LIKE predicate has an invalid escape character.   | -130                           |
| 2201R  | The XML document is not valid.  | -20399                         |



Table 18. **Class Code 22: Data Exception** (continued)

| <b>SQLSTATE Value</b> | <b>Meaning</b>   | <b>SQLCODE Values</b>  |
|-----------------------|--|------------------------|
| 22021                 | A character is not in the coded character set or the conversion is not supported.                                | -330, -331             |
| 22023                 | A parameter or variable value is invalid.  | -302, -304, -406, -802 |
| 22024                 | A NUL-terminated input host variable or parameter did not contain a NUL.   | -302                   |
| 22025                 | The LIKE predicate string pattern contains an invalid occurrence of an escape character.                         | -130                   |
| 2202E                 | Array element error.   | -20439                 |
| 2202F                 | Array data, right truncation.  | -20440                 |
| 22501                 | The length control field of a variable length string is negative or greater than the maximum.                    | -311                   |
| 22502                 | Signalling NaN was encountered.  | -20365                 |
| 22503                 | The string representation of a name is invalid.  | -188                   |
| 22504                 | A mixed data value is invalid.   | -191, -304, -406, -802 |
| 22511                 | ADT length exceeds maximum column length. The value for a ROWID or reference column is not valid.                | -399                   |
| 22522                 | A CCSID value is not valid at all, not valid for the data type or subtype, or not valid for the encoding scheme. | -189                   |
| 22524                 | Character conversion resulted in truncation  | -334                   |
| 22525                 | Partitioning key value is not valid.   | -327                   |
| 22527                 | Invalid input data detected for a multiple-row insert.   | -30106                 |
| 22528                 | Binary data is invalid for DECRYPT_CHAR and DECRYPT_DB.  | -20224                 |
| 22534                 | An XML schema document is not connected to the other XML schema documents using an include or redefine.          | -20340                 |
| 22535                 | The XML schema does not declare the specified global element.  | -20346                 |
| 22536                 | The XML value does not contain the required root element.  | -20347                 |
| 22539                 | Invalid use of extended indicator parameter value.   | -365                   |
| 22540                 | An update operation cannot have all columns set to be unassigned.  | -20434                 |
| 22542                 | The INSERT or UPDATE is not allowed because a resulting row does not satisfy row permissions.                    | -20471                 |
| 225D1                 | The specified XML schema is not enabled for decomposition.   | -16265                 |
| 225D2                 | An SQL Error occurred during decomposition of an XML document.   | -16266                 |

*Table 18. Class Code 22: Data Exception (continued)*

| <b>SQLSTATE Value</b> | <b>Meaning</b>                                     | <b>SQLCODE Values</b>  |
|-----------------------|--|--|
| 225DE                 | An XML schema cannot be enabled for decomposition. | -16246, -16247, -16248, -16249, -16250, -16251, -16252, -16253, -16254, -16255, -16257, -16258, -16259, -16260, -16262, -16263, -16264, -16277 |
| 225X0                 | XSLT processor error.                              | -16280   |

*Table 19. Class Code 23: Constraint Violation*

| <b>SQLSTATE Value</b> | <b>Meaning</b>  | <b>SQLCODE Values</b> |
|-----------------------|---|-----------------------|
| 23001                 | The update or delete of a parent key is prevented by a RESTRICT update or delete rule.  | -531, -532            |
| 23502                 | An insert or update value is null, but the column cannot contain null values.   | -407                  |
| 23503                 | The insert or update value of a foreign key is invalid.   | -530                  |
| 23504                 | The update or delete of a parent key is prevented by a NO ACTION update or delete rule.   | -531, -532            |
| 23505                 | A violation of the constraint imposed by a unique index or a unique constraint occurred.  | -803                  |
| 23507                 | A violation of a constraint imposed by a field procedure occurred.  | -681                  |
| 23511                 | A parent row cannot be deleted, because the check constraint restricts the deletion.  | -543                  |
| 23512                 | The check constraint cannot be added, because the table contains rows that do not satisfy the constraint definition.                | -544                  |
| 23513                 | The resulting row of the INSERT or UPDATE does not conform to the check constraint definition.                                      | -545                  |
| 23515                 | The unique index could not be created or unique constraint added, because the table contains duplicate values of the specified key. | -603                  |
| 23520                 | The foreign key cannot be defined, because all of its values are not equal to a parent key of the parent table.                     | -667                  |
| 23522                 | The range of values for the identity column or sequence is exhausted.   | -359                  |

*Table 20. Class Code 24: Invalid Cursor State*

| <b>SQLSTATE Value</b> | <b>Meaning</b>                     | <b>SQLCODE Values</b> |
|-----------------------|------------------------------------|-----------------------|
| 24501                 | The identified cursor is not open. | -501, -507            |

*Table 20. Class Code 24: Invalid Cursor State (continued)*

| <b>SQLSTATE Value</b> | <b>Meaning</b>  | <b>SQLCODE Values</b> |
|-----------------------|---|-----------------------|
| 24502                 | The cursor identified in an OPEN statement is already open.   | -502, -7055           |
| 24504                 | The cursor identified in the UPDATE, DELETE, SET, or GET statement is not positioned on a row.                                | -508                  |
| 24506                 | The statement identified in the PREPARE is the statement of an open cursor.   | -519                  |
| 24507                 | FETCH CURRENT was specified, but the current row is deleted, or a value of an ORDER BY column of the current row has changed. | -226                  |
| 24513                 | FETCH NEXT, PRIOR, CURRENT, or RELATIVE is not allowed, because the cursor position is not known.                             | -227                  |
| 24514                 | A previous error has disabled this cursor.  | -906                  |
| 24516                 | A cursor has already been assigned to a result set.   | -499                  |

*Table 21. Class Code 25: Invalid Transaction State*

| <b>SQLSTATE Value</b> | <b>Meaning</b>  | <b>SQLCODE Values</b> |
|-----------------------|---|-----------------------|
| 25000                 | An insert, update, or delete operation or procedure call is invalid in the context where it is specified. | -30090                |
| 25001                 | The statement is only allowed as the first statement in a unit of work.                                   | -428                  |
| 25006                 | An update operation is not valid because the transaction is read only.                                    | -817                  |

*Table 22. Class Code 26: Invalid SQL Statement Identifier*

| <b>SQLSTATE Value</b> | <b>Meaning</b>   | <b>SQLCODE Values</b> |
|-----------------------|--|-----------------------|
| 26501                 | The statement identified does not exist.   | -514, -516            |
| 26510                 | The statement name specified in a DECLARE CURSOR already has a cursor allocated to it. | -5023                 |

*Table 23. Class Code 27: Triggered Data Change Violation*

| <b>SQLSTATE Value</b> | <b>Meaning</b>   | <b>SQLCODE Values</b> |
|-----------------------|--|-----------------------|
| 27000                 | An attempt was made to change the same row in the same table in the same SQL statement more than once. | -907                  |

*Table 24. Class Code 28: Invalid Authorization Specification*

| <b>SQLSTATE Value</b> | <b>Meaning</b>                 | <b>SQLCODE Values</b> |
|-----------------------|--------------------------------|-----------------------|
| 28000                 | Authorization name is invalid. | -113, -188            |

*Table 25. Class Code 2D: Invalid Transaction Termination*

| <b>SQLSTATE Value</b> | <b>Meaning</b>  | <b>SQLCODE Values</b> |
|-----------------------|---|-----------------------|
| 2D522                 | COMMIT and ROLLBACK are not allowed in an ATOMIC Compound statement.                              | -774                  |
| 2D528                 | Dynamic COMMIT or COMMIT ON RETURN procedure is invalid for the application execution environment | -426, -30090          |
| 2D529                 | Dynamic ROLLBACK is invalid for the application execution environment.                            | -427, -30090          |

*Table 26. Class Code 2E: Invalid Connection Name*

| <b>SQLSTATE Value</b> | <b>Meaning</b>              | <b>SQLCODE Values</b> |
|-----------------------|-----------------------------|-----------------------|
| 2E000                 | Connection name is invalid. | -113, -188, -251      |

*Table 27. Class Code 2F: SQL Function Exception*

| <b>SQLSTATE Value</b> | <b>Meaning</b>  | <b>SQLCODE Values</b> |
|-----------------------|---|-----------------------|
| 2F002                 | The SQL function attempted to modify data, but the function was not defined as MODIFIES SQL DATA. | -577                  |
| 2F003                 | The statement is not allowed in a function or procedure.  | -751                  |
| 2F004                 | The SQL function attempted to read data, but the function was not defined as READS SQL DATA.      | -579                  |
| 2F005                 | The function did not execute a RETURN statement.  | -578                  |

*Table 28. Class Code 33: Invalid SQL Descriptor Name*

| <b>SQLSTATE Value</b> | <b>Meaning</b>                  | <b>SQLCODE Values</b> |
|-----------------------|---------------------------------|-----------------------|
| 33000                 | SQL descriptor name is invalid. | -077                  |

*Table 29. Class Code 34: Invalid Cursor Name*

| <b>SQLSTATE Value</b> | <b>Meaning</b>          | <b>SQLCODE Values</b> |
|-----------------------|-------------------------|-----------------------|
| 34000                 | Cursor name is invalid. | -504                  |

| <i>Table 30. Class Code 35: Invalid Condition Number</i> |                              |                       |
|--|------------------------------|-----------------------|
| <b>SQLSTATE Value</b>                                    | <b>Meaning</b>               | <b>SQLCODE Values</b> |
| 35000  | Condition number is invalid. | -393                  |

| <i>Table 31. Class Code 36: Cursor Sensitivity Exception</i> |  |                       |
|--|--|-----------------------|
| <b>SQLSTATE Value</b>  | <b>Meaning</b>   | <b>SQLCODE Values</b> |
| 36001  | A SENSITIVE cursor cannot be defined for the specified select-statement. | -243                  |

| <i>Table 32. Class Code 38: External Function Exception</i> |   |                       |
|---|---|-----------------------|
| <b>SQLSTATE Value</b>                                       | <b>Meaning</b>  | <b>SQLCODE Values</b> |
| 38xxx   | Valid error SQLSTATEs returned by an external routine or trigger.   | -443                  |
| 38000   | A Java routine has exited with an exception.  | -4302                 |
| 38001   | The external routine is not allowed to execute SQL statements.  | -487                  |
| 38002   | The external routine attempted to modify data, but the routine was not defined as MODIFIES SQL DATA.  | -577                  |
| 38003   | The statement is not allowed in a routine.  | -751                  |
| 38004   | The external routine attempted to read data, but the routine was not defined as READS SQL DATA.   | -579                  |
| 38501   | Error occurred while calling a user-defined function, procedure, or trigger (using the SIMPLE CALL or SIMPLE CALL WITH NULLS calling convention). | -443                  |
| 38H10   | Error occurred during text search processing.   | -20423                |
| 38H11   | Text search support is not available.   | -20424                |
| 38H12   | Text search is not allowed on a column because a text search index does not exist on the column.  | -20425                |
| 38H13   | A conflicting search administration procedure or command is running on the same text search index.  | -20426                |
| 38H14   | Text search administration procedure error.   | -20427                |

| <i>Table 33. Class Code 39: External Function Call Exception</i> |  |                       |
|--|--|-----------------------|
| <b>SQLSTATE Value</b>  | <b>Meaning</b>   | <b>SQLCODE Values</b> |
| 39001  | A user-defined function has returned an invalid SQLSTATE.  | -463                  |
| 39004  | A null value is not allowed for an IN or INOUT argument when using PARAMETER STYLE GENERAL or an argument that is a Java primitive type. | -470, -20205          |

| <b>SQLSTATE Value</b> | <b>Meaning</b>  | <b>SQLCODE Values</b> |
|-----------------------|---|-----------------------|
| 3B001                 | The savepoint is not valid.   | -880                  |
| 3B002                 | The maximum number of savepoints has been reached.  | -20112                |
| 3B501                 | A duplicate savepoint name was detected.  | -881                  |
| 3B502                 | A RELEASE or ROLLBACK TO SAVEPOINT was specified, but a savepoint does not exist.             | -882                  |
| 3B504                 | A SAVEPOINT is not allowed because a resource is registered that does not support savepoints. | -175                  |

| <b>SQLSTATE Value</b> | <b>Meaning</b>                | <b>SQLCODE Values</b> |
|-----------------------|-------------------------------|-----------------------|
| 3C000                 | The cursor name is ambiguous. | -051                  |

| <b>SQLSTATE Value</b> | <b>Meaning</b>  | <b>SQLCODE Values</b>  |
|-----------------------|---|--|
| 42501                 | The authorization ID does not have the privilege to perform the specified operation on the identified object. | -551   |
| 42502                 | The authorization ID does not have the privilege to perform the operation as specified.                       | -552, -20379   |
| 42506                 | Owner authorization failure occurred.   | -30053   |
| 42601                 | A character, token, or clause is invalid or missing.  | -007, -011, -029, -097, -104, -109, -115, -128, -172, -199, -441, -491 |
| 42602                 | A character that is invalid in a name has been detected.  | -113, -251, -567   |
| 42603                 | An unterminated string constant has been detected.  | -010   |
| 42604                 | An invalid numeric or string constant has been detected.  | -103, -105   |
| 42605                 | The number of arguments specified for a scalar function is invalid.   | -170   |
| 42606                 | An invalid hexadecimal constant has been detected.  | -110   |
| 42607                 | An operand of an aggregate function or CONCAT operator is invalid.  | -112   |
| 42608                 | The use of NULL or DEFAULT in VALUES or an assignment statement is invalid.                                   | -584   |
| 42609                 | All operands of an operator or predicate are parameter markers.   | -417   |
| 42610                 | A parameter marker or the null value is not allowed.  | -184, -418   |
| 42611                 | The column, argument, parameter, or global variable definition is invalid.                                    | -106, -604, -4903, -4905, -4917  |

| <i>Table 36. Class Code 42: Syntax Error or Access Rule Violation (continued)</i> |  |                          |
|---|--|--------------------------|
| <b>SQLSTATE Value</b>   | <b>Meaning</b>   | <b>SQLCODE Values</b>    |
| 42612   | The statement string is an SQL statement that is not acceptable in the context in which it is presented. | -084, -142               |
| 42613   | Clauses are mutually exclusive.  | -628                     |
| 42614   | A duplicate keyword or clause is invalid.  | -637                     |
| 42615   | An invalid alternative was detected.   | -644                     |
| 42616   | Invalid options are specified.   | -5047                    |
| 42617   | The statement string is blank or empty.  | -198                     |
| 42618   | A variable is not allowed.   | -090, -312, -5012, -5024 |
| 42620   | Read-only SCROLL was specified with the UPDATE clause.   | -228                     |
| 42621   | The check constraint or generated column expression is invalid.  | -546                     |
| 42622   | A name or label is too long.   | -107                     |
| 42623   | A DEFAULT clause cannot be specified.  | -373                     |
| 42625   | A CASE expression is invalid.  | -580                     |
| 42629   | Parameter names must be specified for SQL routines.  | -078                     |
| 42631   | An expression must be specified on a RETURN statement in an SQL function.                                | -057                     |
| 42633   | An AS clause is required for an argument of XMLATTRIBUTES or XMLFOREST.                                  | -20227                   |
| 42634   | The XML name is not valid.   | -20275                   |
| 42635   | The XML namespace prefix is not valid.   | -20276                   |
| 42636   | The BY REF or BY VALUE clause is missing or used incorrectly.  | -20337                   |
| 42638   | An obfuscated statement is not valid.  | -20530                   |
| 42701   | The same target is specified more than once for assignment in the same SQL statement.                    | -121                     |
| 42702   | A column reference is ambiguous, because of duplicate names.   | -203                     |
| 42703   | An undefined column or parameter name was detected.  | -205, -206, -213, -5001  |
| 42704   | An undefined object or constraint name was detected.   | -204                     |
| 42705   | An undefined server-name was detected.   | -950                     |
| 42707   | A column name in ORDER BY does not identify a column of the result table.                                | -208                     |
| 42709   | A duplicate column name was specified in a key column list.  | -537                     |
| 42710   | A duplicate object or constraint name was detected.  | -456, -601               |
| 42711   | A duplicate column name was detected in the object definition or ALTER TABLE statement.                  | -612                     |

| <i>Table 36. Class Code 42: Syntax Error or Access Rule Violation (continued)</i> |  |  |
|---|--|--|
| <b>SQLSTATE Value</b>   | <b>Meaning</b>   | <b>SQLCODE Values</b>                  |
| 42712   | A duplicate table designator was detected in the FROM clause or REFERENCING clause of a CREATE TRIGGER statement.  | -212                                   |
| 42713   | A duplicate object was detected in a list or is the same as an existing object.  | -242                                   |
| 42718   | The local server name is not defined.  | -250                                   |
| 42723   | A routine with the same signature already exists in the schema, module, or compound block where it is defined.   | -454                                   |
| 42724   | Unable to access an external program used for a user-defined function or a procedure.  | -444, -4300,<br>-4303, -4304,<br>-4306 |
| 42725   | A routine was referenced directly (not by either signature or by specific instance name), but there is more than one specific instance of that routine.  | -476                                   |
| 42726   | Duplicate names for common table expressions were detected.  | -340                                   |
| 42732   | A duplicate schema name in a special register was detected.  | -585                                   |
| 42733   | A procedure with the specified name cannot be added to the schema because the procedure overloading is not allowed in this database and there is already a procedure with the same name in the schema. | -484                                   |
| 42734   | A duplicate parameter-name, SQL variable name, label, or condition-name was detected.  | -590                                   |
| 42736   | The label specified on the GOTO, ITERATE, or LEAVE statement is not found or not valid.  | -779                                   |
| 42737   | The condition specified is not defined.  | -781                                   |
| 42738   | A duplicate column name or unnamed column was specified in a DECLARE CURSOR statement of a FOR statement.  | -783                                   |
| 42747   | The same descriptor item was specified more than once in the same SET DESCRIPTOR statement.  | -20299                                 |
| 42749   | An XML schema document with the same target namespace and schema location already exists for the XML schema.   | -20328                                 |
| 4274A   | An XSROBJECT is not found in the XML schema repository.  | -20330                                 |
| 4274B   | A unique XSROBJECT could not be found in the XML schema repository.  | -20335                                 |
| 4274K   | Invalid use of a named argument when invoking a routine.   | -20483                                 |
| 42802   | The number of target values is not the same as the number of source values.  | -117                                   |
| 42803   | A column reference in the SELECT or HAVING clause is invalid, because it is not a grouping column; or a column reference in the GROUP BY clause is invalid.  | -119, -122                             |
| 42804   | The result expressions in a CASE expression are not compatible.  | -581                                   |
| 42805   | An integer in the ORDER BY clause does not identify a column of the result table.  | -125                                   |



Table 36. **Class Code 42: Syntax Error or Access Rule Violation** (continued)

| <b>SQLSTATE Value</b> | <b>Meaning</b>   | <b>SQLCODE Values</b>                       |
|-----------------------|--|---|
| 42806                 | A value cannot be assigned to a variable, because the data types are not compatible.   | -303  |
| 42807                 | The data-change statement is not permitted on this object.   | -150, -155                                  |
| 42808                 | A column identified in the INSERT or UPDATE operation is not updatable.  | -151  |
| 42809                 | The identified object is not the type of object to which the statement applies.  | -152, -156, -159                            |
| 42810                 | A base table is not identified in a FOREIGN KEY clause.  | -157  |
| 42811                 | The number of columns specified is not the same as the number of columns in the SELECT clause.   | -158  |
| 42812                 | A library name is required in CREATE TABLE in the system naming mode.  | -5002                                       |
| 42813                 | WITH CHECK OPTION cannot be used for the specified view.   | -160  |
| 42814                 | The column cannot be dropped, because it is the only column in the table.  | -195  |
| 42815                 | The data type, length, scale, value, or CCSID is invalid.  | -060, -171, -451, -713, -846, -5005, -20338 |
| 42816                 | A datetime value or duration in an expression is invalid.  | -182, -187                                  |
| 42817                 | The column cannot be dropped because a view or constraint is dependent on the column, the column is part of a partitioning key, or is a security label column. | -196  |
| 42818                 | The operands of an operator or function are not compatible or comparable.  | -131, -401                                  |
| 42819                 | An operand of an arithmetic operation or an operand of a function that requires a number is invalid.   | -402  |
| 42820                 | A numeric constant is too long, or it has a value that is not within the range of its data type.   | -405, -410                                  |
| 42821                 | A data type for an assignment to a column or variable is not compatible with the data type.  | -408  |
| 42822                 | An expression in the ORDER BY clause or GROUP BY clause is not valid.  | -214  |
| 42823                 | Multiple columns are returned from a subquery that only allows one column.   | -412  |
| 42824                 | An operand of LIKE is not a string, or the first operand is not a column.  | -132, -414                                  |
| 42825                 | The rows of UNION, INTERSECT, EXCEPT, or VALUES do not have compatible columns.  | -415  |
| 42826                 | The rows of UNION, INTERSECT, EXCEPT, or VALUES do not have the same number of columns.  | -421  |
| 42827                 | The table identified in the UPDATE or DELETE is not the same table designated by the cursor.   | -509  |
| 42828                 | The table designated by the cursor of the UPDATE or DELETE statement cannot be modified, or the cursor is read-only.   | -510, -520                                  |

Table 36. **Class Code 42: Syntax Error or Access Rule Violation** (continued)

| <b>SQLSTATE Value</b> | <b>Meaning</b>   | <b>SQLCODE Values</b> |
|-----------------------|--|-----------------------|
| 42829                 | FOR UPDATE OF is invalid, because the result table designated by the cursor cannot be modified.  | -511                  |
| 42830                 | The foreign key does not conform to the description of the parent key.   | -538                  |
| 42831                 | Null values are not allowed in a column of a primary key, a column of a unique key, a ROWID column, a row change timestamp column, a row-begin column, a row-end column, or a column of an application period. | -542, -593            |
| 42832                 | The operation is not allowed on system objects.  | -607                  |
| 42833                 | The qualified object name is inconsistent with the naming option.  | -5016                 |
| 42834                 | SET NULL cannot be specified, because no column of the foreign key can be assigned the null value.   | -629                  |
| 42835                 | Cyclic references cannot be specified between named derived tables.  | -341                  |
| 42836                 | The specification of a recursive, named derived table is invalid.  | -345, -346            |
| 42837                 | The column cannot be altered, because its attributes are not compatible with the current column attributes.  | -190                  |
| 42841                 | An untyped expression cannot be a user-defined type or reference type.   | -432                  |
| 42842                 | A column or parameter definition is invalid, because a specified option is inconsistent with the column description.   | -683                  |
| 42845                 | An invalid use of a NOT DETERMINISTIC or EXTERNAL ACTION function was detected.  | -583                  |
| 42846                 | Cast from source type to target type is not supported.   | -461                  |
| 42847                 | An OVRDBF command was issued for one of the referenced files, but one of the parameters is not valid for SQL.  | -7002                 |
| 42848                 | Isolation level CS WITH KEEP LOCKS is not allowed.   | -194                  |
| 42849                 | The specified option is not supported for routines.  | -20102                |
| 42850                 | A logical file is invalid in CREATE VIEW.  | -7010                 |
| 42851                 | A referenced file is not a table, view, or physical file.  | -7011                 |
| 42852                 | The privileges specified in GRANT or REVOKE are invalid or inconsistent. (For example, GRANT ALTER on a view.)   | -557                  |
| 42854                 | A result column data type in the select list is not compatible with the defined type in a typed view or materialized query table definition.   | -20055                |
| 42855                 | The assignment of the LOB or XML to this variable is not allowed. The target variable for all fetches of a LOB or XML value for this cursor must be the same for all FETCHes.                                  | -392                  |
| 42857                 | A referenced file has more than one format or data space.  | -7003                 |
| 42858                 | Operation cannot be applied to the specified object.   | -7001                 |
| 42860                 | The constraint cannot be dropped because it is enforcing a primary key or ROWID.   | -784                  |
| 42862                 | An extended dynamic statement cannot be executed against a non-extended dynamic package.   | -827                  |

Table 36. **Class Code 42: Syntax Error or Access Rule Violation** (continued)

| <b>SQLSTATE Value</b> | <b>Meaning</b>  | <b>SQLCODE Values</b> |
|-----------------------|---|-----------------------|
| 42863                 | An undefined host variable in REXX has been detected.   | -306                  |
| 42866                 | The data type in either the RETURNS clause or the CAST FROM clause in the CREATE FUNCTION statement is not appropriate for the data type returned from the sourced function or RETURN statement in the function body. | -475                  |
| 42872                 | FETCH statement clauses are incompatible with the cursor definition.  | -225                  |
| 42873                 | An invalid number of rows was specified in a multiple-row FETCH or multiple-row INSERT.   | -221                  |
| 42874                 | ALWCPYDTA(*NO) was specified, but a copy is necessary to implement the select-statement.  | -527                  |
| 42875                 | The schema-name portion of a qualified name must be the same name as the schema name.   | -5051                 |
| 42876                 | Different CCSIDs for keys in CREATE INDEX are only allowed with a *HEX collating sequence.  | -7024                 |
| 42877                 | The column name cannot be qualified.  | -197                  |
| 42878                 | An invalid function or procedure name was used with the EXTERNAL keyword.   | -449                  |
| 42879                 | The data type of one or more input parameters in the CREATE FUNCTION statement is not appropriate for the corresponding data type in the source function.   | -492                  |
| 42880                 | The CAST TO and CAST FROM data types are incompatible, or would always result in truncation of a fixed string.  | -453                  |
| 42881                 | Invalid use of a function.  | -391                  |
| 42882                 | The specific instance name qualifier is not equal to the function name qualifier.   | -455                  |
| 42883                 | No routine was found with a matching signature.   | -458                  |
| 42884                 | No routine was found with the specified name and compatible arguments.  | -440                  |
| 42885                 | The number of input parameters specified on a CREATE FUNCTION statement does not match the number provided by the function named in the SOURCE clause.  | -483                  |
| 42886                 | The IN, OUT, or INOUT parameter attributes do not match.  | -469                  |
| 42887                 | The function or table-reference is not valid in the context where it occurs.  | -390                  |
| 42888                 | The table does not have a primary key.  | -539                  |
| 42889                 | The table already has a primary key.  | -624                  |
| 42890                 | A column list was specified in the references clause, but the identified parent table does not have a unique constraint with the specified column names.  | -573                  |
| 42891                 | A duplicate UNIQUE constraint already exists.   | -541                  |
| 42892                 | The referential constraint and trigger are not allowed, because the DELETE rule and trigger event are not compatible.   | -675                  |

Table 36. **Class Code 42: Syntax Error or Access Rule Violation** (continued)

| <b>SQLSTATE Value</b> | <b>Meaning</b>   | <b>SQLCODE Values</b> |
|-----------------------|--|-----------------------|
| 42893                 | The object or constraint cannot be dropped, altered, or transferred or authorities cannot be revoked from the object, because other objects are dependent on it. | -478, -616            |
| 42894                 | The value of a column or sequence attribute is invalid.  | -574                  |
| 42895                 | For static SQL, an input variable cannot be used, because its data type is not compatible with the parameter of a procedure or user-defined function.            | -301                  |
| 42896                 | The ASP number is invalid.   | -7026                 |
| 42898                 | An invalid correlated reference or transition table was detected in a trigger.   | -696                  |
| 42899                 | Correlated references and column names are not allowed for triggered actions with the FOR EACH STATEMENT clause.   | -697                  |
| 428A1                 | Unable to access a file referenced by a file reference variable.   | -452                  |
| 428B3                 | An invalid SQLSTATE was specified.   | -435                  |
| 428B7                 | A number specified in an SQL statement is out of the valid range.  | -490                  |
| 428B8                 | The name specified on a rename is not valid.   | -7029                 |
| 428BA                 | WITHOUT RETURN cursors must not be specified in SET RESULT SETS.   | -20236                |
| 428C1                 | The data type or attribute of a column can only be specified once for a table.   | -372                  |
| 428C4                 | The number of elements on each side of the predicate operator is not the same.   | -216                  |
| 428C7                 | A ROWID or reference column specification is not valid or used in an invalid context.  | -771                  |
| 428C9                 | A column defined as GENERATED ALWAYS cannot be specified as the target column of an insert or update operation.  | -798                  |
| 428D1                 | Unable to access a file referenced by a DATALINK value.  | -358                  |
| 428D2                 | AS LOCATOR cannot be specified for a non-LOB parameter.  | -398                  |
| 428D4                 | A cursor specified in a FOR statement cannot be referenced in an OPEN, CLOSE, or FETCH statement.  | -776                  |
| 428D5                 | The ending label does not match the beginning label.   | -778                  |
| 428D6                 | UNDO is not allowed for NOT ATOMIC compound statements.  | -780                  |
| 428D7                 | The condition value is not allowed.  | -782                  |
| 428D8                 | The sqlcode or sqlstate variable declaration is not valid.   | -785                  |
| 428DE                 | The PAGESIZE value is not supported.   | -1583                 |
| 428EC                 | The fullselect specified for the materialized query table is not valid.  | -20058                |
| 428EK                 | The schema qualifier is not valid.   | -079                  |
| 428EW                 | The table cannot be converted to or from a materialized query table.   | -20093                |
| 428F1                 | An SQL TABLE function must return a table result.  | -20120                |

Table 36. **Class Code 42: Syntax Error or Access Rule Violation** (continued)

| <b>SQLSTATE Value</b> | <b>Meaning</b>  | <b>SQLCODE Values</b> |
|-----------------------|---|-----------------------|
| 428F2                 | An integer expression must be specified on a RETURN statement in an SQL procedure.  | -058                  |
| 428F5                 | The invocation of a routine is ambiguous.   | -245                  |
| 428F9                 | A sequence expression cannot be specified in this context.  | -348                  |
| 428FA                 | The scale of the decimal number must be zero.   | -336                  |
| 428FC                 | The length of the encryption password is not valid.   | -20144                |
| 428FD                 | The password used for decryption does not match the password used to encrypt the data.  | -20145                |
| 428FE                 | The data is not a result of the ENCRYPT function.   | -20146                |
| 428FI                 | The ORDER OF clause was specified, but the referenced table designator is not ordered.  | -20214                |
| 428FJ                 | ORDER BY or FETCH FIRST is not allowed in the outer fullselect of a view or materialized query table.   | -20211                |
| 428FL                 | A data change statement is not allowed in the context in which it was specified.  | -20165                |
| 428FM                 | An SQL data change statement within a SELECT specified a view which is not a symmetric view.  | -20166                |
| 428FP                 | Only one INSTEAD OF trigger is allowed for each kind of operation on a view.  | -20178                |
| 428FQ                 | An INSTEAD OF trigger cannot be created because of how the view is defined.   | -20179                |
| 428FR                 | A column cannot be altered as specified.  | -20180                |
| 428FT                 | The partitioning clause specified on CREATE or ALTER is not valid.  | -20183                |
| 428FY                 | A column cannot be added, dropped, or altered in a materialized query table.  | -20235                |
| 428G0                 | A logical file prevents the alter.  | -20246                |
| 428G2                 | The last data partition cannot be dropped from the table.   | -20251                |
| 428G3                 | FINAL TABLE is not valid when the target view of the SQL data change statement in a fullselect has an INSTEAD OF trigger defined.   | -20257                |
| 428G4                 | Invalid use of INPUT SEQUENCE ordering.   | -20258                |
| 428G6                 | A column is specified that cannot be selected from the target of the data change statement in the FROM clause of the fullselect.  | -20259                |
| 428GI                 | An XML schema is not complete because an XML schema document is missing.  | -20329                |
| 428GJ                 | The table cannot be truncated because DELETE triggers exist for the table or the table is a parent table of a referential constraint that would be affected by the statement. | -20356                |
| 428GU                 | A table must include at least one column that is not implicitly hidden.   | -20422                |
| 428GX                 | A global variable cannot be set or referenced in this context.  | -20430                |

| <i>Table 36. Class Code 42: Syntax Error or Access Rule Violation (continued)</i> |   |                       |
|---|---|-----------------------|
| <b>SQLSTATE Value</b>   | <b>Meaning</b>  | <b>SQLCODE Values</b> |
| 428H0   | The array index cannot be applied to an object whose type is not ARRAY.   | -20437                |
| 428H1   | The data type of an array index expression is not valid for the array.  | -20438                |
| 428H2   | Data type is not supported in the context where it is being used.   | -20441                |
| 428H4   | A hierarchical query construct is used out of context.  | -20452                |
| 428H5   | The specified join operation is not valid.  | -20454                |
| 428H8   | The object must be defined as secure because another object depends on it for row-level or column-level access control.               | -20470                |
| 428H9   | PERMISSION or MASK cannot be altered.   | -20472                |
| 428HA   | An argument of a user-defined table function must not reference a column for which a column mask is defined.                          | -20473                |
| 428HB   | A permission or mask cannot be created on the specified object.   | -20474                |
| 428HC   | A column mask is already defined for the specified column.  | -20475                |
| 428HD   | The statement cannot be processed because a column mask cannot be applied or the definition of the mask conflicts with the statement. | -20478                |
| 428HF   | The invocation of the routine omits a parameter which is not defined with a DEFAULT.  | -20484                |
| 428I3   | A global variable identified as the target of an assignment is a read only global variable.   | -20547                |
| 42902   | The object of the INSERT, UPDATE, or DELETE is also identified (possibly implicitly through a view) in a FROM clause.                 | -118                  |
| 42903   | Invalid use of an aggregate function or OLAP function.  | -120                  |
| 42904   | The SQL procedure was not created because of a compile error.   | -7032                 |
| 42906   | An aggregate function in a subquery of a HAVING clause includes an expression that applies an operator to a correlated reference.     | -133                  |
| 42907   | The string is too long in the context it was specified.   | -134                  |
| 42908   | The statement does not include a required column list.  | -153, -343            |
| 42910   | The statement is not allowed in a Compound statement.   | -775                  |
| 42911   | A decimal divide operation is invalid, because the result would have a negative scale.  | -419                  |
| 42912   | A column cannot be updated, because it is not identified in the UPDATE clause of the select-statement of the cursor.                  | -503                  |
| 42914   | The DELETE is invalid, because a table referenced in a subquery can be affected by the operation.                                     | -536                  |
| 42917   | The object cannot be explicitly dropped, altered, or replaced.  | -658, -20479          |
| 42918   | A user-defined data type cannot be created with a system-defined data type name (for example, INTEGER).                               | -473                  |
| 42919   | Nested compound statements are not allowed.   | -777                  |
| 42922   | DROP SCHEMA cannot be executed under commitment control.  | -5003                 |

| <i>Table 36. Class Code 42: Syntax Error or Access Rule Violation (continued)</i> |   |                       |
|---|---|-----------------------|
| <b>SQLSTATE Value</b>   | <b>Meaning</b>  | <b>SQLCODE Values</b> |
| 42923   | Program or package must be recreated to reference an alias-name.  | -7033                 |
| 42924   | An alias resolved to another alias rather than a table or view at the remote location.  | -513                  |
| 42925   | Recursive named derived tables cannot specify SELECT DISTINCT and must specify UNION ALL.   | -342                  |
| 42926   | Locators are not allowed with COMMIT(*NONE).  | -7034                 |
| 42927   | The function cannot be altered to NOT DETERMINISTIC or EXTERNAL ACTION because it is referenced by one or more existing views.  | -20073                |
| 42928   | WITH EMPTY TABLE cannot be specified.   | -1596                 |
| 42929   | FOR ALL PARTITIONS is not allowed for an encoded vector index.  | -20489                |
| 42930   | The same column was identified in FOR UPDATE OF and ORDER BY.   | -5021                 |
| 42932   | The program preparation assumptions are incorrect.  | -30052                |
| 42937   | The parameter must not have a subtype of mixed.   | -192                  |
| 42939   | The name cannot be used, because the specified identifier is reserved for system use.   | -457, -553, -707      |
| 42944   | The authorization ID cannot be both an owner and primary group owner.   | -7028                 |
| 42961   | The server name specified does not match the current server.  | -114                  |
| 42962   | A long column, LOB column, structured type column or datalink column cannot be used in an index, a key, generated column, or a constraint.  | -350                  |
| 42968   | The connection failed, because there is no current software license.  | -9012                 |
| 42969   | The package was not created.  | -7020                 |
| 42970   | COMMIT HOLD or ROLLBACK HOLD is only allowed to a DB2 for i application server.   | -7018                 |
| 42971   | SQL statements cannot be executed under commitment control, because commitment control is already active to another relational database.  | -7017                 |
| 42972   | An expression in a join-condition or ON clause of a MERGE statement references columns in more than one of the operand tables.  | -338                  |
| 42977   | The authorization ID cannot be changed when connecting to the local server.   | -7022                 |
| 42978   | An indicator variable is not a small integer.   | -080                  |
| 42981   | CREATE SCHEMA is not allowed if changes are pending in the unit of work.  | -7941                 |
| 42984   | The privilege cannot be granted to the view, because *OBJOPR or *OBJMGT authority exists on a dependent view or table, and the grantee does not have *ALLOBJ or the specified privilege on the dependent table or view. | -7027                 |
| 42985   | The statement is not allowed in a routine.  | -577, -579, -751      |
| 42987   | The statement or routine is not allowed in a trigger.   | -751                  |

| <i>Table 36. Class Code 42: Syntax Error or Access Rule Violation (continued)</i> |  |                       |
|---|--|-----------------------|
| <b>SQLSTATE Value</b>   | <b>Meaning</b>   | <b>SQLCODE Values</b> |
| 42990   | A unique index or unique constraint is not allowed because the key columns are not a superset of the partitioned key columns.  | -270                  |
| 42995   | The requested function does not apply to global temporary tables.  | -526                  |
| 42996   | The partition key cannot be a datetime or floating-point column.   | -328                  |
| 42997   | Capability is not supported by this version of the DB2 application requester, DB2 application server, or the combination of the two.   | -7906                 |
| 42998   | A referential constraint is not allowed because the foreign key columns are not a superset of the partitioned key columns or the node group is not the same as the parent table. | -256                  |
| 42999   | Function not supported for query.  | -255                  |
| 429B6   | Rows from a distributed table cannot be redistributed because the table contains a datalink column with FILE LINK CONTROL.   | -7037                 |
| 429B7   | A referential constraint with a delete rule of CASCADE is not allowed on a table with a DataLink column with FILE LINK CONTROL.  | -7038                 |
| 429BB   | The data type of a column, parameter, or SQL variable is not supported.  | -789                  |
| 429BD   | RETURN must be the last SQL statement of the atomic compound statement within an SQL row or table function.  | -20148                |
| 429BM   | The collating sequence cannot be used in this context.   | -20268                |
| 429BV   | Invalid specification of a ROW CHANGE TIMESTAMP column.  | -20354                |
| 429BX   | The expression for an index key is not valid.  | -356                  |
| 429C2   | The data type specified for an array is not valid in the context where it is specified.  | -20436                |
| 429C3   | The creation or revalidation of an object would result in an invalid direct or indirect self-reference.  | -20481                |

| <i>Table 37. Class Code 44: WITH CHECK OPTION Violation</i> |  |                       |
|---|--|-----------------------|
| <b>SQLSTATE Value</b>                                       | <b>Meaning</b>   | <b>SQLCODE Values</b> |
| 44000   | The INSERT or UPDATE is not allowed, because a resulting row does not satisfy the view definition. | -161                  |

| <i>Table 38. Class Code 46: Java Errors</i> |  |                       |
|---|--|-----------------------|
| <b>SQLSTATE Value</b>                       | <b>Meaning</b>   | <b>SQLCODE Values</b> |
| 46001                                       | The URL specified on an install or replace of a jar procedure did not identify a valid jar file. | -20200                |
| 46002                                       | The jar name specified on the install, replace, or remove of a Java procedure is not valid.      | -20201                |



*Table 38. Class Code 46: Java Errors (continued)*

| <b>SQLSTATE Value</b> | <b>Meaning</b>  | <b>SQLCODE Values</b> |
|-----------------------|---|-----------------------|
| 46003                 | The jar file cannot be removed, a class is in use by a procedure.                 | -20202                |
| 46007                 | A Java function has a Java method with an invalid signature.                      | -20203                |
| 46008                 | A Java function could not map to a single Java method.                            | -20204                |
| 46501                 | The install or remove jar procedure specified the use of a deployment descriptor. | -20207                |

*Table 39. Class Code 51: Invalid Application State*

| <b>SQLSTATE Value</b> | <b>Meaning</b>  | <b>SQLCODE Values</b> |
|-----------------------|---|-----------------------|
| 51002                 | The package corresponding to an SQL statement execution request was not found.  | -805                  |
| 51003                 | Consistency tokens do not match.  | -818                  |
| 51004                 | An address in the SQLDA is invalid.   | -822                  |
| 51009                 | COMMIT or ROLLBACK is not allowed, because commitment control has not been started.   | -7007                 |
| 51015                 | An attempt was made to execute a section that was found to be in error at bind time.  | -525                  |
| 51021                 | SQL statements cannot be executed until the application process executes a rollback operation.  | -918                  |
| 51030                 | The procedure referenced in a DESCRIBE PROCEDURE or ASSOCIATE LOCATOR statement has not yet been called within the application process. | -480                  |
| 51035                 | A PREVIOUS VALUE expression cannot be used because a value has not been generated for the sequence yet in this session.                 | -845                  |
| 51036                 | An implicit connect to a remote server is not allowed because a savepoint is outstanding.   | -20110                |
| 51037                 | The operation is not allowed because a trigger has been marked inoperative.   | -7048                 |
| 51039                 | The ENCRYPTION PASSWORD value is not set.   | -20143                |
| 51043                 | Procedure cannot be called because the nested environment already called an autonomous procedure.                                       | -4729                 |
| 51047                 | The activation group of the program or service program referenced by an external procedure is not valid.                                | -7059                 |

*Table 40. Class Code 53: Invalid Operand or Inconsistent Specification*

| <b>SQLSTATE Value</b> | <b>Meaning</b>   | <b>SQLCODE Values</b> |
|-----------------------|--|-----------------------|
| 53037                 | A partitioned index cannot be created on a table in a non-partitioned table space. | -662                  |

| <i>Table 40. Class Code 53: Invalid Operand or Inconsistent Specification (continued)</i> |  |                       |
|---|--|-----------------------|
| <b>SQLSTATE Value</b>   | <b>Meaning</b>   | <b>SQLCODE Values</b> |
| 53038   | The number of key limit values is zero or greater than the number of columns in the key.     | -663                  |
| 53039   | The PARTITION clause of the ALTER statement is omitted or invalid.                           | -665                  |
| 53045   | The data type of the key limit constant is not the same as the data type of the column.      | -678                  |
| 530A3   | The specified option is not allowed for the internal representation of the routine specified | -4705                 |

| <i>Table 41. Class Code 54: SQL or Product Limit Exceeded</i> |  |                        |
|---|--|------------------------|
| <b>SQLSTATE Value</b>   | <b>Meaning</b>   | <b>SQLCODE Values</b>  |
| 54001   | The statement is too long or too complex.  | -101                   |
| 54002   | A string constant is too long.   | -102                   |
| 54004   | The statement has too many table names or too many items in a SELECT or INSERT list.   | -129, -840             |
| 54005   | The sort key is too long, or has too many columns.   | -136                   |
| 54006   | The result string is too long.   | -137                   |
| 54008   | The key is too long, a column of the key is too long, or the key has too many columns.   | -602, -613, -614, -631 |
| 54009   | Too many users were specified in GRANT or REVOKE.  | -5017                  |
| 54010   | The record length of the table is too long.  | -101                   |
| 54011   | Too many columns were specified for a table, view, or table function.  | -101, -680             |
| 54012   | The literal is too long.   | -684                   |
| 54018   | The row is too long.   | -809                   |
| 54019   | The maximum number of late descriptors has been exceeded, probably because too many different CCSIDs were used.  | -871                   |
| 54021   | Too many constraints, or the size of the constraint is too large.  | -642                   |
| 54023   | The limit for the number of parameters or arguments for a function or a procedure has been exceeded.   | -442, -448             |
| 54028   | The maximum number of concurrent LOB handles has been reached.   | -429                   |
| 54035   | An internal object limit exceeded.   | -7049                  |
| 54038   | Maximum depth of nested routines or triggers was exceeded.   | -724                   |
| 54044   | A multiple-byte (UCS-2) collating sequence table cannot be supported in DRDA because it is too large.  | -7031                  |
| 54054   | The number of data partitions, or the combination of the number of table space partitions and the corresponding length of the partitioning limit key is exceeded | -4701                  |

*Table 41. Class Code 54: SQL or Product Limit Exceeded (continued)*

| <b>SQLSTATE Value</b> | <b>Meaning</b>  | <b>SQLCODE Values</b> |
|-----------------------|---|-----------------------|
| 54057                 | An XML element name, attribute name, namespace prefix or URI is too long. | -20326                |
| 54058                 | The internal representation of an XML path is too long.                   | -20327                |

*Table 42. Class Code 55: Object Not in Prerequisite State*

| <b>SQLSTATE Value</b> | <b>Meaning</b>   | <b>SQLCODE Values</b>        |
|-----------------------|--|------------------------------|
| 55005                 | Recursion is only supported to a DB2 for i application server.   | -145                         |
| 55006                 | The object cannot be dropped, because it is currently in use by the same application process.            | -615, -950                   |
| 55007                 | The object cannot be altered, because it is currently in use by the same application process.            | -951                         |
| 55018                 | The schema cannot be dropped, because it is in the library list.   | -7006                        |
| 55019                 | The object is in an invalid state for the operation.   | -7008, -7009, -20054, -20469 |
| 55029                 | Local program attempted to connect to a remote database.   | -862                         |
| 55042                 | The alias is not allowed because it identifies a single member of a multiple member file.                | -7030                        |
| 55048                 | Encrypted data cannot be encrypted.  | -20147                       |
| 55050                 | An object cannot be created into a protected schema.   | -7052                        |
| 55058                 | The DEBUG MODE cannot be changed for a routine that was created with DISABLE DEBUG MODE.                 | -20313                       |
| 55063                 | The XML schema is not in the correct state for the operation.  | -20339                       |
| 55068                 | A row change timestamp expression cannot be used because the table does not have a row change timestamp. | -20431                       |

*Table 43. Class Code 56: Miscellaneous SQL or Product Error*

| <b>SQLSTATE Value</b> | <b>Meaning</b>   | <b>SQLCODE Values</b> |
|-----------------------|--|-----------------------|
| 56016                 | The ranges specified for data partitions are not valid.  | -636                  |
| 56023                 | An invalid reference to a remote object has been detected.   | -512                  |
| 56084                 | An unsupported SQLTYPE was encountered in a select list or input list.   | -351, -352            |
| 56092                 | The type of authorization cannot be determined, because the authorization name is both a user id and group id. | -569                  |
| 56095                 | A bind option is invalid.  | -30104                |
| 56098                 | An error occurred during an implicit rebind, recompile, or revalidation.                                       | -727                  |

*Table 43. Class Code 56: Miscellaneous SQL or Product Error (continued)*

| <b>SQLSTATE Value</b> | <b>Meaning</b>   | <b>SQLCODE Values</b> |
|-----------------------|--|-----------------------|
| 560BF                 | The encryption and decryption facility has not been installed.   | -20223                |
| 560C3                 | An AFTER trigger cannot modify a row being inserted for an INSERT statement.   | -989                  |
| 560C4                 | The option is not valid for the ARD interface.   | -5027, -5028          |
| 560C6                 | A referential constraint cannot modify a row that was modified by an SQL data change statement within a fullselect.  | -864                  |
| 560CO                 | Cycle detected in a hierarchical query.  | -20451                |
| 560CR                 | The XML Toolkit LPO, the Java JDK or JVM, or PASE is not installed.  | -7056                 |
| 560CX                 | A table that has a trigger or is a parent of a referential constraint with a delete rule of CASCADE, SET NULL, or SET DEFAULT is not allowed as the target table in a MERGE statement that contains a global variable, function, or subselect in an assignment or values clause. | -7058                 |
| 560D1                 | MERGE not allowed because operations performed in the MERGE may affect other operations in the MERGE.  | -7058                 |

*Table 44. Class Code 57: Resource Not Available or Operator Intervention*

| <b>SQLSTATE Value</b> | <b>Meaning</b>  | <b>SQLCODE Values</b> |
|-----------------------|---|-----------------------|
| 57005                 | The statement cannot be executed, because a utility or a governor time limit was exceeded.                        | -666                  |
| 57006                 | The object cannot be created, because a DROP or CREATE is pending.  | -679                  |
| 57007                 | The object cannot be used, because an operation is pending.   | -910                  |
| 57010                 | A field procedure could not be loaded.  | -682                  |
| 57011                 | Virtual storage or database resource is not available.  | -904, -971, -7053     |
| 57012                 | A non-database resource is not available. This will not affect the successful execution of subsequent statements. | -30040                |
| 57013                 | A non-database resource is not available. This will affect the successful execution of subsequent statements.     | -30041                |
| 57014                 | Processing was canceled as requested.   | -952                  |
| 57017                 | Character conversion is not defined.  | -332                  |
| 57033                 | Deadlock or timeout occurred without automatic rollback.  | -913                  |
| 57042                 | DDM recursion has occurred.   | -30001                |
| 57043                 | A local SQL application program cannot be executed on an application server.                                      | -7021                 |
| 57050                 | The file server is not currently available.   | -357                  |

| SQLSTATE Value | Meaning   | SQLCODE Values |
|----------------|---|----------------|
| 58002          | An exit has returned an error or invalid data.  | -685, -7054    |
| 58003          | An invalid section number was detected.   | -144           |
| 58004          | A system error (that does not necessarily preclude the successful execution of subsequent SQL statements) occurred.                               | -901, -4301    |
| 58008          | Execution failed due to a distribution protocol error that will not affect the successful execution of subsequent DDM commands or SQL statements. | -30000         |
| 58009          | Execution failed due to a distribution protocol error that caused deallocation of the conversation.   | -30020         |
| 58010          | Execution failed due to a distribution protocol error that will affect the successful execution of subsequent DDM commands or SQL statements.     | -30021         |
| 58011          | The DDM command is invalid while the bind process in progress.  | -30050         |
| 58012          | The bind process with the specified package name and consistency token is not active.   | -30051         |
| 58014          | The DDM command is not supported.   | -30070         |
| 58015          | The DDM object is not supported.  | -30071         |
| 58016          | The DDM parameter is not supported.   | -30072         |
| 58017          | The DDM parameter value is not supported.   | -30073         |
| 58018          | The DDM reply message is not supported.   | -30074         |
| 58028          | The commit operation failed, because a resource in the unit of work was not able to commit its resources.   | -175           |
| 58033          | An unexpected error occurred while attempting to access a client driver.  | -969           |

| SQLSTATE Value | Meaning  | SQLCODE Values |
|----------------|--|----------------|
| 5UA00          | The argument to the WRAP function or to the CREATE_WRAPPED procedure is not valid. | -20529         |

## SQL message concepts

SQL messages are displayed when Db2 for i returns an error or warning code to the application that uses it.

To find a specific message, SQLCODE, or SQLSTATE, try the [SQL message finder](#).

### Use Display Message Description (DSPMSGD) to display a message description

Detailed descriptions of all Db2 for i messages, including SQLCODEs, are available in message file QSQLMSG. You can display and print them from the Display Message Description display. The CL command to display the message description is DSPMSGD. This command shows you both the first level and the second level text for the message. The first level is a short, single sentence version of the

message. The second level generally describes the reason in more detail and provides suggested solutions.

To show the message that corresponds to SQLCODE 0204, type the following command:

```
DSPMSGD RANGE (SQL0204) MSGF (QSYS/QSQLMSG)
```

### Related reference

[Listing of SQL messages](#)

These tables list SQL messages. Use these tables to find message text, cause text, recovery text, and corresponding SQLCODEs and SQLSTATEs.

## Listing of SQL messages

These tables list SQL messages. Use these tables to find message text, cause text, recovery text, and corresponding SQLCODEs and SQLSTATEs.

You can use the following tables with both positive and negative SQLCODEs. Take the absolute value of the SQLCODE, then append it to the letters SQL (for SQLCODEs less than 10 000) or the letters SQ (for SQLCODEs greater than or equal to 10 000) to determine the message identifier. Each SQLCODE corresponds to one or more SQLSTATEs.

| <b>SQ16000</b>                |  |
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| <b>Message Text:</b>          | A component of the static context has not been assigned.   |
| <b>Cause Text:</b>            | An XPath expression cannot be processed because the &1 component of the static context has not been assigned.<br><br>Static analysis of the expression relies on a component of the static context, &1, that has not been assigned a value.<br><br>The XPath expression cannot be processed. |
| <b>Recovery Text:</b>         | Assign a value to &1.  |
| <b>SQLCODE or SQLCODEs:</b>   | -16000   |
| <b>SQLSTATE or SQLSTATEs:</b> | 10501  |

| <b>SQ16001</b>       |  |
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| <b>Message Text:</b> | The focus component of the dynamic context has not been defined for an XPath expression.   |
| <b>Cause Text:</b>   | An XPath expression starting with token &1 cannot be processed because the focus component of the dynamic context has not been defined.<br><br>Evaluation of the expression starting with &1 requires that the focus component of the dynamic context be assigned. The token is being considered as the beginning of a path expression which does not have an associated context item or context sequence. This might be the result of not specifying an XPath context item expression in the passing clause. Other common causes for this error include: <ul style="list-style-type: none"> <li>• The value in token &amp;1 was intended to be a literal string but delimiting quotation characters are missing.</li> <li>• The value in token &amp;1 was intended to be a function but the opening and closing parentheses are missing.</li> </ul> The XPath expression cannot be processed. |

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| <b>SQ16001</b>                |  |
| <b>Recovery Text:</b>         | Correct the XPath expression to assign a focus component or make other changes so that the token is no longer expecting an assigned focus component. |
| <b>SQLCODE or SQLCODEs:</b>   | -16001   |
| <b>SQLSTATE or SQLSTATES:</b> | 10501  |

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| <b>SQ16002</b>                |  |
| <b>Message Text:</b>          | An XPath expression has an unexpected token &1 following &2. Expected tokens may include: &3.  |
| <b>Cause Text:</b>            | The &1 that follows &2 is not valid where it occurs in the expression. The &3 includes one or more possible tokens that are valid replacements for the unexpected token. The XPath expression cannot be processed. |
| <b>Recovery Text:</b>         | Use the correct syntax for the expression.   |
| <b>SQLCODE or SQLCODEs:</b>   | -16002   |
| <b>SQLSTATE or SQLSTATES:</b> | 10505  |

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| <b>SQ16003</b>                |   |
| <b>Message Text:</b>          | An XPath expression has a type that is not valid for the context in which the expression occurs.  |
| <b>Cause Text:</b>            | <p>An expression of data type &amp;1 cannot be used when the data type &amp;2 is expected for the context. The following situations might cause this error:</p> <ul style="list-style-type: none"> <li>• For a constructor function of an XML schema atomic type, atomization of its argument must not result in more than one atomic value.</li> <li>• The cast of a value of &amp;1 to target &amp;2 must be a supported cast.</li> <li>• An XPath expression was used in an output column of the XMLTABLE built in table function that could not be cast to the expected type. This typically happens when the expression result contains more than one atomic value and a singleton is expected; or a cast from the result type to the expected data type is not supported.</li> </ul> <p>The XPath expression cannot be processed.</p> |
| <b>Recovery Text:</b>         | Specify a value of the correct type.  |
| <b>SQLCODE or SQLCODEs:</b>   | -16003  |
| <b>SQLSTATE or SQLSTATES:</b> | 10507   |

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| <b>SQ16005</b>       |   |
| <b>Message Text:</b> | XPath expression references undefined name &1 within static context.  |
| <b>Cause Text:</b>   | During the static analysis phase, the static context is used to resolve element names, attribute names, type names, function names, namespace prefixes, and variable names. If an expression uses &1 that is not found in the static context, a static error is raised. The XPath expression cannot be processed. |

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| <b>SQ16005</b>                |   |
| <b>Recovery Text:</b>         | Use a name that is defined within the static context. If the QName includes a prefix, verify that the namespace prefix has been bound to a namespace through a namespace declaration. If the error resulted from a variable reference, verify that the variable is in scope for the expression. |
| <b>SQLCODE or SQLCODEs:</b>   | -16005  |
| <b>SQLSTATE or SQLSTATES:</b> | 10506   |

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| <b>SQ16007</b>                |   |
| <b>Message Text:</b>          | The XPath path expression references an axis &1 that is not supported.  |
| <b>Cause Text:</b>            | The &1 that is specified is not supported because DB2 XPath does not support the Full Axis Feature. The supported axes include: child, attribute, descendant, self, descendant-or-self, and parent. The XPath expression cannot be processed. |
| <b>Recovery Text:</b>         | Specify an axis that is supported.  |
| <b>SQLCODE or SQLCODEs:</b>   | -16007  |
| <b>SQLSTATE or SQLSTATES:</b> | 10505   |

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| <b>SQ16009</b>                |   |
| <b>Message Text:</b>          | An XPath function named &1 is not defined in the static context.  |
| <b>Cause Text:</b>            | In a call to function &1 with &2 parameters, the expanded QName and number of parameters does not match the function name and number of parameters of a function signature in the static context.<br><br>The XPath expression cannot be processed.  |
| <b>Recovery Text:</b>         | Try one of the following actions:<br><br>- Verify that you are passing the correct number of parameters to the function call.<br><br>- If the function call uses a function name with no prefix, verify that the local name of the function matches a function that is defined in the default function namespace, or use the correct prefix.<br><br>- If the function call uses a prefix, verify that the local name of the function matches a function that is defined in the namespace indicated by the prefix. |
| <b>SQLCODE or SQLCODEs:</b>   | -16009  |
| <b>SQLSTATE or SQLSTATES:</b> | 10506   |

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| <b>SQ16011</b>       |  |
| <b>Message Text:</b> | The result of an intermediate step expression in an XPath expression contains an atomic value. |



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| <b>SQ16011</b>                |   |
| <b>Cause Text:</b>            | Each intermediate step in an XPath expression must evaluate to a sequence of XPath nodes. Such sequences might be empty, however they must not include any atomic values. The expression cannot be processed. |
| <b>Recovery Text:</b>         | Modify the expression to ensure that each intermediate step in an XPath expression returns a sequence of nodes.   |
| <b>SQLCODE or SQLCODEs:</b>   | -16011  |
| <b>SQLSTATE or SQLSTATES:</b> | 10507   |

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| <b>SQ16012</b>                |   |
| <b>Message Text:</b>          | Context item in axis step must be node.   |
| <b>Cause Text:</b>            | In an axis step, the context item, which is the item currently being processed, must be a node of the XPath Data Model. The XPath expression cannot be processed. |
| <b>Recovery Text:</b>         | Modify the axis step or the input to ensure that the context item is a node.  |
| <b>SQLCODE or SQLCODEs:</b>   | -16012  |
| <b>SQLSTATE or SQLSTATES:</b> | 10507   |

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| <b>SQ16015</b>                |  |
| <b>Message Text:</b>          | Error occurred when processing attribute node &1.  |
| <b>Cause Text:</b>            | The sequence used for constructing an element's content contains an attribute node named &1 that follows an XPath node that is not an attribute node. Attribute nodes can only occur at the beginning of the content sequence. The XPath expression cannot be processed. |
| <b>Recovery Text:</b>         | Modify the content sequence to ensure that attribute nodes follow other attribute nodes.   |
| <b>SQLCODE or SQLCODEs:</b>   | -16015   |
| <b>SQLSTATE or SQLSTATES:</b> | 10507  |

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| <b>SQ16020</b>                |  |
| <b>Message Text:</b>          | Context node in path expression does not have document node root.  |
| <b>Cause Text:</b>            | The root node above the context node in a path expression must be an XPath document node. The XPath expression cannot be processed.          |
| <b>Recovery Text:</b>         | Change each path expression that begins with an initial "/" or "//" so that the context node has a root node that is an XPath document node. |
| <b>SQLCODE or SQLCODEs:</b>   | -16020   |
| <b>SQLSTATE or SQLSTATES:</b> | 10507  |

| <b>SQ16022</b>                |  |
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| <b>Message Text:</b>          | Operands of type &1 are not valid for operator &2.   |
| <b>Cause Text:</b>            | <p>One or both operands of the operator have invalid data types. The following situations might cause this error:</p> <ul style="list-style-type: none"> <li>• The types of the operands are not a valid combination for the given operator. For example, the operands of an arithmetic operator are not numeric types.</li> <li>• One or both operands of an arithmetic operator are a sequence of more than one item, but the given operator requires single item operands. The notation (item(), item()+) represents the type of a sequence of more than one item.</li> <li>• An XML document is being constructed from an attribute node. A sequence item that is used to construct an XML document must not be an attribute node. This error can occur when a sequence that contains an attribute is returned to SQL as an XML value.</li> </ul> <p>The XPath expression cannot be processed.</p> |
| <b>Recovery Text:</b>         | Use operands that have the correct types for the operator.   |
| <b>SQLCODE or SQLCODEs:</b>   | -16022   |
| <b>SQLSTATE or SQLSTATEs:</b> | 10507  |

| <b>SQ16023</b>                |   |
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| <b>Message Text:</b>          | The XPath prolog cannot contain multiple declarations for the same namespace prefix &1.   |
| <b>Cause Text:</b>            | The prolog contains multiple declarations for the namespace prefix &1. Although a namespace declaration in a prolog can override a prefix that has been predeclared in the static context, the same namespace prefix cannot be declared more than once in the prolog. The XPath expression cannot be processed. |
| <b>Recovery Text:</b>         | Remove any extra declarations for the prefix from the prolog, or change the prefix that is assigned to the extra declarations. Verify that the prefixes used in the query reference the correct namespaces.   |
| <b>SQLCODE or SQLCODEs:</b>   | -16023  |
| <b>SQLSTATE or SQLSTATEs:</b> | 10503   |

| <b>SQ16024</b>       |  |
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| <b>Message Text:</b> | The namespace prefix &1 cannot be redeclared or cannot be bound to the specified URI.  |
| <b>Cause Text:</b>   | A namespace declaration cannot redeclare the predefined namespace prefixes "xml" or "xmlns". If the prefix name is not "xml", then it cannot be bound to the namespace URI 'http://www.w3.org/XML/1998/namespace'. No prefix can be bound to the namespace URI 'http://www.w3.org/2000/xmlns/' either. The XPath expression cannot be processed. |

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| <b>SQ16024</b>                |   |
| <b>Recovery Text:</b>         | <p>Perform one of the following actions:</p> <ul style="list-style-type: none"> <li>• If the prefix name is "xml" or "xmlns", then change the prefix name to a different namespace prefix or remove the namespace declaration.</li> <li>• If the namespace URI is 'http://www.w3.org/XML/1998/namespace' or 'http://www.w3.org/2000/xmlns/', then change the namespace URI specified in the declaration of the namespace prefix.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | -16024  |
| <b>SQLSTATE or SQLSTATES:</b> | 10503   |

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| <b>SQ16031</b>                |  |
| <b>Message Text:</b>          | The XPath expression is not supported.                   |
| <b>Cause Text:</b>            | The XPath expression syntax &1 is not supported.         |
| <b>Recovery Text:</b>         | Correct the expression or remove the unsupported syntax. |
| <b>SQLCODE or SQLCODEs:</b>   | -16031   |
| <b>SQLSTATE or SQLSTATES:</b> | 10509  |

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| <b>SQ16036</b>                |   |
| <b>Message Text:</b>          | The URI that is specified in a namespace declaration cannot be a zero-length string.  |
| <b>Cause Text:</b>            | The URI that is specified in a namespace declaration must be a valid URI that conforms to the generic URI syntax specified by the World Wide Web Consortium(W3C). The URI cannot be a zero-length string. The XPath expression cannot be processed. |
| <b>Recovery Text:</b>         | Specify a valid URI in the namespace declaration.   |
| <b>SQLCODE or SQLCODEs:</b>   | -16036  |
| <b>SQLSTATE or SQLSTATES:</b> | 10504   |

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| <b>SQ16038</b>                |   |
| <b>Message Text:</b>          | The arguments of fn:dateTime have different time zones.   |
| <b>Cause Text:</b>            | The function fn:dateTime includes arguments that reference different time zones. The time zone of either argument might be an explicit part of the value, or the result of using the implicit time zone for the XPath execution environment for the argument. The XPath expression was not processed. |
| <b>Recovery Text:</b>         | Make sure that the same time zone is used for both arguments of the function fn:dateTime.   |
| <b>SQLCODE or SQLCODEs:</b>   | -16038  |
| <b>SQLSTATE or SQLSTATES:</b> | 10608   |

| <b>SQ16041</b>                |   |
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| <b>Message Text:</b>          | The effective boolean value of a sequence could not be computed.  |
| <b>Cause Text:</b>            | <p>An implicit or explicit invocation of the fn:boolean function in the XPath expression could not compute the effective boolean value of the sequence.</p> <p>The effective boolean value can be computed only if the sequence operand is one of the following sequences:</p> <ul style="list-style-type: none"> <li>• An empty sequence</li> <li>• A sequence where the value of the first item is a node</li> <li>• A singleton sequence with a value of type xs:string, xs:untypedAtomic or a type derived from one of these types.</li> <li>• A singleton sequence with a value of any numeric type or derived from any numeric type.</li> </ul> <p>The expression cannot be processed.</p>                |
| <b>Recovery Text:</b>         | <p>Determine the possible expressions within the XPath expression where an effective boolean value is calculated either implicitly or explicitly. An implicit invocation of the fn:boolean function can occur when processing the following types of expressions.</p> <ul style="list-style-type: none"> <li>• The logical expressions AND and OR</li> <li>• An fn:not function invocation</li> <li>• Certain types of predicates, such as a[b]</li> <li>• The WHERE clause of an FLWOR expression</li> <li>• Conditional expressions, such as IF</li> </ul> <p>Ensure that the sequence operand of each effective boolean value calculation has a valid sequence operand, as described in the explanation.</p> |
| <b>SQLCODE or SQLCODEs:</b>   | -16041  |
| <b>SQLSTATE or SQLSTATES:</b> | 10608   |

| <b>SQ16046</b>                |  |
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| <b>Message Text:</b>          | A numeric XPath expression attempted to divide by zero.  |
| <b>Cause Text:</b>            | A division or modulus operation attempted to divide an integer or decimal value by zero. The XPath expression cannot be processed. |
| <b>Recovery Text:</b>         | Use a value for the divisor that is not equal to zero.   |
| <b>SQLCODE or SQLCODEs:</b>   | -16046   |
| <b>SQLSTATE or SQLSTATES:</b> | 10601  |

| <b>SQ16047</b>       |   |
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| <b>Message Text:</b> | An XPath expression resulted in arithmetic overflow or underflow.   |
| <b>Cause Text:</b>   | An arithmetic operation resulted in a number that either exceeded the maximum or was below the minimum value allowed. The XPath expression cannot be processed. |

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| <b>SQ16047</b>                |  |
| <b>Recovery Text:</b>         | Modify the expression to result in a number that does not result in an arithmetic overflow or underflow. |
| <b>SQLCODE or SQLCODEs:</b>   | -16047   |
| <b>SQLSTATE or SQLSTATES:</b> | 10601  |

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| <b>SQ16048</b>                |   |
| <b>Message Text:</b>          | An XPath prolog cannot contain more than one &1 declaration.  |
| <b>Cause Text:</b>            | Declaring more than one &1 in a prolog results in an error. The XPath expression cannot be processed. |
| <b>Recovery Text:</b>         | Remove the extra &1 from the prolog.  |
| <b>SQLCODE or SQLCODEs:</b>   | -16048  |
| <b>SQLSTATE or SQLSTATES:</b> | 10502   |

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| <b>SQ16049</b>                |  |
| <b>Message Text:</b>          | The lexical value &1 is not valid for the &2 data type in the function or cast.  |
| <b>Cause Text:</b>            | A cast expression or function call includes a &1 that does not have the correct lexical form for the &2 data type. The XPath expression cannot be processed.   |
| <b>Recovery Text:</b>         | <p>Try one of the following actions:</p> <ul style="list-style-type: none"> <li>• If the error results from a function invocation, verify that the string parameters used for QNames or local names have the correct lexical form.</li> <li>• If the error results from a cast expression, verify that the source value is not one of the special float or double values NaN, INF, or -INF.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | -16049   |
| <b>SQLSTATE or SQLSTATES:</b> | 10602  |

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| <b>SQ16051</b>              |  |
| <b>Message Text:</b>        | The value &1 data type &2 is out of range for an implicit or explicit cast to target data type &3.   |
| <b>Cause Text:</b>          | An XPath expression requires that the &1 with data type of &2 be cast, either implicitly or explicitly, to the target data type &3. The value is outside the defined range of values for that data type. This error could be returned for a variety of error QNames such as FOAR0002, FOCA0001, or FOCA0003. The XPath expression cannot be processed. |
| <b>Recovery Text:</b>       | Change the XPath expression to use a target data type with a range that supports the specific value, or change the value to be within the defined range of the target data type.   |
| <b>SQLCODE or SQLCODEs:</b> | -16051   |

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| <b>SQ16051</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 10602 |

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| <b>SQ16052</b>                |   |
| <b>Message Text:</b>          | NaN cannot be used as a float or double value in a dateTime operation.  |
| <b>Cause Text:</b>            | The value "NaN" was passed as an argument to a date, time, or duration operation, but that value is not valid for this operation. The XPath expression was not processed. |
| <b>Recovery Text:</b>         | Pass a valid float or double value into the date, time, or duration operation.  |
| <b>SQLCODE or SQLCODEs:</b>   | -16052  |
| <b>SQLSTATE or SQLSTATES:</b> | 10602   |

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| <b>SQ16055</b>                |   |
| <b>Message Text:</b>          | An arithmetic operation involving a date or dateTime value resulted in overflow.  |
| <b>Cause Text:</b>            | An arithmetic operation involving a date or dateTime value returned a number that exceeded the maximum value allowed. The XPath expression was not processed. |
| <b>Recovery Text:</b>         | Modify the XPath expression so that the result does not exceed the maximum allowed value.   |
| <b>SQLCODE or SQLCODEs:</b>   | -16055  |
| <b>SQLSTATE or SQLSTATES:</b> | 10605   |

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| <b>SQ16056</b>                |  |
| <b>Message Text:</b>          | An arithmetic operation involving a duration value resulted in overflow.   |
| <b>Cause Text:</b>            | An arithmetic operation involving a duration value resulted in a number that exceeded the maximum value allowed. The XPath expression cannot be processed. |
| <b>Recovery Text:</b>         | Modify the XPath expression to result in a number that does not exceed the maximum value allowed.  |
| <b>SQLCODE or SQLCODEs:</b>   | -16056   |
| <b>SQLSTATE or SQLSTATES:</b> | 10605  |

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| <b>SQ16057</b>              |   |
| <b>Message Text:</b>        | A time zone value is not valid.   |
| <b>Cause Text:</b>          | An XPath expression specifies a time zone value that is less than -PT14H00M or greater than PT14H00M. The XPath expression was not processed. |
| <b>Recovery Text:</b>       | Specify a time zone value that is greater than or equal to -PT14H00M and less than or equal to PT14H00M.                                      |
| <b>SQLCODE or SQLCODEs:</b> | -16057  |

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| <b>SQ16057</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 10605 |

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| <b>SQ16061</b>                |  |
| <b>Message Text:</b>          | The value &1 cannot be constructed as or cast to the data type &2.   |
| <b>Cause Text:</b>            | <p>An XPath expression attempted to use the value &amp;1 as a &amp;2 value but the value is not valid for the data type. The following situations might cause this error:</p> <ul style="list-style-type: none"> <li>• &amp;1 was explicitly passed to a constructor function or specified in a cast expression with a target data type of &amp;2.</li> <li>• An expression that includes &amp;1 implicitly cast the value to the target data type of &amp;2. Many XPath expressions use implicit casting to process the expressions. For example, an implicit cast is used in general comparisons of numeric values that require the values to be of data type xs:double.</li> <li>• &amp;1 is not within the range of valid values for the target type &amp;2.</li> </ul> <p>The XPath expression cannot be processed.</p> |
| <b>Recovery Text:</b>         | <p>Take one the following actions:</p> <ul style="list-style-type: none"> <li>• If the error occurs in an expression that casts from one primitive type to another, verify that casting from the source type to the target type is supported. If the cast is not supported, either remove the expression or cast the value to a different data type.</li> <li>• Check for expressions that would result in implicit casting to values that may not conform to the data type of the implicit cast.</li> </ul>   |
| <b>SQLCODE or SQLCODEs:</b>   | -16061   |
| <b>SQLSTATE or SQLSTATES:</b> | 10608  |

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| <b>SQ16066</b>       |  |
| <b>Message Text:</b> | Argument passed to aggregate function &1 is not valid.   |
| <b>Cause Text:</b>   | The argument that was passed to the aggregate function &1 is not valid because the argument does not meet the conditions that are required for arguments to the function &1. |

| <b>SQ16066</b>                |   |
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| <b>Recovery Text:</b>         | <p>Try one of the following actions:</p> <ul style="list-style-type: none"> <li>• If the function is fn:avg, verify that the following conditions are met: If the input sequence contains duration values, the values must be either all xs:yearMonthDuration values or all xs:dayTimeDuration values. If the input sequence contains numeric values, the values must all be promotable to a single common type that is one of the four numeric types, xs:yearMonthDuration or xs:dayTimeDuration or one of its subtypes.</li> <li>• If the function is fn:max or fn:min, verify that the following conditions are met: All items in the input sequence must be numeric or derived from a single base type for which the gt operator (for fn:max) or lt operator (for fn:min) is defined. If the input sequence contains numeric values, the values must all be promotable to a single common type and the values in the sequence must have a total order. If the input sequence contains duration values, the values must be either all xs:yearMonthDuration values or all xs:dayTimeDuration values.</li> <li>• If the function is fn:sum, verify that the following conditions are met: All items in the input sequence must be numeric or derived from a single base type. The type must support addition. If the input sequence contains numeric values, the values must all be promotable to a single common type. If the input sequence contains duration values, the values must be either all xs:yearMonthDuration values or all xs:dayTimeDuration values.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | -16066  |
| <b>SQLSTATE or SQLSTATES:</b> | 10608   |

| <b>SQ16067</b>                |  |
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| <b>Message Text:</b>          | The flags argument &1 passed to function &2 is not valid.  |
| <b>Cause Text:</b>            | The function &2 includes a &1 that was passed to the function as a regular expression flag parameter. However, the string that was passed to the function includes characters that are not defined as flags. |
| <b>Recovery Text:</b>         | Modify the function call to pass in a string argument that contains only characters that are defined as flags. Valid characters include s, m, i, and x.  |
| <b>SQLCODE or SQLCODEs:</b>   | -16067   |
| <b>SQLSTATE or SQLSTATES:</b> | 10609  |

| <b>SQ16068</b>              |  |
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| <b>Message Text:</b>        | The regular expression argument &1 passed to function &2 is not valid.   |
| <b>Cause Text:</b>          | The &1 that was passed to function &2 is not valid according to the rules for regular expressions in XPath. See SQL XML Programming in the Information Center, <a href="http://www.ibm.com/systems/i/infocenter/">http://www.ibm.com/systems/i/infocenter/</a> , for a description of XPath regular expression syntax. |
| <b>Recovery Text:</b>       | Specify a valid value for the regular expression.  |
| <b>SQLCODE or SQLCODEs:</b> | -16068   |



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| <b>SQ16068</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 10609 |

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| <b>SQ16069</b>                |   |
| <b>Message Text:</b>          | A regular expression argument &1 passed to function &2 is a zero-length string.   |
| <b>Cause Text:</b>            | The &1 that was specified for the pattern parameter in a call to function &2 is a zero-length string. A zero-length string is not a valid pattern for this function because the pattern will never match a substring in the input string. |
| <b>Recovery Text:</b>         | Pass a valid pattern to the function call or remove the function call from the expression.  |
| <b>SQLCODE or SQLCODEs:</b>   | -16069  |
| <b>SQLSTATE or SQLSTATES:</b> | 10609   |

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| <b>SQ16104</b>                |  |
| <b>Message Text:</b>          | Internal error encountered in XML parser.  |
| <b>Cause Text:</b>            | While parsing an XML document the parser encountered an internal error. The byte offset into the XML value being processed after conversion to UTF-8 is &1. The XML parser error description is: &2. |
| <b>Recovery Text:</b>         | Correct the XML value. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -16104   |
| <b>SQLSTATE or SQLSTATES:</b> | 2200M  |

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| <b>SQ16168</b>                |  |
| <b>Message Text:</b>          | XML declaration in XML document not valid.   |
| <b>Cause Text:</b>            | <p>The XML declaration in the XML document or XML schema is incorrect. The error type is &amp;1. The error types are:</p> <ul style="list-style-type: none"> <li>• 1 -- Unsupported Byte Order Mark, declaration string order is incorrect, declaration must be in lower case, the 'version=' string is missing, or unsupported attributes were specified.</li> <li>• 6 -- Specified version is not supported.</li> <li>• 7 -- Specified encoding is not supported, or the internal encoding does not match the external encoding.</li> <li>• 8 -- The XML declaration is not terminated.</li> </ul> |
| <b>Recovery Text:</b>         | Correct the XML document. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -16168   |
| <b>SQLSTATE or SQLSTATES:</b> | 2200M  |

| <b>SQ16246</b>                |  |
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| <b>Message Text:</b>          | Incomplete annotation mapping at or near &1 in XML schema document &2. The reason code is &3.  |
| <b>Cause Text:</b>            | <p>The annotation mapping the XML schema item to a database object is missing some information near &amp;1 in &amp;2. The reason code is &amp;3. Reason codes and their meanings are:</p> <ul style="list-style-type: none"> <li>• 1 - A rowset name is not specified or is not fully qualified.</li> <li>• 2 - Any mapping must specify either a target column or a condition. Neither a target column nor a condition is specified.</li> <li>• 3 - The annotation has an unexpected format.</li> <li>• 4 - The annotation is empty.</li> </ul> <p>The XML schema document can be determined by matching &amp;2 to the SCHEMALOCATION column of the XSROBJECTCOMPONENTS catalog table. The XML schema is not enabled for decomposition.</p> |
| <b>Recovery Text:</b>         | <p>Modify the annotations in the XML schema. Possible actions based on the reason code include:</p> <ul style="list-style-type: none"> <li>• 1 - Specify a rowset name or fully qualify the rowset name.</li> <li>• 2 - Specify either a target column or a condition.</li> <li>• 3 - Correct the format of the annotation.</li> <li>• 4 - Specify an annotation value.</li> </ul>   |
| <b>SQLCODE or SQLCODEs:</b>   | -16246   |
| <b>SQLSTATE or SQLSTATES:</b> | 225DE  |

| <b>SQ16247</b>                |  |
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| <b>Message Text:</b>          | Source XML type &1 cannot be mapped to target SQL type &2.   |
| <b>Cause Text:</b>            | Annotation at or around &3 in XML schema document &4 maps an XML schema type &1 to an incompatible SQL type &2. The XML schema document can be determined by matching &4 to the SCHEMALOCATION column of the XSROBJECTCOMPONENTS catalog table. The XML schema is not enabled for decomposition. |
| <b>Recovery Text:</b>         | Consult annotated XML schema documentation on compatibility between XML schema types and SQL types. Correct the annotation appropriately.  |
| <b>SQLCODE or SQLCODEs:</b>   | -16247   |
| <b>SQLSTATE or SQLSTATES:</b> | 225DE  |

| <b>SQ16248</b>       |   |
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| <b>Message Text:</b> | Unknown annotation &1 at or near &2 in XML schema document &3.  |
| <b>Cause Text:</b>   | The annotated XML schema document &3 contains an error in the annotation at or near &2. The unrecognized name given in the annotation tag is &1. The XML schema document can be determined by matching &3 to the SCHEMALOCATION column of the XSROBJECTCOMPONENTS catalog table. The XML schema is not enabled for decomposition. |

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| <b>SQ16248</b>                |  |
| <b>Recovery Text:</b>         | Consult annotated XML schema documentation for a list of legal annotations and their syntax. Correct or remove the unknown annotation. |
| <b>SQLCODE or SQLCODEs:</b>   | -16248   |
| <b>SQLSTATE or SQLSTATES:</b> | 225DE  |

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| <b>SQ16249</b>                |   |
| <b>Message Text:</b>          | The db2-xdb:expression annotation &1 at or near &2 in XML schema document &3 is too long.   |
| <b>Cause Text:</b>            | The string length of the specified expression exceeds the maximum allowed. The XML schema document can be determined by matching &3 to the SCHEMALOCATION column of the XSROBJECTCOMPONENTS catalog table. The XML schema is not enabled for decomposition. |
| <b>Recovery Text:</b>         | Consult annotated XML schema documentation on the limit for strings specified in db2-xdb:expression annotations. Correct the expression appropriately.  |
| <b>SQLCODE or SQLCODEs:</b>   | -16249  |
| <b>SQLSTATE or SQLSTATES:</b> | 225DE   |

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| <b>SQ16250</b>                |   |
| <b>Message Text:</b>          | More than one db2-xdb:defaultSQLSchema exists within the XML schema.  |
| <b>Cause Text:</b>            | <p>The db2-xdb:defaultSQLSchema with value &amp;1 at or near &amp;2 in XML schema document &amp;3 conflicts with another db2-xdb:defaultSQLSchema specified in one of the XML schema documents within the same XML schema. The XML schema is not enabled for decomposition.</p> <p>There can only be one value for the db2-xdb:defaultSQLSchema annotation across all XML schema documents that comprise an annotated XML schema. The specified SQL schema name &amp;1 at or near &amp;2 in the XML schema document &amp;3 conflicts with another value for db2-xdb:defaultSQLSchema annotation in this or another XML schema document of the XML schema.</p> |
| <b>Recovery Text:</b>         | Correct the annotated XML schema such that all specifications of db2-xdb:defaultSQLSchema are consistent.   |
| <b>SQLCODE or SQLCODEs:</b>   | -16250  |
| <b>SQLSTATE or SQLSTATES:</b> | 225DE   |

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| <b>SQ16251</b>       |  |
| <b>Message Text:</b> | Duplicate annotation defined for &1 at or near &2 in XML schema document &3. |

| <b>SQ16251</b>                |   |
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| <b>Cause Text:</b>            | There is more than one annotation for &1 in the annotated XML schema. A duplicate annotation has been found for this object at or around &2 in XML schema document &3. The XML schema document can be determined by matching &3 to the SCHEMALOCATION column of the XSROBJECTCOMPONENTS catalog table. The XML schema is not enabled for decomposition. |
| <b>Recovery Text:</b>         | Correct the annotated XML schema by removing the duplicate annotation from the XML schema documents of the XML schema.  |
| <b>SQLCODE or SQLCODEs:</b>   | -16251  |
| <b>SQLSTATE or SQLSTATEs:</b> | 225DE   |

| <b>SQ16252</b>                |   |
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| <b>Message Text:</b>          | The db2-xdb:rowSet &1 near &2 in the XML schema document &3 is associated with another table.   |
| <b>Cause Text:</b>            | A rowset in an annotated XML schema must correspond to exactly one table. The rowset declaration at or near &2 declares an association between rowset &1 and the table specified in the enclosing db2-xdb:table annotation. The specified rowset has already been associated to a different table in another db2-xdb:table annotation. The XML schema document can be determined by matching &3 to the SCHEMALOCATION column of the XSROBJECTCOMPONENTS catalog table. The XML schema is not enabled for decomposition. |
| <b>Recovery Text:</b>         | Correct the annotated XML schema such that each rowset name is uniquely associated with exactly one table across the annotated XML schema documents of the XML schema.  |
| <b>SQLCODE or SQLCODEs:</b>   | -16252  |
| <b>SQLSTATE or SQLSTATEs:</b> | 225DE   |

| <b>SQ16253</b>                |  |
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| <b>Message Text:</b>          | The db2-xdb:condition annotation &1 at or near line &2 in XML schema document &3 is too long.  |
| <b>Cause Text:</b>            | The length of the string associated with db2-xdb:condition that starts with &1 exceeds the maximum allowed. The db2-xdb:condition is found at or around line number &2 in XML schema document &3. The XML schema document can be determined by matching &3 to the SCHEMALOCATION column of the XSROBJECTCOMPONENTS catalog table. The XML schema is not enabled for decomposition. |
| <b>Recovery Text:</b>         | Reduce the size of the condition string for db2-xdb:condition in the XML schema document.  |
| <b>SQLCODE or SQLCODEs:</b>   | -16253   |
| <b>SQLSTATE or SQLSTATEs:</b> | 225DE  |

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| <b>SQ16254</b>                |  |
| <b>Message Text:</b>          | A db2-xdb:locationPath &1 near &2 in XML schema document &3 is not valid with reason code &4.  |
| <b>Cause Text:</b>            | <p>A value specified in the annotated schema for &amp;3 is not valid. The XML schema document can be determined by matching &amp;3 to the SCHEMALOCATION column of the XSROBJECTCOMPONENTS catalog table. Possible values for reason code include:</p> <ul style="list-style-type: none"> <li>• 1 - An element or attribute has a namespace prefix that is not mapped to a URI. All namespace prefixes used in the location path must be associated with a namespace in the XML schema document containing the annotation specifying this location path.</li> <li>• 2 - Syntax is not valid for a location path.</li> <li>• 3 - The specified path does not match any possible path from a root node to a location where the element or attribute may appear in an instance document.</li> </ul> |
| <b>Recovery Text:</b>         | <p>Modify the annotations in the XML schema. Possible actions based on the reason code include:</p> <ul style="list-style-type: none"> <li>• 1 - Ensure that namespace prefixes in the db2-xdb:locationPath are correct or add a declaration for the missing namespace.</li> <li>• 2 - Ensure that the syntax of the value for db2-xdb:locationPath is valid syntax for a location path.</li> <li>• 3 - Ensure that the value for db2-xdb:locationPath corresponds to a possible path from the root node to the element or attribute at the end of the location path.</li> </ul>   |
| <b>SQLCODE or SQLCODEs:</b>   | -16254   |
| <b>SQLSTATE or SQLSTATES:</b> | 225DE  |

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| <b>SQ16255</b>                |  |
| <b>Message Text:</b>          | A db2-xdb:rowSet value conflicts with a db2-xdb:table annotation with the same name.   |
| <b>Cause Text:</b>            | <p>A db2-xdb:rowSet value &amp;1 used at or near &amp;2 in XML schema document &amp;3 conflicts with a db2-xdb:table annotation with the same name. The annotated XML schema contains a db2-xdb:table annotation which declares a table named &amp;1, but the annotated XML schema does not have any db2-xdb:rowSet annotation declaration to associate &amp;1 to any table. If a rowset is not declared in any db2-xdb:table annotation, it is implicitly associated to a table with the same name qualified by the value of db2-xdb:defaultSQLSchema. The annotated XML schema cannot use a db2-xdb:rowSet annotation that relies on an implicit association between a rowset and a table with the same name of &amp;1, and at the same time declare a table named &amp;1 using a db2-xdb:table annotation. The XML schema document can be determined by matching &amp;3 to the SCHEMALOCATION column of the XSROBJECTCOMPONENTS catalog table. The schema is not enabled for decomposition.</p> |
| <b>Recovery Text:</b>         | Correct the annotated XML schema by adding a db2-xdb:rowSet child element to the db2-xdb:table element with name &1. This will explicitly associate the rowset to the table.   |
| <b>SQLCODE or SQLCODEs:</b>   | -16255   |
| <b>SQLSTATE or SQLSTATES:</b> | 225DE  |

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| <b>SQ16257</b>                |   |
| <b>Message Text:</b>          | XML schema feature &1 is not supported for decomposition.   |
| <b>Cause Text:</b>            | Feature &1 is used in the XML schema. In some cases, the presence of an unsupported feature in the XML schema results in failure to enable for decomposition.   |
| <b>Recovery Text:</b>         | Remove the feature from the XML schema or remove the decomposition annotations associated with the feature, as appropriate. Consult decomposition documentation on the restrictions on use of the specified XML schema feature. |
| <b>SQLCODE or SQLCODEs:</b>   | -16257  |
| <b>SQLSTATE or SQLSTATES:</b> | 225DE   |

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| <b>SQ16258</b>                |   |
| <b>Message Text:</b>          | The XML schema contains a recursive element which is an unsupported feature for decomposition.  |
| <b>Cause Text:</b>            | The XML schema contains a recursive element which is an unsupported feature for decomposition. The recursive element is identified as &1 of type &2. The XML schema is not enabled for decomposition. |
| <b>Recovery Text:</b>         | Remove the use of recursion from the XML schema.  |
| <b>SQLCODE or SQLCODEs:</b>   | -16258  |
| <b>SQLSTATE or SQLSTATES:</b> | 225DE   |

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| <b>SQ16259</b>                |  |
| <b>Message Text:</b>          | Many-to-many mappings relationship between elements that map to the same rowset is not valid.  |
| <b>Cause Text:</b>            | Many-to-many mappings detected in XML schema document &1 near &2 and in XML schema document &3 near &4 is not valid. If two element declarations have a sequence model group as their lowest common ancestor then only one of the paths from the element declaration up to that model group can have maxOccurs > 1 on one or more elements declarations or model groups in that path. The XML schema documents can be determined by matching &1 and &3 to the SCHEMALOCATION column of the XSROBJECTCOMPONENTS catalog table. The XML schema is not enabled for decomposition. |
| <b>Recovery Text:</b>         | Correct the annotations such that there are no many-to-many mappings. Consult annotated XML schema documentation for rules on mapping elements and attributes.   |
| <b>SQLCODE or SQLCODEs:</b>   | -16259   |
| <b>SQLSTATE or SQLSTATES:</b> | 225DE  |

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| <b>SQ16260</b>       |  |
| <b>Message Text:</b> | XML schema annotations include no mappings to any column of any table.   |
| <b>Cause Text:</b>   | The XML schema contains no annotations that map an XML element or attribute to any column of any table. The XML schema is not enabled for decomposition. |

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| <b>SQ16260</b>                |   |
| <b>Recovery Text:</b>         | Add annotations to the XML schema so that at least one XML element or attribute is mapped to a column of a table. |
| <b>SQLCODE or SQLCODEs:</b>   | -16260  |
| <b>SQLSTATE or SQLSTATES:</b> | 225DE   |

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| <b>SQ16262</b>                |   |
| <b>Message Text:</b>          | The annotated XML schema has no columns mapped for the rowset &1.   |
| <b>Cause Text:</b>            | The set of annotations involving rowset &1 contain no mappings to any column. In order for a rowset to be target for decomposition, at least one column must be mapped to some XML element or attribute.                      |
| <b>Recovery Text:</b>         | Add an annotation that maps a column of the specified rowset to some XML element or attribute. If the rowset is not intended to be a target for decomposition, remove references to the rowset from the annotated XML schema. |
| <b>SQLCODE or SQLCODEs:</b>   | -16262  |
| <b>SQLSTATE or SQLSTATES:</b> | 225DE   |

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| <b>SQ16263</b>                |   |
| <b>Message Text:</b>          | The rowSet name &1 at or near &2 in the XML schema document &3 is not used in any mapping.                                  |
| <b>Cause Text:</b>            | The rowSet name &1 at or near &2 in the XML schema document &3 must be specified in at least one mapping in the XML schema. |
| <b>Recovery Text:</b>         | Ensure that the rowSet name &1 is specified in mapping at least one element or attribute in the XML schema.                 |
| <b>SQLCODE or SQLCODEs:</b>   | -16263  |
| <b>SQLSTATE or SQLSTATES:</b> | 225DE   |

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| <b>SQ16264</b>                |   |
| <b>Message Text:</b>          | RowSet name &1 at or near &2 in the XML schema document &3 cannot be used more than once under &4.  |
| <b>Cause Text:</b>            | A rowSet name can be used only once under &4. It can participate in only one hierarchy of operation orders.   |
| <b>Recovery Text:</b>         | Verify that using the same rowSet name under multiple instances of the element db2-xdb:order is needed. Combine the affected db2-xdb:order elements, so the resulting order is consistent with the required order of insertion. |
| <b>SQLCODE or SQLCODEs:</b>   | -16264  |
| <b>SQLSTATE or SQLSTATES:</b> | 225DE   |

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| <b>SQL16265</b>               |   |
| <b>Message Text:</b>          | XML schema &1 in &2 is not enabled for decomposition.   |
| <b>Cause Text:</b>            | The XML schema identified by &1 in &2 is not in the correct state to perform decomposition. The XML schema could be in one of the following states: <ul style="list-style-type: none"> <li>• Not enabled for decomposition (possibly never enabled)</li> <li>• Disabled for decomposition</li> </ul> Decomposition can only be performed using XML schemas that are enabled for decomposition. XML decomposition was not started. |
| <b>Recovery Text:</b>         | Ensure that the XML schema is enabled for decomposition before attempting to use it for decomposition of an XML document. The decomposition status of an XML schema can be checked by selecting the DECOMPOSITION column of the XSROBJECTS catalog table for the XML schema identified by &1.   |
| <b>SQLCODE or SQLCODEs:</b>   | -16265  |
| <b>SQLSTATE or SQLSTATES:</b> | 225D1   |

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| <b>SQL16266</b>               |  |
| <b>Message Text:</b>          | Error occurred during decomposition of XML document &1.  |
| <b>Cause Text:</b>            | An SQL error occurred during decomposition of document &1 while attempting to insert data. Information returned for the error includes SQLCODE &2 and SQLSTATE &3. The error occurred while attempting an SQL insert operation based on some piece of data from the XML document. The XML document was not decomposed. |
| <b>Recovery Text:</b>         | Check the message associated with the SQLCODE &2. Follow the action suggested by that message.   |
| <b>SQLCODE or SQLCODEs:</b>   | -16266   |
| <b>SQLSTATE or SQLSTATES:</b> | 225D2  |

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| <b>SQL16277</b>               |   |
| <b>Message Text:</b>          | The global annotation &1 appears more than once in the XML schema.  |
| <b>Cause Text:</b>            | An annotated XML schema can contain at most one occurrence of the annotation &1. Another occurrence of this annotation appears at or near &2 in XML schema document &3. |
| <b>Recovery Text:</b>         | Combine the contents of the multiple &1 annotations into a single annotation, and ensure that the resulting annotation does not contain any duplicate information.      |
| <b>SQLCODE or SQLCODEs:</b>   | -16277  |
| <b>SQLSTATE or SQLSTATES:</b> | 225DE   |

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| <b>SQL16280</b>      |                       |
| <b>Message Text:</b> | XSLT processor error. |



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| <b>SQ16280</b>                |   |
| <b>Cause Text:</b>            | An error occurred during the XSLT processing for the XSLTRANSFORM function. Text describing the problem is: &1. |
| <b>Recovery Text:</b>         | Refer to the XSLT processor documentation for this error. Try the request again.                                |
| <b>SQLCODE or SQLCODEs:</b>   | -16280  |
| <b>SQLSTATE or SQLSTATEs:</b> | 225X0   |

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| <b>SQ20054</b>                |  |
| <b>Message Text:</b>          | File &1 in &2 has DataLinks in link pending mode.  |
| <b>Cause Text:</b>            | The accessed file &1 has DataLinks in link pending mode for reason code &3. The reason codes are as follows: <ul style="list-style-type: none"> <li>• 21 The status of the DataLinks cannot be verified. A file cannot be used for INSERT and UPDATE statements while in link pending mode.</li> </ul> |
| <b>Recovery Text:</b>         | Use the WRKPFDL (Work with Physical File DataLinks) command to determine which files have DataLinks in link pending mode. Resolve the pending links and try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20054   |
| <b>SQLSTATE or SQLSTATEs:</b> | 55019  |

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| <b>SQ20055</b>                |   |
| <b>Message Text:</b>          | Result column not compatible with column &1 in materialized query table.  |
| <b>Cause Text:</b>            | The data type of a result column in the select list is not compatible with column &1 in the materialized query table.                           |
| <b>Recovery Text:</b>         | Ensure that the data types of all SELECT result columns are compatible with the corresponding existing columns of the materialized query table. |
| <b>SQLCODE or SQLCODEs:</b>   | -20055  |
| <b>SQLSTATE or SQLSTATEs:</b> | 42854   |

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| <b>SQ20058</b>       |   |
| <b>Message Text:</b> | Subselect for materialized query table &1 not valid for reason code &3. |

| <b>SQ20058</b>                |   |
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| <b>Cause Text:</b>            | <p>&amp;1 in &amp;2 cannot be created or altered because the SELECT statement contains a reference or expression that is not valid. Reason codes and their meanings are:</p> <ul style="list-style-type: none"> <li>• 1 -- Refers to another materialized query table or a protected system file, or to a view that refers to a materialized query table or a protected system file.</li> <li>• 2 -- Refers to a declared temporary table, a table in QTEMP, a program-described file, or a non-SQL logical file in the FROM clause.</li> <li>• 3 -- Refers to a VIEW that contains an item for a materialized query table that is not valid.</li> <li>• 4 -- Contains an expression with a DataLink or a distinct type based on a DataLink where the DataLink is FILE LINK CONTROL.</li> <li>• 6 -- Refers to a function that has an external action or that is not deterministic.</li> <li>• 8 -- Refers to a special register or global variable.</li> <li>• 9 -- Refers to result column that is a not an SQL data type, such as binary with precision, DBCS-ONLY, or DBCS-EITHER.</li> <li>• 10 -- Refers to a column that has a field procedure defined and that column is used in an expression in the select-list.</li> </ul> |
| <b>Recovery Text:</b>         | Based on the reason code, correct the SELECT statement for the materialized query table. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20058  |
| <b>SQLSTATE or SQLSTATES:</b> | 428EC   |

| <b>SQ20073</b>                |   |
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| <b>Message Text:</b>          | Attribute not valid for function &1 in &2.  |
| <b>Cause Text:</b>            | Function &1 in &2 cannot be created or altered as NOT DETERMINISTIC or EXTERNAL ACTION because it is referenced in an MQT, in a view that has the WITH CHECK OPTION attribute, or in a global variable. |
| <b>Recovery Text:</b>         | Specify DETERMINISTIC or NO EXTERNAL ACTION for the function. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20073  |
| <b>SQLSTATE or SQLSTATES:</b> | 42927   |

| <b>SQ20093</b>       |   |
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| <b>Message Text:</b> | Attempt to ALTER table &1 in &2 failed. Reason code &3. |

| <b>SQ20093</b>                |   |
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| <b>Cause Text:</b>            | <p>The ALTER request involving a materialized query table cannot be completed. Reason codes and their meanings are:</p> <ul style="list-style-type: none"> <li>• 2 -- The ALTER specified DROP MATERIALIZED QUERY or ALTER MATERIALIZED QUERY, but the specified table is not a materialized query table.</li> <li>• 4 -- The table has one or more triggers defined.</li> <li>• 8 -- The table is referenced in the definition of another materialized query table.</li> <li>• 9 -- The table is referenced directly or indirectly (such as through a view) in the SELECT statement.</li> <li>• 10 -- The ALTER specified ADD MATERIALIZED QUERY, but the specified table is already a materialized query table.</li> <li>• 11 -- The number of columns in the existing table does not match the number of columns for the result of the SELECT statement.</li> <li>• 12 -- Column data types in the existing table do not match the column data types for the result of the SELECT statement.</li> <li>• 16 -- The ALTER specified ADD MATERIALIZED QUERY, but the specified table has more than one member.</li> <li>• 20 -- The ALTER specified ALTER MATERIALIZED QUERY or ADD MATERIALIZED QUERY and either the specified table &amp;1 in &amp;2 or the referenced table &amp;4 in &amp;5 is using row or column access control.</li> </ul> |
| <b>Recovery Text:</b>         | <p>Change the ALTER statement, specify a different table, or change the SELECT statement to specify different result columns. Try the request again.</p> <p>If the failure is due to reason code 20, you must remove all masks and permissions defined on &amp;1 in &amp;2 or &amp;4 in &amp;5. Additionally, row and column access control must be deactivated for both tables.</p>  |
| <b>SQLCODE or SQLCODEs:</b>   | -20093  |
| <b>SQLSTATE or SQLSTATES:</b> | 428EW   |

| <b>SQ20102</b>                |  |
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| <b>Message Text:</b>          | &3 cannot be specified for routine &1.   |
| <b>Cause Text:</b>            | &3 cannot be specified for routine &1 in &2. ALTER REPLACE is only allowed for an SQL routine. DEBUG MODE can only be specified for SQL and JAVA routines. The language type of an SQL routine cannot be changed. An external name cannot be specified for an SQL routine. |
| <b>Recovery Text:</b>         | Remove the clause that is not allowed. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20102   |
| <b>SQLSTATE or SQLSTATES:</b> | 42849  |

| <b>SQ20110</b>       |  |
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| <b>Message Text:</b> | Cannot implicitly connect to a remote site with a savepoint outstanding.             |
| <b>Cause Text:</b>   | The statement referenced an object at a remote DBMS when an active savepoint exists. |

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| <b>SQ20110</b>                |  |
| <b>Recovery Text:</b>         | An implicit connect to a remote server is not allowed because a savepoint is outstanding. Issue a RELEASE TO SAVEPOINT or ROLLBACK TO SAVEPOINT before retrying the statement. Committing or rolling back the transaction will also release existing savepoints. |
| <b>SQLCODE or SQLCODEs:</b>   | -20110   |
| <b>SQLSTATE or SQLSTATES:</b> | 51036  |

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| <b>SQ20112</b>                |   |
| <b>Message Text:</b>          | The maximum number of savepoints has been reached.  |
| <b>Cause Text:</b>            | A resource limit has been exceeded.   |
| <b>Recovery Text:</b>         | Issue a RELEASE TO SAVEPOINT or ROLLBACK TO SAVEPOINT before creating additional savepoints. You may issue a COMMIT or ROLLBACK to release existing savepoints. |
| <b>SQLCODE or SQLCODEs:</b>   | -20112  |
| <b>SQLSTATE or SQLSTATES:</b> | 3B002   |

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| <b>SQ20120</b>                |  |
| <b>Message Text:</b>          | SQL TABLE function must return a table result.   |
| <b>Cause Text:</b>            | The RETURN statement in an SQL TABLE function must return a table result. There must be exactly one RETURN statement in an SQL TABLE function. |
| <b>Recovery Text:</b>         | Specify a query in the RETURN statement of a table function. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20120   |
| <b>SQLSTATE or SQLSTATES:</b> | 428F1  |

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| <b>SQ20141</b>        |  |
| <b>Message Text:</b>  | Truncation of value with length &1 occurred for &2.  |
| <b>Cause Text:</b>    | <p>On assignment of a value to a host variable or parameter, truncation occurred and the length of the value that was truncated is too large to be returned in the indicator variable. This situation can occur when truncation occurs on assignment of:</p> <ul style="list-style-type: none"> <li>• A value to a parameter of a remote stored procedure and the value being truncated is greater than 127 bytes. In this case, the indicator variable will contain a value of 127.</li> <li>• A LOB or XML value to a host variable and the value being truncated is greater than 32767 bytes. In this case, the indicator variable will contain a value of 32767.</li> </ul> <p>In these cases the actual length of the truncated value cannot be returned to the application using the indicator variable. The actual length of the value is returned as message token length.</p> |
| <b>Recovery Text:</b> | Change the length of the host variable or parameter and try the request again.   |

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| <b>SQ20141</b>                |        |
| <b>SQLCODE or SQLCODEs:</b>   | +20141 |
| <b>SQLSTATE or SQLSTATES:</b> | 01004  |

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| <b>SQ20143</b>                |   |
| <b>Message Text:</b>          | Encryption or decryption function failed.   |
| <b>Cause Text:</b>            | An encryption or decryption function failed because the encryption password value was not set.  |
| <b>Recovery Text:</b>         | Use the SET ENCRYPTION PASSWORD statement to set the password to be used for encryption and decryption functions. The password can also be specified as an argument of the encryption and decryption functions. |
| <b>SQLCODE or SQLCODEs:</b>   | -20143  |
| <b>SQLSTATE or SQLSTATES:</b> | 51039   |

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| <b>SQ20144</b>                |   |
| <b>Message Text:</b>          | Encryption password length not valid.                                   |
| <b>Cause Text:</b>            | The length of the encryption password must be from 6 to 127 characters. |
| <b>Recovery Text:</b>         | Correct the length of the password value. Submit the request again.     |
| <b>SQLCODE or SQLCODEs:</b>   | -20144  |
| <b>SQLSTATE or SQLSTATES:</b> | 428FC   |

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| <b>SQ20145</b>                |  |
| <b>Message Text:</b>          | The decryption function failed.  |
| <b>Cause Text:</b>            | The password used for decryption does not match the password used to encrypt the data. The data must be decrypted using the same password that was used to encrypt the data. |
| <b>Recovery Text:</b>         | Ensure that the same password is used to encrypt and decrypt the data.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20145   |
| <b>SQLSTATE or SQLSTATES:</b> | 428FD  |

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| <b>SQ20146</b>        |   |
| <b>Message Text:</b>  | The decryption function failed. The data is not encrypted.  |
| <b>Cause Text:</b>    | The data must be a result of the ENCRYPT, ENCRYPT_AES, ENCRYPT_RC2, or ENCRYPT_TDES function.   |
| <b>Recovery Text:</b> | Ensure that the data is a result of the ENCRYPT, ENCRYPT_AES, ENCRYPT_RC2, or ENCRYPT_TDES function. Data passed to a decryption function must be encrypted data. |

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| <b>SQ20146</b>                |        |
| <b>SQLCODE or SQLCODEs:</b>   | -20146 |
| <b>SQLSTATE or SQLSTATES:</b> | 428FE  |

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| <b>SQ20147</b>                |  |
| <b>Message Text:</b>          | The ENCRYPT function failed. Data is already encrypted.        |
| <b>Cause Text:</b>            | An attempt was made to encrypt data that is already encrypted. |
| <b>Recovery Text:</b>         | Ensure that the data has not already been encrypted.           |
| <b>SQLCODE or SQLCODEs:</b>   | -20147   |
| <b>SQLSTATE or SQLSTATES:</b> | 55048  |

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| <b>SQ20148</b>                |  |
| <b>Message Text:</b>          | RETURN statement must be specified in function &1 in &2. |
| <b>Cause Text:</b>            | A RETURN statement must be specified in an SQL function. |
| <b>Recovery Text:</b>         | Specify a RETURN statement. Try the request again.       |
| <b>SQLCODE or SQLCODEs:</b>   | -20148   |
| <b>SQLSTATE or SQLSTATES:</b> | 429BD  |

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| <b>SQ20165</b>                |   |
| <b>Message Text:</b>          | Data change table reference not allowed where specified.  |
| <b>Cause Text:</b>            | A data change table reference can only be specified in certain FROM clauses. A data change table reference must be the only table reference in a FROM clause used in: <ul style="list-style-type: none"> <li>• The outer fullselect of a SELECT or SELECT INTO statement.</li> <li>• The only fullselect of a SET or VALUES INTO statement.</li> <li>• The query expression of a RETURN statement.</li> </ul> |
| <b>Recovery Text:</b>         | Modify the statement so that the data change table reference is used correctly. Make sure it is the only table reference in the FROM clause.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20165  |
| <b>SQLSTATE or SQLSTATES:</b> | 428FL   |

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| <b>SQ20166</b>       |  |
| <b>Message Text:</b> | View or logical file &1 not allowed for data change table reference. |

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| <b>SQ20166</b>                |   |
| <b>Cause Text:</b>            | &1 in &2 cannot be specified as the target of a data change table reference.<br>If &1 is a view, the WHERE clause in the view definition cannot contain a function that is not deterministic, has external action, or modifies SQL data.<br>If &1 is a logical file, it cannot have select/omit specifications or be a join logical file. |
| <b>Recovery Text:</b>         | Specify a different view or logical file in the data change table reference.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20166  |
| <b>SQLSTATE or SQLSTATES:</b> | 428FM   |

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| <b>SQ20178</b>                |   |
| <b>Message Text:</b>          | INSTEAD OF trigger not created for view &1.   |
| <b>Cause Text:</b>            | View &1 in &2 already has an INSTEAD OF trigger defined for the specified operation. A view can have only one INSTEAD OF trigger defined for each of the INSERT, UPDATE, and DELETE operations. |
| <b>Recovery Text:</b>         | Drop the existing trigger. Combine the function for the existing trigger and the new trigger into a single trigger. Create the trigger again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20178  |
| <b>SQLSTATE or SQLSTATES:</b> | 428FP   |

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| <b>SQ20179</b>                |   |
| <b>Message Text:</b>          | Trigger cannot be created for view &1 that uses a WITH CHECK OPTION.  |
| <b>Cause Text:</b>            | View &1 in &2 specifies a WITH CHECK OPTION or is dependent on a view which has a WITH CHECK OPTION. An INSTEAD OF trigger cannot be defined for a view that has a WITH CHECK OPTION. |
| <b>Recovery Text:</b>         | Remove the WITH CHECK OPTION from the view.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20179  |
| <b>SQLSTATE or SQLSTATES:</b> | 428FQ   |

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| <b>SQ20180</b>                |  |
| <b>Message Text:</b>          | Column &1 cannot be altered.   |
| <b>Cause Text:</b>            | Column &1 is a partitioning key column for table &2 in &3 and cannot be altered.   |
| <b>Recovery Text:</b>         | Change the table to a non-partitioned table before attempting to alter the column or remove the ALTER COLUMN clause from the statement. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -20180   |
| <b>SQLSTATE or SQLSTATES:</b> | 428FR  |

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| <b>SQ20183</b>                |   |
| <b>Message Text:</b>          | ALTER TABLE partitioning clause not valid for &1.   |
| <b>Cause Text:</b>            | Table &1 in &2 cannot be altered. One of the following errors has occurred: <ul style="list-style-type: none"> <li>• ADD PARTITION BY was specified on an ALTER TABLE statement, but the table is already a partitioned table or is a physical file</li> <li>• ADD PARTITION, ALTER PARTITION, or DROP PARTITION was specified on an ALTER TABLE statement, but the table is not a partitioned table.</li> <li>• DROP PARTITION of a RANGE partition was specified on the ALTER TABLE statement, but the PRESERVE ROWS clause was used. The PRESERVE ROWS clause is only valid for partitioned tables that have HASH partitioning.</li> </ul> |
| <b>Recovery Text:</b>         | Change the statement to one that is valid or specify a different table. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20183  |
| <b>SQLSTATE or SQLSTATES:</b> | 428FT   |

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| <b>SQ20200</b>                |  |
| <b>Message Text:</b>          | The install or replace of &1 in &2 failed because &3 could not be located.                   |
| <b>Cause Text:</b>            | The URL specified on the install or replace jar procedure did not identify a valid jar file. |
| <b>Recovery Text:</b>         | Reissue the install or replace jar procedure with a URL that identifies a valid jar file.    |
| <b>SQLCODE or SQLCODEs:</b>   | -20200   |
| <b>SQLSTATE or SQLSTATES:</b> | 46001  |

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| <b>SQ20201</b>                |   |
| <b>Message Text:</b>          | The install, replace, or remove of &1 in &2 failed because the jar name is not valid.   |
| <b>Cause Text:</b>            | The jar name specified on the install, replace, or remove jar procedure is not valid. For example, the jar id may be of the improper format, may not exist to be replaced or removed, or can not be installed as it already exists. |
| <b>Recovery Text:</b>         | Ensure the jar name is of the correct format. If the jar id exists, it may need to be removed before it can be installed. For the remove or replace procedures, ensure the jar id exists.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20201  |
| <b>SQLSTATE or SQLSTATES:</b> | 46002   |

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| <b>SQ20202</b>       |  |
| <b>Message Text:</b> | The replace or remove of &1 in &2 failed because &3 is in use.   |
| <b>Cause Text:</b>   | The specified class in the jar file is currently in use by a defined procedure, or the replacement jar file does not contain the specified class for which a procedure is defined. |



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| <b>SQ20202</b>                |   |
| <b>Recovery Text:</b>         | Ensure all procedures referencing the classes being removed are dropped and resubmit the replace or remove procedure. |
| <b>SQLCODE or SQLCODEs:</b>   | -20202  |
| <b>SQLSTATE or SQLSTATES:</b> | 46003   |

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| <b>SQ20203</b>                |  |
| <b>Message Text:</b>          | Signature not valid for Java method in user defined function or procedure &1 in &2.  |
| <b>Cause Text:</b>            | The signature of the Java method used to implement the function or procedure is not valid. For example, the method may have parameters that are not compatible with the parameters on the corresponding CREATE statement or the method for a procedure may specify a return value. |
| <b>Recovery Text:</b>         | Reissue the corresponding CREATE statement specifying parameters that match the Java method, or correct the parameters or return type of the Java method and rebuild the class.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20203   |
| <b>SQLSTATE or SQLSTATES:</b> | 46007  |

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| <b>SQ20204</b>                |   |
| <b>Message Text:</b>          | The user defined function or procedure &1 in &2 was unable to map to a single Java method.  |
| <b>Cause Text:</b>            | The identified function or procedure either failed to find a matching Java method, or found more than 1 matching Java method.             |
| <b>Recovery Text:</b>         | Correct either the Java method or corresponding create statement so that the function or procedure call resolves to a single Java method. |
| <b>SQLCODE or SQLCODEs:</b>   | -20204  |
| <b>SQLSTATE or SQLSTATES:</b> | 46008   |

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| <b>SQ20205</b>              |   |
| <b>Message Text:</b>        | User defined function or procedure &1 in &2 has an input argument with a null value.  |
| <b>Cause Text:</b>          | A function created with CALLED ON NULL INPUT or a procedure has an input parameter with a null value but the Java data type for this argument does not support null values. Examples of Java data types that do not support null values are BOOLEAN, BYTE, SHORT, INT, LONG, or DOUBLE. |
| <b>Recovery Text:</b>       | If the method is to be called with null values, ensure the input Java types are capable of accepting a null value. If &1 is a function, RETURNS NULL ON NULL INPUT may be specified on the CREATE FUNCTION statement.   |
| <b>SQLCODE or SQLCODEs:</b> | -20205  |

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| <b>SQ20205</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 39004 |

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| <b>SQ20206</b>                |  |
| <b>Message Text:</b>          | The procedure &1 in &2 returned too many result sets.  |
| <b>Cause Text:</b>            | The specified procedure returned more results sets than were specified on the procedure definition.                                |
| <b>Recovery Text:</b>         | Modify the procedure to return fewer result sets, or drop and recreate the procedure specifying the correct number of result sets. |
| <b>SQLCODE or SQLCODEs:</b>   | +20206   |
| <b>SQLSTATE or SQLSTATES:</b> | 0100E  |

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| <b>SQ20207</b>                |  |
| <b>Message Text:</b>          | The install or remove jar procedure for &1 in &2 specified the use of a deployment descriptor.   |
| <b>Cause Text:</b>            | The DEPLOY or UNDEPLOY parameter of the install or replace jar procedure was non-zero; this parameter is not supported and must be zero. |
| <b>Recovery Text:</b>         | Reissue the procedure with the DEPLOY or UNDEPLOY parameter set to zero.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20207   |
| <b>SQLSTATE or SQLSTATES:</b> | 46501  |

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| <b>SQ20211</b>                |  |
| <b>Message Text:</b>          | Clause not allowed for CREATE VIEW.  |
| <b>Cause Text:</b>            | ORDER BY and FETCH FIRST n ROWS are not allowed in the outer fullselect of a view. |
| <b>Recovery Text:</b>         | Remove the clause. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20211   |
| <b>SQLSTATE or SQLSTATES:</b> | 428FJ  |

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| <b>SQ20214</b>                |  |
| <b>Message Text:</b>          | Table designator &1 is not ordered.  |
| <b>Cause Text:</b>            | The ORDER OF clause was specified, but table designator &1 is not ordered. |
| <b>Recovery Text:</b>         | Correct the ORDER OF clause. Try the request again.                        |
| <b>SQLCODE or SQLCODEs:</b>   | -20214   |
| <b>SQLSTATE or SQLSTATES:</b> | 428FI  |

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| <b>SQ20223</b>                |   |
| <b>Message Text:</b>          | The encryption or decryption function failed. Encryption facility error.  |
| <b>Cause Text:</b>            | An attempt to use function ENCRYPT, ENCRYPT_AES, ENCRYPT_RC2, ENCRYPT_TDES, DECRYPT_BIN, DECRYPT_BINARY, DECRYPT_BIT, DECRYPT_CHAR, DECRYPT_DB, or GETHINT failed due to an error with the encryption facility. |
| <b>Recovery Text:</b>         | Contact your software service provider.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20223  |
| <b>SQLSTATE or SQLSTATES:</b> | 560BF   |

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| <b>SQ20224</b>                |   |
| <b>Message Text:</b>          | Encrypted data that was originally a binary string cannot be decrypted to a character string.   |
| <b>Cause Text:</b>            | The DECRYPT_CHAR function was invoked with an argument that represents an encrypted string that was originally a binary string. A binary string cannot be cast to a character string using the DECRYPT_CHAR function. |
| <b>Recovery Text:</b>         | The encrypted value can only be decrypted using the DECRYPT_BINARY function.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20224  |
| <b>SQLSTATE or SQLSTATES:</b> | 22528   |

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| <b>SQ20226</b>                |   |
| <b>Message Text:</b>          | The maximum number of stacked diagnostics areas has been exceeded.  |
| <b>Cause Text:</b>            | The storage available to hold condition information items or to hold stacked diagnostics has been exceeded.                               |
| <b>Recovery Text:</b>         | Modify the application logic so that fewer SQL warnings occur, or specify additional condition areas using the SET TRANSACTION statement. |
| <b>SQLCODE or SQLCODEs:</b>   | -20226  |
| <b>SQLSTATE or SQLSTATES:</b> | 0Z001   |

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| <b>SQ20227</b>                |  |
| <b>Message Text:</b>          | AS clause required for XML function.   |
| <b>Cause Text:</b>            | The AS clause must be specified for argument &1 of the XMLATTRIBUTES, XMLFOREST, XMLROW, or XMLGROUP function because the argument is not named. Argument &1 is specified as &2. |
| <b>Recovery Text:</b>         | Specify an AS clause to name the argument. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20227   |
| <b>SQLSTATE or SQLSTATES:</b> | 42633  |

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| <b>SQ20228</b>                |   |
| <b>Message Text:</b>          | A STACKED diagnostic is not available.  |
| <b>Cause Text:</b>            | A STACKED diagnostic is only accessible from a handler.   |
| <b>Recovery Text:</b>         | Modify the application logic so that the STACKED diagnostic is only accessed from within a handler. |
| <b>SQLCODE or SQLCODEs:</b>   | -20228  |
| <b>SQLSTATE or SQLSTATES:</b> | 0Z002   |

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| <b>SQ20235</b>                |  |
| <b>Message Text:</b>          | Alter of materialized query table &1 in &2 not valid.                                      |
| <b>Cause Text:</b>            | A column of a materialized query table cannot be added, dropped, or altered.               |
| <b>Recovery Text:</b>         | Change the statement to one that is valid or specify another table. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -20235   |
| <b>SQLSTATE or SQLSTATES:</b> | 428FY  |

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| <b>SQ20236</b>                |   |
| <b>Message Text:</b>          | Cursor &1 cannot be returned.   |
| <b>Cause Text:</b>            | A SET RESULT SETS statement references cursor &1 that was declared with the WITHOUT RETURN attribute. Cursor &1 cannot be specified in a SET RESULT SETS statement. |
| <b>Recovery Text:</b>         | Remove the reference to the cursor from the SET RESULT SETS statement. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20236  |
| <b>SQLSTATE or SQLSTATES:</b> | 428BA   |

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| <b>SQ20246</b>                |  |
| <b>Message Text:</b>          | &1 in &2 cannot be altered.  |
| <b>Cause Text:</b>            | Table &1 is a partitioned table and cannot be altered because DDS-created logical file &3 in &4 is based on the table. |
| <b>Recovery Text:</b>         | Remove the logical file. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20246   |
| <b>SQLSTATE or SQLSTATES:</b> | 428G0  |

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| <b>SQ20251</b>       |                                 |
| <b>Message Text:</b> | Partition &1 cannot be dropped. |

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| <b>SQ20251</b>                |  |
| <b>Cause Text:</b>            | An attempt was made to drop partition &1 but it is the last partition in the table. The partition table must contain at least one partition. |
| <b>Recovery Text:</b>         | Use the DROP TABLE statement to drop the table.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20251   |
| <b>SQLSTATE or SQLSTATES:</b> | 428G2  |

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| <b>SQ20257</b>                |  |
| <b>Message Text:</b>          | INSERT into view &1 in &2 with INSTEAD OF trigger not allowed.   |
| <b>Cause Text:</b>            | An data change table reference INSERT statement specifies a view defined with an INSTEAD OF trigger. Results of the INSTEAD OF trigger cannot be returned. |
| <b>Recovery Text:</b>         | Drop the INSTEAD OF trigger from the view, or specify a different view as the target of the INSERT.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20257   |
| <b>SQLSTATE or SQLSTATES:</b> | 428G3  |

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| <b>SQ20258</b>                |  |
| <b>Message Text:</b>          | Use of INPUT SEQUENCE ordering not correct.  |
| <b>Cause Text:</b>            | The ORDER BY clause specifies INPUT SEQUENCE but the FROM clause of the fullselect does not specify an INSERT statement. |
| <b>Recovery Text:</b>         | Specify a valid sort key in the ORDER BY clause or make sure the FROM clause contains an INSERT statement.               |
| <b>SQLCODE or SQLCODEs:</b>   | -20258   |
| <b>SQLSTATE or SQLSTATES:</b> | 428G4  |

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| <b>SQ20259</b>                |   |
| <b>Message Text:</b>          | View &2 not allowed in data change table reference.   |
| <b>Cause Text:</b>            | The definition of view &2 in &3 prevents its use as the target of a data change table reference. The view definition cannot contain a scalar subselect, a scalar fullselect, or a subquery. |
| <b>Recovery Text:</b>         | Specify a different view as the data change table reference target, or change the view definition.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20259  |
| <b>SQLSTATE or SQLSTATES:</b> | 428G6   |

| <b>SQ20268</b>                |   |
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| <b>Message Text:</b>          | Sort sequence cannot be applied. Reason code &4.  |
| <b>Cause Text:</b>            | Sort sequence table &2 in library &3 cannot be applied for reason code &4. The reason codes and their meanings follow: <ul style="list-style-type: none"> <li>• 1 -- The result of applying the sort sequence table to field &amp;1 is greater than 32,742 bytes.</li> <li>• 2 -- The sort sequence table cannot be applied to the following functions: LOCATE, POSITION and POSSTR.</li> <li>• 3 -- The sort sequence table cannot be applied to a LIKE predicate or %WLDCRD function.</li> <li>• 4 -- A shared weight sort sequence table cannot be applied to the key fields of a create encoded vector index with INCLUDE statement.</li> <li>• 5 -- The ICU (International Components for Unicode) table cannot be used for this index.</li> </ul> |
| <b>Recovery Text:</b>         | Sort sequence table &2 is an International Components of Unicode (ICU) table. Recovery for reason code 1: ICU sort sequence table results are longer than the fields they operate on. If the field can contain SBCS data, the result of applying the sort sequence table can be 6 times the length of the field. Applying this sort sequence table to a DBCS field can be 3 times the length of the field. Either specify a smaller field or a non-ICU type sort sequence table. Recovery for reason code 4: Use a unique-weight sort sequence table. Recovery for the other reason codes: Either omit the function or specify a non-ICU type of sort sequence table.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20268  |
| <b>SQLSTATE or SQLSTATES:</b> | 429BM   |

| <b>SQ20275</b>                |   |
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| <b>Message Text:</b>          | XML name &1 not valid.  |
| <b>Cause Text:</b>            | The XML name &1 is not valid for reason code &2. Reason codes are: <ul style="list-style-type: none"> <li>• 1 -- "xmlns" is used as an XML attribute name or as a prefix for an XML element or attribute name.</li> <li>• 2 -- The XML namespace prefix in a qualified XML name is not declared within its scope.</li> <li>• 3 -- The name for an XML element or XML attribute is not an XML QName.</li> <li>• 4 -- The name for an XML processing instruction is not an XML NCName.</li> <li>• 5 -- The name for an XML processing instruction cannot contain "xml".</li> <li>• 6 -- The name for an argument of XMLTABLE is not an XML NCName.</li> </ul> |
| <b>Recovery Text:</b>         | Specify a valid XML name. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20275  |
| <b>SQLSTATE or SQLSTATES:</b> | 42634   |

| <b>SQ20276</b>                |   |
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| <b>Message Text:</b>          | XML namespace prefix &1 not valid.  |
| <b>Cause Text:</b>            | The XML namespace prefix &1 is not valid for reason code &2. Reason codes are: <ul style="list-style-type: none"> <li>• 1 -- The XML namespace prefix is not an XML NCName.</li> <li>• 2 -- The name "xml" or "xmlns" cannot be used as an XML namespace prefix.</li> <li>• 3 -- The XML namespace prefix is not unique.</li> </ul> |
| <b>Recovery Text:</b>         | Specify a valid and unique name for the XML namespace prefix. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20276  |
| <b>SQLSTATE or SQLSTATEs:</b> | 42635   |

| <b>SQ20298</b>                |  |
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| <b>Message Text:</b>          | VALUE specified for GET DESCRIPTOR is greater than current COUNT.  |
| <b>Cause Text:</b>            | The item number supplied in VALUE for GET DESCRIPTOR is greater than the current COUNT for the descriptor. |
| <b>Recovery Text:</b>         | This is a warning only. No information requested for the descriptor item provided in VALUE was returned.   |
| <b>SQLCODE or SQLCODEs:</b>   | +20298   |
| <b>SQLSTATE or SQLSTATEs:</b> | 02505  |

| <b>SQ20299</b>                |   |
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| <b>Message Text:</b>          | Item &1 already set for descriptor.   |
| <b>Cause Text:</b>            | Descriptor item &1 was already specified for this SET DESCRIPTOR statement. Each item can be set only one time. |
| <b>Recovery Text:</b>         | Remove the duplicate item. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20299  |
| <b>SQLSTATE or SQLSTATEs:</b> | 42747   |

| <b>SQ20313</b>                |  |
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| <b>Message Text:</b>          | DEBUG MODE cannot be changed for routine &1 in &2.   |
| <b>Cause Text:</b>            | Routine &1 in &2 was created with a DEBUG MODE of DISABLE. The DEBUG MODE cannot be altered. |
| <b>Recovery Text:</b>         | Drop the routine and recreate it with DEBUG MODE ALLOW or DEBUG MODE DISALLOW.               |
| <b>SQLCODE or SQLCODEs:</b>   | -20313   |
| <b>SQLSTATE or SQLSTATEs:</b> | 55058  |

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| <b>SQ20326</b>                |   |
| <b>Message Text:</b>          | XML name &1 too long.   |
| <b>Cause Text:</b>            | The XML name &1 is too long. The maximum length for an XML element name, an XML attribute name, an XML namespace prefix, and an XML processing instruction name is 128. The maximum length of an XML namespace URI is 1024. |
| <b>Recovery Text:</b>         | Ensure the name is not too long. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20326  |
| <b>SQLSTATE or SQLSTATES:</b> | 54057   |

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| <b>SQ20327</b>                |  |
| <b>Message Text:</b>          | The depth of an XML document exceeds the maximum number of levels.   |
| <b>Cause Text:</b>            | An XML value that is being parsed, validated, stored, or is being traversed during the evaluation of an XPath expression is nested deeper than the maximum supported depth. The statement cannot be processed. |
| <b>Recovery Text:</b>         | Reduce the number of levels of elements and attributes that are used in the XML value.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20327   |
| <b>SQLSTATE or SQLSTATES:</b> | 54058  |

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| <b>SQ20328</b>                |   |
| <b>Message Text:</b>          | An XML schema document with the same target namespace and schema location already exists.   |
| <b>Cause Text:</b>            | An XML schema document with the same target namespace &1 and schema location &2 already exists for the XML schema &3 in &4. Multiple XML schema documents were added using the XSR_ADDSCHEMADOC stored procedure with the same target namespace and schema location. There cannot be two documents with the same target namespace and schema location within an XML schema. |
| <b>Recovery Text:</b>         | Remove the XML schema using XSR_REMOVE stored procedure and then register and add the XML schema documents before the complete. Change the documents so they do not have the same target namespace and schema location.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20328  |
| <b>SQLSTATE or SQLSTATES:</b> | 42749   |

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| <b>SQ20329</b>       |   |
| <b>Message Text:</b> | The completion check for the XML schema failed because one or more XML schema documents are missing.  |
| <b>Cause Text:</b>   | The XML schema registration completion processing determined that more than one XML schema document is required for a complete XML schema and at least one XML schema document is missing from the XML schema repository. The missing XML schema document is identified by either targetnamespace or schemalocation &1 with value &2. |



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| <b>SQ20329</b>                |  |
| <b>Recovery Text:</b>         | Add any missing XML schema documents to the XML schema repository, and then call the XSR_COMPLETE stored procedure in SYSPROC. |
| <b>SQLCODE or SQLCODEs:</b>   | -20329   |
| <b>SQLSTATE or SQLSTATES:</b> | 428GI  |

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| <b>SQ20330</b>                |  |
| <b>Message Text:</b>          | XML schema identified by target namespace &3 and schema location &5 not found in the repository.   |
| <b>Cause Text:</b>            | The &1 identified by XML &2 &3 and XML &4 &5 is not found in the XML schema repository. If either value was null on the request, the corresponding &3 or &5 is the empty string. |
| <b>Recovery Text:</b>         | Add the missing XML schema to the XML schema repository and reissue the statement.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20330   |
| <b>SQLSTATE or SQLSTATES:</b> | 4274A  |

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| <b>SQ20331</b>                |  |
| <b>Message Text:</b>          | The XML comment value &1 is not valid.   |
| <b>Cause Text:</b>            | The string expression in the XML comment cannot contain two adjacent hyphens and cannot end in a hyphen. |
| <b>Recovery Text:</b>         | Ensure the value for the XML comment is valid.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20331   |
| <b>SQLSTATE or SQLSTATES:</b> | 2200S  |

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| <b>SQ20332</b>                |   |
| <b>Message Text:</b>          | The XML processing instruction &1 is not valid.                     |
| <b>Cause Text:</b>            | The XML processing instruction must not contain the substring '?>'. |
| <b>Recovery Text:</b>         | Ensure the value for the XML processing instruction is valid.       |
| <b>SQLCODE or SQLCODEs:</b>   | -20332  |
| <b>SQLSTATE or SQLSTATES:</b> | 2200T   |

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| <b>SQ20335</b>       |   |
| <b>Message Text:</b> | More than one XML schema exists identified by the target namespace and schema location.                   |
| <b>Cause Text:</b>   | There is more than one registered XML schema that matches the target namespace &3 and schema location &5. |

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| <b>SQ20335</b>                |  |
| <b>Recovery Text:</b>         | Use the unique XML schema ID to identify the XML schema. |
| <b>SQLCODE or SQLCODEs:</b>   | -20335   |
| <b>SQLSTATE or SQLSTATES:</b> | 4274B  |

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| <b>SQ20337</b>                |  |
| <b>Message Text:</b>          | BY VALUE clause not used correctly.  |
| <b>Cause Text:</b>            | <p>Use of BY VALUE is not valid for reason code &amp;1. Reason codes are:</p> <ul style="list-style-type: none"> <li>• 1 -- The BY VALUE clause can only be specified when the corresponding data type is XML for an argument of the XMLTABLE function.</li> <li>• 2 -- The BY VALUE clause can only be specified for an XMLTABLE result column with data type XML.</li> </ul> |
| <b>Recovery Text:</b>         | Remove the BY VALUE clause. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20337   |
| <b>SQLSTATE or SQLSTATES:</b> | 42636  |

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| <b>SQ20338</b>                |   |
| <b>Message Text:</b>          | The data type of the XMLCAST specification must be XML.   |
| <b>Cause Text:</b>            | Both operands of the XMLCAST specification must be the XML data type. The XMLCAST specification can be used to cast a NULL XML value, or to cast an XML value to a specified CCSID. |
| <b>Recovery Text:</b>         | Change the XMLCAST specification so that both operands are the XML data type. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20338  |
| <b>SQLSTATE or SQLSTATES:</b> | 42815   |

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| <b>SQ20339</b>                |  |
| <b>Message Text:</b>          | XML schema &1 in &2 not in correct state for operation &3.   |
| <b>Cause Text:</b>            | The operation &3 cannot be performed on the XML schema identified by &1 in &2 because it is not in the correct state. For example, the XML schema has already been completed and the operation is attempting to add additional XML schema documents.         |
| <b>Recovery Text:</b>         | If the schema has not yet been completed, invoke the XSR_COMPLETE stored procedure in SYSPROC and try the operation again. If the schema has already been completed and needs to be updated, you must first remove it or register it using a different name. |
| <b>SQLCODE or SQLCODEs:</b>   | -20339   |
| <b>SQLSTATE or SQLSTATES:</b> | 55063  |

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| <b>SQ20340</b>                |  |
| <b>Message Text:</b>          | XML schema document is not connected to the other XML schema documents.  |
| <b>Cause Text:</b>            | The XML schema identified by identifier &1 in &2 includes multiple XML schema documents in the namespace &3. At least one of these XML schema documents is not connected to the other XML schema documents registered to this XML schema.  |
| <b>Recovery Text:</b>         | Correct the XML schema documents, or add a new XML schema document, so that all XML schema documents in an XML schema are connected using import, include, or redefine, beginning from the primary schema document. Use the XSR_REMOVE stored procedure in SYSPROC to remove the schema that is not valid and re-invoke the XSR stored procedures to register it with the corrected and/or new XML schema documents. |
| <b>SQLCODE or SQLCODEs:</b>   | -20340   |
| <b>SQLSTATE or SQLSTATES:</b> | 22534  |

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| <b>SQ20341</b>                |  |
| <b>Message Text:</b>          | Transfer operation ignored since &1 is already the owner of the database object. |
| <b>Cause Text:</b>            | The user profile specified already owns the object.                              |
| <b>Recovery Text:</b>         | Specify a different owner on the TRANSFER OWNERSHIP statement.                   |
| <b>SQLCODE or SQLCODEs:</b>   | +20341   |
| <b>SQLSTATE or SQLSTATES:</b> | 01676  |

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| <b>SQ20345</b>                |  |
| <b>Message Text:</b>          | XML value not a well-formed document.  |
| <b>Cause Text:</b>            | The XML value is not a well-formed document. An XML value that is being stored in a table must be a well-formed XML document with a single root element. |
| <b>Recovery Text:</b>         | Change the XML value to be a well-formed document with a single root element. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20345   |
| <b>SQLSTATE or SQLSTATES:</b> | 2200L  |

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| <b>SQ20346</b>        |   |
| <b>Message Text:</b>  | Specified global element not in XML schema.   |
| <b>Cause Text:</b>    | A validation operation specified that an explicit element local name &2 in namespace &3 should be the root element of the XML document to be validated. The XML schema with SQL identifier &1 does not have &2 declared as a global element in namespace &3. The statement cannot be processed. |
| <b>Recovery Text:</b> | Check that the element local name &2 in namespace URI &3 is correct for the XML schema and for the XML document that is being validated. Change the element local name, namespace, or the XML schema and try the validation again.  |

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| <b>SQ20346</b>                |        |
| <b>SQLCODE or SQLCODEs:</b>   | -20346 |
| <b>SQLSTATE or SQLSTATES:</b> | 22535  |

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| <b>SQ20347</b>                |   |
| <b>Message Text:</b>          | Required root element not in XML document.  |
| <b>Cause Text:</b>            | The root element of the XML document does not match the required element local name &1 in namespace URI &2 specified for the validation operation. The statement cannot be processed. |
| <b>Recovery Text:</b>         | Check that the root element matches the specified element local name &1 and namespace URI &2. If the XML value is correct, change the specified element local name or namespace URI.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20347  |
| <b>SQLSTATE or SQLSTATES:</b> | 22536   |

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| <b>SQ20353</b>                |   |
| <b>Message Text:</b>          | Data type &2 not allowed in &1.   |
| <b>Cause Text:</b>            | The &1 clause contains a value of data type &2. Since &1 involves comparisons, this data type is not allowed. |
| <b>Recovery Text:</b>         | Use an expression of a different data type in the &1 clause and try the request again.                        |
| <b>SQLCODE or SQLCODEs:</b>   | -20353  |
| <b>SQLSTATE or SQLSTATES:</b> | 42818   |

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| <b>SQ20354</b>                |  |
| <b>Message Text:</b>          | Row change timestamp column not valid for key.   |
| <b>Cause Text:</b>            | A ROW CHANGE TIMESTAMP column cannot be specified in a foreign key or a partitioning key for table &1 in &2. |
| <b>Recovery Text:</b>         | Remove the column from the key specification. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20354   |
| <b>SQLSTATE or SQLSTATES:</b> | 429BV  |

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| <b>SQ20356</b>       |                                     |
| <b>Message Text:</b> | Table &1 in &2 cannot be truncated. |

| <b>SQ20356</b>                |   |
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| <b>Cause Text:</b>            | A table cannot be truncated if one or more of the following conditions is true: <ul style="list-style-type: none"> <li>• The TRUNCATE statement would result in the activation of delete triggers but the statement specified RESTRICT WHEN DELETE TRIGGERS, either implicitly or explicitly. This can occur when enabled delete triggers exist for the table to be truncated, and the result of the TRUNCATE statement would activate the triggers.</li> <li>• The table to be truncated is the parent table in a referential constraint, regardless of whether the child table contains rows or not.</li> </ul> |
| <b>Recovery Text:</b>         | If the statement failed because of the existence of delete triggers, specify the IGNORE DELETE TRIGGERS clause on the TRUNCATE statement. If the statement failed because of referential constraints, use the ALTER TABLE statement to drop the constraint, and then try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20356  |
| <b>SQLSTATE or SQLSTATES:</b> | 428GJ   |

| <b>SQ20365</b>                |   |
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| <b>Message Text:</b>          | Signaling NaN encountered, or exception occurred involving DECFLOAT.  |
| <b>Cause Text:</b>            | The DECFLOAT special value sNaN was encountered in an expression, arithmetic operation, or function, or an expression, arithmetic operation, or function involving a DECFLOAT column or value resulted in an exception. |
| <b>Recovery Text:</b>         | Do not reference sNaN values in an arithmetic operation or function.  |
| <b>SQLCODE or SQLCODEs:</b>   | +20365, -20365  |
| <b>SQLSTATE or SQLSTATES:</b> | 01565, 22502  |

| <b>SQ20367</b>                |   |
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| <b>Message Text:</b>          | Clause &1 ignored.  |
| <b>Cause Text:</b>            | &1 is not supported by DB2 for IBM® i or is not supported in the context where it was specified. It has been ignored. |
| <b>Recovery Text:</b>         | No action is required.  |
| <b>SQLCODE or SQLCODEs:</b>   | +20367  |
| <b>SQLSTATE or SQLSTATES:</b> | 01680   |

| <b>SQ20377</b>        |  |
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| <b>Message Text:</b>  | Character &1 cannot be mapped to a valid XML character.  |
| <b>Cause Text:</b>    | Character &1 was found in an XML expression or function argument that begins with string &2. This character is not allowed in an XML expression. |
| <b>Recovery Text:</b> | Remove the character or replace it with a character that is allowed.   |

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| <b>SQ20377</b>                |        |
| <b>SQLCODE or SQLCODEs:</b>   | -20377 |
| <b>SQLSTATE or SQLSTATES:</b> | 0N002  |

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| <b>SQ20379</b>                |   |
| <b>Message Text:</b>          | &2 cannot transfer ownership or grant authority to itself.  |
| <b>Cause Text:</b>            | &2 is authorized to the QIBM_DB_SECADM function. An authorization ID authorized to the QIBM_DB_SECADM function cannot transfer the ownership of an object to itself. Likewise, it cannot grant authority to the object to itself. |
| <b>Recovery Text:</b>         | Choose a different authorization ID as the new owner of the object or perform this request using a different authorization ID.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20379  |
| <b>SQLSTATE or SQLSTATES:</b> | 42502   |

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| <b>SQ20398</b>                |  |
| <b>Message Text:</b>          | XML parsing failed.  |
| <b>Cause Text:</b>            | The XML parsing failed during SQL processing. The byte offset into the XML value being processed after conversion to UTF-8 is &1. The XML parser error description is: &2. |
| <b>Recovery Text:</b>         | Correct the XML value. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20398   |
| <b>SQLSTATE or SQLSTATES:</b> | 2200M  |

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| <b>SQ20399</b>                |  |
| <b>Message Text:</b>          | XML parsing or validation failed.  |
| <b>Cause Text:</b>            | The XML parsing failed during validation. The byte offset into the XML value being processed after conversion to UTF-8 is &1. The XML parser error description is: &2. |
| <b>Recovery Text:</b>         | Correct the problem with the XML instance document. Retry the XMLVALIDATE or XDBDECOMPXML.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20399   |
| <b>SQLSTATE or SQLSTATES:</b> | 2201R  |

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| <b>SQ20400</b>       |  |
| <b>Message Text:</b> | XML schema document did not process.   |
| <b>Cause Text:</b>   | The XML document processing failed. The byte offset into the XML value being processed after conversion to UTF-8 is &1. The XML parser error description is: &2. |

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| <b>SQ20400</b>                |  |
| <b>Recovery Text:</b>         | Correct the problem with the XML schema document and CALL the XSR_COMPLETE stored procedure again. |
| <b>SQLCODE or SQLCODEs:</b>   | -20400   |
| <b>SQLSTATE or SQLSTATES:</b> | 2200M  |

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| <b>SQ20412</b>                |   |
| <b>Message Text:</b>          | Serialization of XML value resulted in conversion error.  |
| <b>Cause Text:</b>            | Serialization of the XML data may require conversion to a CCSID different from the source CCSID. Substitution characters are not allowed in the result of XML serialization. The statement cannot be processed. |
| <b>Recovery Text:</b>         | Choose a target encoding that can represent all characters in the XML value. Unicode encodings are recommended as they can represent all characters. Try the request again.                                     |
| <b>SQLCODE or SQLCODEs:</b>   | -20412  |
| <b>SQLSTATE or SQLSTATES:</b> | 2200W   |

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| <b>SQ20422</b>                |   |
| <b>Message Text:</b>          | Table &1 in &2 must contain a column that is not hidden.  |
| <b>Cause Text:</b>            | A CREATE or ALTER TABLE of table &1 in schema &2 was attempted but the statement would result in a table with only IMPLICITLY HIDDEN columns. Tables must have at least one column that is not IMPLICITLY HIDDEN. |
| <b>Recovery Text:</b>         | Ensure the table has at least one column that is not IMPLICITLY HIDDEN. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20422  |
| <b>SQLSTATE or SQLSTATES:</b> | 428GU   |

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| <b>SQ20423</b>                |  |
| <b>Message Text:</b>          | Error occurred during text search processing.  |
| <b>Cause Text:</b>            | An error occurred during the text search processing of a CONTAINS or SCORE function. The error happened on server &1 using text search index &2 for reason code &3.<br>Text describing the problem is: &4. |
| <b>Recovery Text:</b>         | Refer to the text search documentation for this reason code. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20423   |
| <b>SQLSTATE or SQLSTATES:</b> | 38H10  |

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| <b>SQ20424</b>                |   |
| <b>Message Text:</b>          | Text search support is not available for reason &1.   |
| <b>Cause Text:</b>            | A problem with one of the text search administrative tables was detected. The reason code is &1. <ul style="list-style-type: none"> <li>• 1 - One of the text search administrative tables was not found.</li> <li>• 3 - Text search support is not installed.</li> <li>• 4 - Text search support is not started.</li> <li>• 7 - No text search servers have been defined.</li> </ul> |
| <b>Recovery Text:</b>         | Make sure text search support is correctly installed and has been started. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20424  |
| <b>SQLSTATE or SQLSTATES:</b> | 38H11   |

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| <b>SQ20425</b>                |  |
| <b>Message Text:</b>          | Text search not allowed for column &1.   |
| <b>Cause Text:</b>            | A CONTAINS or SCORE text search function specified column &1 in table &2 in &3. A text index does not exist for this column so text search processing cannot be performed. |
| <b>Recovery Text:</b>         | Define a text index for this column, or use a column that already has a text index defined.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20425   |
| <b>SQLSTATE or SQLSTATES:</b> | 38H12  |

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| <b>SQ20426</b>                |   |
| <b>Message Text:</b>          | Conflicting text search administration procedure already running.                                   |
| <b>Cause Text:</b>            | A conflicting text search administrative procedure such as update is already running on this index. |
| <b>Recovery Text:</b>         | Wait until the other administrative procedure is complete. Try the request again.                   |
| <b>SQLCODE or SQLCODEs:</b>   | -20426  |
| <b>SQLSTATE or SQLSTATES:</b> | 38H13   |

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| <b>SQ20427</b>        |   |
| <b>Message Text:</b>  | Error occurred during text search administrative procedure.   |
| <b>Cause Text:</b>    | An error occurred during a text search administrative procedure. The reason code is &2. The text returned is: &1. |
| <b>Recovery Text:</b> | Fix the problem indicated by the reason code and try the administrative procedure again.                          |



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| <b>SQ20427</b>                |        |
| <b>SQLCODE or SQLCODEs:</b>   | -20427 |
| <b>SQLSTATE or SQLSTATES:</b> | 38H14  |

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| <b>SQ20430</b>                |   |
| <b>Message Text:</b>          | Global variable &1 in &2 may not be used in this context.   |
| <b>Cause Text:</b>            | Global variable &1 in &2 may not be set or used. A global variable may not be used in a PREPARE, OPEN, EXECUTE IMMEDIATE, or FETCH statement when the current connection is to a remote database. |
| <b>Recovery Text:</b>         | Run the PREPARE, OPEN, EXECUTE IMMEDIATE, or FETCH statement when the current connection is to the local database.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20430  |
| <b>SQLSTATE or SQLSTATES:</b> | 428GX   |

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| <b>SQ20431</b>                |   |
| <b>Message Text:</b>          | ROW CHANGE TIMESTAMP expression not valid for table &1 in &2.   |
| <b>Cause Text:</b>            | A ROW CHANGE TIMESTAMP expression is specified for table &1 in &2 but table does not have a column that is defined as ROW CHANGE TIMESTAMP. |
| <b>Recovery Text:</b>         | Remove the ROW CHANGE TIMESTAMP expression or specify a table that contains a ROW CHANGE TIMESTAMP column. Try the request again.           |
| <b>SQLCODE or SQLCODEs:</b>   | -20431  |
| <b>SQLSTATE or SQLSTATES:</b> | 55068   |

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| <b>SQ20434</b>                |  |
| <b>Message Text:</b>          | UPDATE statement cannot have all columns set to UNASSIGNED value.  |
| <b>Cause Text:</b>            | The value UNASSIGNED was used in an UPDATE statement to set the values for all columns in the statement. At least one of the columns must be set to a value other than UNASSIGNED. |
| <b>Recovery Text:</b>         | Change the value of at least one of the extended indicator variables to a value other than UNASSIGNED. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20434   |
| <b>SQLSTATE or SQLSTATES:</b> | 22540  |

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| <b>SQ20436</b>       |                                |
| <b>Message Text:</b> | Data type not valid for array. |

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| <b>SQ20436</b>                |  |
| <b>Cause Text:</b>            | CREATE TYPE for an array was specified using a data type that is not supported for an array. |
| <b>Recovery Text:</b>         | Change the data type to one that can be used for an array. Try the request again.            |
| <b>SQLCODE or SQLCODEs:</b>   | -20436   |
| <b>SQLSTATE or SQLSTATES:</b> | 429C2  |

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| <b>SQ20437</b>                |  |
| <b>Message Text:</b>          | Operation only allowed for array variables.  |
| <b>Cause Text:</b>            | An operand that is not an SQL array was specified for an operation that is only allowed for an array. Array subscripts, TRIM_ARRAY, UNNEST, CARDINALITY, and MAX_CARDINALITY can only be specified for an SQL array parameter or variable. |
| <b>Recovery Text:</b>         | Change the operand to be an SQL array variable or parameter. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20437   |
| <b>SQLSTATE or SQLSTATES:</b> | 428H0  |

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| <b>SQ20438</b>                |   |
| <b>Message Text:</b>          | Array subscript value not correct data type.  |
| <b>Cause Text:</b>            | The value specified for the subscript of an array must be a built in numeric or string data type. |
| <b>Recovery Text:</b>         | Change the array subscript to a valid value. Try the request again.                               |
| <b>SQLCODE or SQLCODEs:</b>   | -20438  |
| <b>SQLSTATE or SQLSTATES:</b> | 428H1   |

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| <b>SQ20439</b>                |  |
| <b>Message Text:</b>          | Value &1 not valid for array subscript.  |
| <b>Cause Text:</b>            | Value &1 was specified as the subscript of an array but the value is negative or 0, the value is greater than the maximum cardinality of the array, or the value is being used to reference an array element greater than the current cardinality. If the value is -1, the NULL value may have been supplied for the subscript, or the array is a read-only array. |
| <b>Recovery Text:</b>         | Change the subscript to a valid value or use an array that is not a read-only array. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20439   |
| <b>SQLSTATE or SQLSTATES:</b> | 2200E, 2202E   |

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| <b>SQ20440</b>                |  |
| <b>Message Text:</b>          | Cardinality &1 of source array greater than maximum &2 of target array.  |
| <b>Cause Text:</b>            | Cardinality &1 of the source array is greater than the maximum cardinality of the target array. The array cannot be assigned.  |
| <b>Recovery Text:</b>         | Change the maximum cardinality of the target array so that all elements of the source array will fit in the array. TRIM_ARRAY can be used to reduce the size of the source array. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -20440   |
| <b>SQLSTATE or SQLSTATES:</b> | 2202F  |

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| <b>SQ20441</b>                |   |
| <b>Message Text:</b>          | Array type not valid where specified.   |
| <b>Cause Text:</b>            | <p>An array type was used but is not allowed in the specified context. Array types can only be used:</p> <ul style="list-style-type: none"> <li>• As an argument of as SQL scalar function or an SQL or JAVA procedure.</li> <li>• For an SQL variable declared in an SQL procedure or SQL scalar function.</li> <li>• In a CAST specification in an SQL procedure or SQL scalar function.</li> </ul> <p>The data type of the array type that is used when a routine is invoked must match the data type of the array that was used when the routine was created.</p> |
| <b>Recovery Text:</b>         | Remove the reference to the array type. If the data type of the array changed after the routine was created, recreate the routine so it will use the new definition. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20441  |
| <b>SQLSTATE or SQLSTATES:</b> | 428H2   |

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| <b>SQ20446</b>                |  |
| <b>Message Text:</b>          | CCSID was changed.   |
| <b>Cause Text:</b>            | An associated mixed or graphic CCSID does not exist for the job's default CCSID &1. A CCSID of UTF-8 or UTF-16 will be used. |
| <b>Recovery Text:</b>         | Change the job's CCSID to one that has an associated mixed or graphic CCSID.   |
| <b>SQLCODE or SQLCODEs:</b>   | +20446   |
| <b>SQLSTATE or SQLSTATES:</b> | 0168P  |

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| <b>SQ20447</b>       |  |
| <b>Message Text:</b> | Format string not valid for function &1. |

| <b>SQ20447</b>                |  |
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| <b>Cause Text:</b>            | <p>The format string specified in argument 2 of function &amp;1 is not valid because the length of the format string is greater than 255, the length of the result of the VARCHAR_FORMAT function is greater than 255, or the format string contains an unsupported element.</p> <p>The format string may not be valid for one of the following reasons:</p> <ul style="list-style-type: none"> <li>• The format does not contain a format element.</li> <li>• The format contains multiple elements that represent the same component of a timestamp.</li> <li>• The format contains AM, IYYY.</li> </ul> |
| <b>Recovery Text:</b>         | Specify a valid format string for the function. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20447   |
| <b>SQLSTATE or SQLSTATES:</b> | 22007  |

| <b>SQ20448</b>                |   |
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| <b>Message Text:</b>          | Expression not valid using format string specified for TIMESTAMP_FORMAT.  |
| <b>Cause Text:</b>            | <p>Argument 1 of the TIMESTAMP_FORMAT function can not be interpreted using the format string specified in argument 2 for one of the following reasons:</p> <ul style="list-style-type: none"> <li>• The string expression is too short or too long.</li> <li>• The string expression does not conform to the template specified in the format string.</li> <li>• Too many digits were specified in the string expression for the corresponding format element in the format string.</li> <li>• A value in the string expression is not valid for the corresponding format element in the format string.</li> </ul> |
| <b>Recovery Text:</b>         | Specify a valid format string for the function. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20448  |
| <b>SQLSTATE or SQLSTATES:</b> | 22007   |

| <b>SQ20451</b>              |   |
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| <b>Message Text:</b>        | Cycle detected in hierarchical query.   |
| <b>Cause Text:</b>          | The hierarchical query using the CONNECT BY clause found a row that is a direct or indirect parent of itself by using the CONNECT BY search condition.  |
| <b>Recovery Text:</b>       | <p>Do one of the following:</p> <ul style="list-style-type: none"> <li>• If a cycle is expected, add the NOCYCLE keyword to the CONNECT BY clause.</li> <li>• If no cycles are expected, use the CONNECT_BY_ISCYCLE pseudo column along with the NOCYCLE keyword to find a row that is directly or indirectly an ancestor of itself.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b> | -20451  |

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| <b>SQ20451</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 560CO |

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| <b>SQ20452</b>                |   |
| <b>Message Text:</b>          | Hierarchical query construct &1 not used correctly.   |
| <b>Cause Text:</b>            | <p>The &amp;1 construct was found outside of its allowed context for one of the following reasons:</p> <ul style="list-style-type: none"> <li>• The construct was specified in the START WITH clause.</li> <li>• In the subselect where it was specified, there is no CONNECT BY clause.</li> <li>• PRIOR was specified outside the context of a CONNECT BY clause.</li> <li>• An argument of CONNECT_BY_ROOT or SYS_CONNECT_BY_PATH cannot be an aggregate function or OLAP specification.</li> <li>• ORDER SIBLINGS BY was specified, but there is a DISTINCT, GROUP BY, or HAVING clause in the query which has changed the partial order provided by the hierarchical query.</li> </ul> |
| <b>Recovery Text:</b>         | <p>Make one of the following changes and try the request again.</p> <ul style="list-style-type: none"> <li>• If the construct is LEVEL and this is not a hierarchical query, make sure a column or variable with that name exists and can be resolved to for the statement.</li> <li>• Verify that there is a CONNECT BY clause in the subselect containing &amp;1.</li> <li>• Remove &amp;1 from the statement.</li> </ul>   |
| <b>SQLCODE or SQLCODEs:</b>   | -20452  |
| <b>SQLSTATE or SQLSTATES:</b> | 428H4   |

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| <b>SQ20454</b>                |  |
| <b>Message Text:</b>          | Specified join operation not valid.  |
| <b>Cause Text:</b>            | <p>The specified join operation is not valid for reason code &amp;1. Reason codes and their meanings are:</p> <ul style="list-style-type: none"> <li>• 20 -- The USING clause is specified and the select list contains only T.* where T is a table in the join. All the columns in table T are contained in the USING clause so the result table is empty.</li> </ul> |
| <b>Recovery Text:</b>         | Change the select list to return at least one result column. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20454   |
| <b>SQLSTATE or SQLSTATES:</b> | 428H5  |

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| <b>SQ20455</b>       |   |
| <b>Message Text:</b> | Text search index &1 may be out of date.  |
| <b>Cause Text:</b>   | The text index &1 used for text search processing of a CONTAINS or SCORE function may be out of date. |

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| <b>SQ20455</b>                |  |
| <b>Recovery Text:</b>         | Run the administrative stored procedure to update the text index. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | +20455   |
| <b>SQLSTATE or SQLSTATES:</b> | 0168R  |

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| <b>SQ20463</b>                |  |
| <b>Message Text:</b>          | Result sets not returned because procedure called by function or trigger.  |
| <b>Cause Text:</b>            | Result sets will not be returned to the client because the procedure was directly or indirectly called by a function or trigger. |
| <b>Recovery Text:</b>         | No recovery is necessary.  |
| <b>SQLCODE or SQLCODEs:</b>   | +20463   |
| <b>SQLSTATE or SQLSTATES:</b> | 0168U  |

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| <b>SQ20469</b>                |  |
| <b>Message Text:</b>          | Access control on table &1 in &2 is not valid.   |
| <b>Cause Text:</b>            | <p>Row or column access control for table &amp;1 in &amp;2 either cannot be activated or is not valid. The reason code is &amp;3. Reason codes are:</p> <ul style="list-style-type: none"> <li>• 37 -- A trigger, &amp;4 in &amp;5, is defined for the table and the trigger is not defined as secured or is a read trigger.</li> <li>• 38 -- A view is defined on the table. Trigger &amp;4 in &amp;5 is defined for that view and the trigger is not defined as secured.</li> <li>• 39 -- A materialized query table definition directly or indirectly references user defined function &amp;4 in &amp;5 which must be defined as secured due to one of the following conditions: 1) The materialized query table is defined on the table and the table has row or column access control. 2) The materialized query table has row or column access control. 3) The function either directly or indirectly references a table with row or column access control.</li> </ul> |
| <b>Recovery Text:</b>         | <p>Do one of the following based on the reason code:</p> <p>37, 38 -- Alter trigger &amp;4 in &amp;5 using the SECURE keyword to make it secure.</p> <ul style="list-style-type: none"> <li>• 39 -- Alter user defined function &amp;4 in &amp;5 using the SECURE keyword to make it secure. If the user defined function name is *N, examine the job log to determine which function needs to be altered.</li> </ul>  |
| <b>SQLCODE or SQLCODEs:</b>   | -20469   |
| <b>SQLSTATE or SQLSTATES:</b> | 55019  |

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| <b>SQ20470</b>       |  |
| <b>Message Text:</b> | &2 in &3 cannot be used for row and column access control. |

| <b>SQ20470</b>                |   |
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| <b>Cause Text:</b>            | <p>&amp;2 in &amp;3 type &amp;1 cannot be created or altered for one of the following reasons because &amp;5 in &amp;6 type &amp;4 depends on it for row or column level access control.</p> <ul style="list-style-type: none"> <li>• A user defined function must be secure if it is referenced in a PERMISSION or MASK or is referenced in a view that is referenced by a PERMISSION or MASK.</li> <li>• A trigger must be secure if it is defined on a table with an active PERMISSION or MASK.</li> <li>• A trigger must be secure if it is defined on a view that is based on a table with an active PERMISSION or MASK.</li> <li>• A read trigger cannot be defined over a table with active row or column level access control.</li> </ul> |
| <b>Recovery Text:</b>         | If &2 in &3 is a read trigger, row or column access control must be deactivated. Otherwise, use the SECURE keyword to create or alter &2 in &3 type &1 to be secure.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20470  |
| <b>SQLSTATE or SQLSTATES:</b> | 428H8   |

| <b>SQ20471</b>                |   |
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| <b>Message Text:</b>          | INSERT or UPDATE does not satisfy row permissions.  |
| <b>Cause Text:</b>            | Row access control is enforced for &1 in &2. Consequently, all attempts to insert or update rows in that table are checked to ensure that the resulting rows conform to the row permissions defined for the table. The INSERT or UPDATE could not be done because a resulting row did not satisfy one or more row permissions for &1 in &2. |
| <b>Recovery Text:</b>         | Change the data being inserted or updated so that it conforms to the rules defined for the row permissions.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20471  |
| <b>SQLSTATE or SQLSTATES:</b> | 22542   |

| <b>SQ20472</b>                |   |
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| <b>Message Text:</b>          | &1 cannot be used as the name of a permission or mask.  |
| <b>Cause Text:</b>            | <p>The name specified for the mask or permission cannot be used for reason code &amp;2.</p> <ul style="list-style-type: none"> <li>• 3 -- &amp;1 begins with the letters QIBM which are not allowed as the first 4 characters of a row permission or column mask name.</li> </ul> |
| <b>Recovery Text:</b>         | Choose a different mask or permission name.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20472  |
| <b>SQLSTATE or SQLSTATES:</b> | 428H9   |

| <b>SQ20473</b>       |   |
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| <b>Message Text:</b> | Column &3 cannot be used as an argument of function &1. |

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| <b>SQ20473</b>                |   |
| <b>Cause Text:</b>            | Function &1 in &2 is not secure and column &3 has an active and enabled column mask. An input argument of a function that is not secure must not reference a column with a mask that is enabled on a table with active column access control. |
| <b>Recovery Text:</b>         | Alter function &1 in &2 to be SECURE. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20473  |
| <b>SQLSTATE or SQLSTATES:</b> | 428HA   |

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| <b>SQ20474</b>                |   |
| <b>Message Text:</b>          | Permission or mask &7 in &8 is not valid.   |
| <b>Cause Text:</b>            | <p>The requested operation has failed because permission or mask &amp;7 in &amp;8 directly or indirectly references one of the following, as described by reason code &amp;4.</p> <ul style="list-style-type: none"> <li>• 1 -- The table for which the row permission or the column mask is being defined. The definition references &amp;1 in &amp;2, type *&amp;3, or references view or alias &amp;5 in &amp;6 that is defined over &amp;1 in &amp;2.</li> <li>• 3 -- User-defined function &amp;5 in &amp;6, which is not secure.</li> <li>• 4 -- Function &amp;5 in &amp;6, which is defined as not deterministic or is defined to have an external action.</li> <li>• 5 -- An OLAP specification.</li> <li>• 7 -- A ROW CHANGE expression.</li> <li>• 8 -- A sequence reference.</li> <li>• 9 -- A declared global temporary table, a table in QTEMP, a file with a read trigger, or a distributed file.</li> <li>• 11 -- A * or name.* in a SELECT clause.</li> <li>• 53 -- Table &amp;5 in &amp;6, which is a member alias.</li> </ul> <p>This failure may occur when attempting to do one of the following operations:</p> <ul style="list-style-type: none"> <li>• CREATE MASK or CREATE PERMISSION of &amp;7 in &amp;8.</li> <li>• CREATE FUNCTION or ALTER FUNCTION of a function that is used by &amp;7 in &amp;8 type &amp;9.</li> <li>• ALTER TABLE of &amp;1 in &amp;2.</li> <li>• ALTER MASK or ALTER PERMISSION of &amp;7 in &amp;8.</li> <li>• ALTER MASK, ALTER PERMISSION, DROP MASK, or DROP PERMISSION of any mask or permission defined on &amp;1 in &amp;2.</li> <li>• CREATE MASK or CREATE PERMISSION of additional masks or permissions defined on &amp;1 in &amp;2.</li> <li>• Any operation that uses table &amp;1 in &amp;2.</li> </ul> |
| <b>Recovery Text:</b>         | Correct the problem. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20474  |
| <b>SQLSTATE or SQLSTATES:</b> | 428HB   |



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| <b>SQ20475</b>                |   |
| <b>Message Text:</b>          | A mask is already defined for column &5.  |
| <b>Cause Text:</b>            | Column mask &1 in &2 is currently defined for column &5. Only one column mask may be defined on a column. |
| <b>Recovery Text:</b>         | Define this column mask on a different column or drop column mask &1 in &2 and try the request again.     |
| <b>SQLCODE or SQLCODEs:</b>   | -20475  |
| <b>SQLSTATE or SQLSTATES:</b> | 428HC   |

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| <b>SQ20478</b>                |   |
| <b>Message Text:</b>          | Row or column access control is not valid.  |
| <b>Cause Text:</b>            | <p>Row or column access control specified by row permission or column mask &amp;1 in &amp;2 is not valid for the query for reason code &amp;4. The reason codes and their meanings are:</p> <ul style="list-style-type: none"> <li>• 20 -- The result table is derived from a recursive common table expression and column &amp;3 is specified in the fullselect of the recursive common table expression. A column mask cannot be applied to column &amp;3.</li> <li>• 30 -- An insert or update operation is using a masked value returned from column mask &amp;1 in &amp;2 for column &amp;3. The expression specified in the THEN or ELSE clause of the column mask definition that is used to return the masked value is not a direct reference of column &amp;3.</li> <li>• 51 -- A distributed table cannot be referenced in a query that also references a table with active permissions or masks.</li> <li>• 52 -- A table with read triggers cannot be referenced in a query that also references a table with active permissions or masks.</li> </ul> |
| <b>Recovery Text:</b>         | <p>For INSERT and UPDATE, the value returned from the mask must be a direct reference to the column itself.</p> <p>Remove the incorrect reference and try the request again.</p>  |
| <b>SQLCODE or SQLCODEs:</b>   | -20478  |
| <b>SQLSTATE or SQLSTATES:</b> | 428HD   |

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| <b>SQ20479</b>       |  |
| <b>Message Text:</b> | Object &1 in &2 type *&4 cannot be dropped or altered.   |
| <b>Cause Text:</b>   | <p>&amp;1 in &amp;2 cannot be dropped or altered as specified because it is involved in row or column access control &amp;5 in &amp;6. See reason code &amp;3 for more information on the failure:</p> <ul style="list-style-type: none"> <li>• 1 -- Dependent object &amp;5 in &amp;6 type &amp;7 references column &amp;8.</li> <li>• 2 -- The authorization ID associated with the statement is not authorized to the QIBM_DB_SECADM function.</li> <li>• 3 -- &amp;1 in &amp;2 type *&amp;4 is defined with row or column access control. An attempt to regenerate &amp;5 in &amp;6 has failed.</li> </ul> |

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| <b>SQ20479</b>                |   |
| <b>Recovery Text:</b>         | Do one of the following based on the reason code. <ul style="list-style-type: none"> <li>• 1 -- DROP the dependent object &amp;5 in &amp;6 type &amp;7 and try the request again.</li> <li>• 2 -- Perform the operation with a user profile that is authorized to the Database Security Administrator function. This is obtained through Application Administration in System i® Navigator, or with the Change Function Usage Information (CHGFCNUSG) command with a function ID of QIBM_DB_SECADM.</li> <li>• 3 -- See previously listed messages in the job log for the cause of the failure, correct the problem and retry the request.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | -20479  |
| <b>SQLSTATE or SQLSTATEs:</b> | 42917   |

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| <b>SQ20481</b>                |  |
| <b>Message Text:</b>          | View or function &1 in &2 references itself.   |
| <b>Cause Text:</b>            | An attempt was made to create or invoke function &1 in &2 or to replace the definition of view &1 in &2. The operation failed due to reason &3. Reason codes are: <ul style="list-style-type: none"> <li>• 1 -- The new view definition of &amp;1 in &amp;2 contains a reference to itself. This circular self-reference can either be explicit in the definition, or implicit by a reference to another view that explicitly or implicitly references &amp;1.</li> <li>• 2 -- Function &amp;1 in &amp;2 contains a reference to itself in its default expression. This can happen through the invocation of another function that references &amp;1.</li> </ul> |
| <b>Recovery Text:</b>         | Remove the circular self-reference from the object definition and try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20481   |
| <b>SQLSTATE or SQLSTATEs:</b> | 429C3  |

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| <b>SQ20483</b>       |   |
| <b>Message Text:</b> | Named argument &1 for routine &2 not valid for reason code &4.  |
| <b>Cause Text:</b>   | The named argument for parameter &1 is not valid for reason code &4. <ul style="list-style-type: none"> <li>• 1 -- The CALL statement or function invocation includes named argument &amp;1 which does not exist for routine &amp;2 in schema &amp;3.</li> <li>• 2 -- The CALL statement or function invocation includes named argument &amp;1 which is followed by one or more unnamed arguments. All arguments following a named argument must also be named.</li> <li>• 3 -- The CALL statement or function invocation specifies named argument &amp;1 more than once, either explicitly or implicitly.</li> <li>• 4 -- The CALL statement specifies named argument &amp;1 and routine &amp;2 in &amp;3 is not found. Named arguments are only supported for procedures defined with the CREATE PROCEDURE statement.</li> <li>• 5 -- The function invocation of &amp;2 in &amp;3 specifies named argument &amp;1 and the ordinal position of the corresponding parameter is different for at least two candidate functions.</li> </ul> |

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| <b>SQ20483</b>                |   |
| <b>Recovery Text:</b>         | Change the invocation of the procedure or function to use named parameters that are valid. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -20483  |
| <b>SQLSTATE or SQLSTATES:</b> | 4274K   |

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| <b>SQ20484</b>                |   |
| <b>Message Text:</b>          | Parameter &3 required for routine &1 in &2.   |
| <b>Cause Text:</b>            | A call statement for routine &1 in schema &2 specified with a named parameter is not valid. Parameter &3 must be specified on the call statement because it has no default value. |
| <b>Recovery Text:</b>         | Specify a value for parameter &3. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20484  |
| <b>SQLSTATE or SQLSTATES:</b> | 428HF   |

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| <b>SQ20489</b>                |   |
| <b>Message Text:</b>          | Index &1 cannot be both an encoded vector index and span all partitions.  |
| <b>Cause Text:</b>            | An attempt was made to create index &1 as an encoded vector index and have it span all partitions of a partitioned table. An encoded vector index can only be created over a single partition of a partitioned table or over a non-partitioned table. |
| <b>Recovery Text:</b>         | Change the CREATE INDEX statement to remove either the NOT PARTITIONED clause or the ENCODED VECTOR clause. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -20489  |
| <b>SQLSTATE or SQLSTATES:</b> | 42929   |

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| <b>SQ20529</b>        |  |
| <b>Message Text:</b>  | Argument of WRAP function or CREATE_WRAPPED procedure not valid.   |
| <b>Cause Text:</b>    | <p>The argument of the WRAP function or the CREATE_WRAPPED procedure is not a valid SQL statement. The valid statements are:</p> <ul style="list-style-type: none"> <li>• CREATE FUNCTION (SQL)</li> <li>• CREATE PROCEDURE (SQL)</li> <li>• CREATE TRIGGER</li> </ul> <p>If the argument is one of these statements, it is not valid if it has already been wrapped and the token directly following the WRAPPED keyword is not a supported application server value.</p> |
| <b>Recovery Text:</b> | Make sure the argument to the WRAP function or the CREATE_WRAPPED procedure is a valid statement. If the statement is already wrapped by a different application server, it cannot be processed using DB2 for i.   |

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| <b>SQ20529</b>                |        |
| <b>SQLCODE or SQLCODEs:</b>   | -20529 |
| <b>SQLSTATE or SQLSTATES:</b> | 5UAA0  |

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| <b>SQ20530</b>                |  |
| <b>Message Text:</b>          | Obfuscated statement is not valid. Reason code is &1.  |
| <b>Cause Text:</b>            | An error occurred processing an SQL statement that includes the WRAPPED clause. The reason code is &1. Reason codes and their meanings are: <ul style="list-style-type: none"> <li>• 1 -- The statement was wrapped on a platform or version that is not supported.</li> <li>• 2 -- The obfuscated portion of the statement is corrupted.</li> </ul> |
| <b>Recovery Text:</b>         | Make sure that the statement was wrapped on a supported platform and that the obfuscated portion of the statement has not been modified.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20530   |
| <b>SQLSTATE or SQLSTATES:</b> | 42638  |

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| <b>SQ20538</b>                |   |
| <b>Message Text:</b>          | Row and column access control on &3 in &4 may need to be changed.   |
| <b>Cause Text:</b>            | Row and column access control has been modified for &1 in &2 which is referenced by materialized query &3 in &4.          |
| <b>Recovery Text:</b>         | A comparable change may need to be made to the row and column access control definitions for materialized query &3 in &4. |
| <b>SQLCODE or SQLCODEs:</b>   | +20538  |
| <b>SQLSTATE or SQLSTATES:</b> | 01698   |

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| <b>SQ20547</b>                |  |
| <b>Message Text:</b>          | Variable &1 in &2 is read-only.  |
| <b>Cause Text:</b>            | An attempt to use variable &1 in &2 as a target of an assignment statement has failed because &1 in &2 is a read-only global variable. |
| <b>Recovery Text:</b>         | Change the statement to use a different variable. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -20547   |
| <b>SQLSTATE or SQLSTATES:</b> | 42813  |

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| <b>SQ30000</b>       |  |
| <b>Message Text:</b> | Distributed Relational Database Architecture™ (DRDA) protocol error. |

| <b>SQ30000</b>                |  |
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| <b>Cause Text:</b>            | <p>Command or SQL statement failed due to a distributed protocol error that will not affect subsequent commands or SQL statements. The protocol error is &amp;1 with a location code of &amp;2.</p> <p>The location codes are:</p> <ul style="list-style-type: none"> <li>• '01'X -- The error was detected at the application requester.</li> <li>• '02'X -- The error was detected at the application server.</li> </ul> <p>A possible list of protocol errors is:</p> <ul style="list-style-type: none"> <li>• '121C'X -- Not authorized to command.</li> <li>• '1245'X -- Conversation protocol error. The error code is &amp;3.</li> <li>• '124C'X -- Data stream syntax error. The error code is &amp;3.</li> <li>• '1254'X -- Unexpected error condition. The error code is &amp;3.</li> <li>• '125F'X -- Application server does not support function requested.</li> <li>• '2202'X -- Cursor not open.</li> <li>• '2204'X -- Relational database not connected.</li> <li>• '2207'X -- Relational database already connected.</li> <li>• '220A'X -- Data descriptor not valid. The error code is &amp;3.</li> <li>• '220E'X -- Data descriptor did not match data.</li> <li>• '220F'X -- Cursor already open.</li> <li>• '221D'X -- Command not valid for conversation type.</li> </ul> <p>If the protocol error does not appear in the list, refer to the DDM Architecture Reference for DDM code point &amp;1.</p> |
| <b>Recovery Text:</b>         | If the protocol error is '121C'X, then obtain the authorization required to use this command or SQL statement at the application server. If the protocol error is not '121C'X, then report the problem using Analyze Problem (ANZPRB).   |
| <b>SQLCODE or SQLCODEs:</b>   | -30000   |
| <b>SQLSTATE or SQLSTATES:</b> | 58008  |

| <b>SQ30001</b>                |   |
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| <b>Message Text:</b>          | Call to distributed SQL program not allowed.  |
| <b>Cause Text:</b>            | An attempt was made to use Submit Remote Command (SBMRMTCMD) to call a distributed SQL program from a Distributed Data Management (DDM) target job. |
| <b>Recovery Text:</b>         | Call the SQL program from a job that is not a DDM target job.   |
| <b>SQLCODE or SQLCODEs:</b>   | -30001  |
| <b>SQLSTATE or SQLSTATES:</b> | 57042   |

| <b>SQ30020</b>       |   |
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| <b>Message Text:</b> | Distributed Relational Database Architecture (DRDA) protocol error. |

| <b>SQ30020</b>                |  |
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| <b>Cause Text:</b>            | <p>Command or SQL statement failed due to a distribution protocol error that will affect subsequent SQL statements or commands. The application has been disconnected and the process is in an unconnected state. The protocol error is &amp;1 with a location code of &amp;2.</p> <p>The location codes are:</p> <ul style="list-style-type: none"> <li>• '01'X -- The error was detected at the application requester.</li> <li>• '02'X -- The error was detected at the application server.</li> </ul> <p>A possible list of protocol errors is:</p> <ul style="list-style-type: none"> <li>• '1218'X -- Unsupported function requested. The error code is &amp;3.</li> <li>• '1232'X -- Unexpected permanent error.</li> <li>• '1245'X -- Conversation protocol error. The error code is &amp;3.</li> <li>• '1254'X -- Unexpected error condition. The error code is &amp;3.</li> </ul> <p>If the protocol error does not appear in the list, refer to the DDM Architecture Reference for DDM code point &amp;1.</p> |
| <b>Recovery Text:</b>         | Report the problem using Analyze Problem (ANZPRB).   |
| <b>SQLCODE or SQLCODEs:</b>   | -30020   |
| <b>SQLSTATE or SQLSTATES:</b> | 58009  |

| <b>SQ30021</b>                |  |
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| <b>Message Text:</b>          | Distributed relational database not supported by the remote system.  |
| <b>Cause Text:</b>            | <p>An attempt was made to connect to a Distribute Data Management (DDM) server that does not support Distributed Relational Database Architecture (DRDA).</p> <p>On the remote system, the DDM manager class was &amp;1 with manager level &amp;2.</p> |
| <b>Recovery Text:</b>         | Change the program to connect to a relational database which supports DRDA.  |
| <b>SQLCODE or SQLCODEs:</b>   | -30021   |
| <b>SQLSTATE or SQLSTATES:</b> | 58010  |

| <b>SQ30040</b>       |   |
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| <b>Message Text:</b> | DRDA resources at relational database &1 unavailable. |

| <b>SQ30040</b>                |   |
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| <b>Cause Text:</b>            | <p>SQL statement or command failed due to an unavailable Distributed Relational Database Architecture (DRDA) resource that will not affect subsequent commands and SQL statements.</p> <p>DRDA resource &amp;2 is unavailable at relational database &amp;1 with location code &amp;3.</p> <p>The resource codes are:</p> <ul style="list-style-type: none"> <li>• '1409'X -- Communication buffer.</li> <li>• '1410'X -- Local build space.</li> <li>• '1411'X -- Diagnostic area.</li> <li>• '1412'X -- Local build space.</li> <li>• '1413'X -- LOB build space.</li> <li>• '1414'X -- Pool space.</li> </ul> <p>The location codes are:</p> <ul style="list-style-type: none"> <li>• '01'X -- Application requester.</li> <li>• '02'X -- Application server.</li> </ul> |
| <b>Recovery Text:</b>         | Free the DRDA resource and try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -30040  |
| <b>SQLSTATE or SQLSTATEs:</b> | 57012   |

| <b>SQ30041</b>              |   |
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| <b>Message Text:</b>        | DRDA resources at relational database &1 unavailable.   |
| <b>Cause Text:</b>          | <p>SQL statement or command failed due to an unavailable Distributed Relational Database Architecture (DRDA) resource that will affect subsequent commands and SQL statements. The application has been disconnected and the process is in an unconnected state.</p> <p>DRDA resource &amp;2 is unavailable at relational database &amp;1 with location code &amp;3.</p> <p>The resource codes are:</p> <ul style="list-style-type: none"> <li>• '1409'X -- Communication buffer.</li> <li>• '1410'X -- Local build space.</li> <li>• '1411'X -- Diagnostic area.</li> <li>• '1412'X -- Local build space.</li> <li>• '1413'X -- LOB build space.</li> <li>• '1414'X -- Pool space.</li> </ul> <p>The location codes are:</p> <ul style="list-style-type: none"> <li>• '01'X -- Application requester.</li> <li>• '02'X -- Application server.</li> </ul> |
| <b>Recovery Text:</b>       | Free the DRDA resource and try the request again.   |
| <b>SQLCODE or SQLCODEs:</b> | -30041  |

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| <b>SQ30041</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 57013 |

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| <b>SQ30050</b>                |   |
| <b>Message Text:</b>          | DDM command &1 not valid while bind process in progress.  |
| <b>Cause Text:</b>            | An attempt was made to run Distributed Data Management (DDM) command &1. This command is not valid while a bind process is in progress. |
| <b>Recovery Text:</b>         | Report this problem using the Analyze Problem (ANZPRB) command.   |
| <b>SQLCODE or SQLCODEs:</b>   | -30050  |
| <b>SQLSTATE or SQLSTATES:</b> | 58011   |

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| <b>SQ30051</b>                |  |
| <b>Message Text:</b>          | Bind process for specified package name and consistency token not active.  |
| <b>Cause Text:</b>            | Attempted to run a BNDSQLSTT or ENDBND Distributed Data Management (DDM) command for a bind process that was not active. |
| <b>Recovery Text:</b>         | Report this problem using the Analyze Problem (ANZPRB) command.  |
| <b>SQLCODE or SQLCODEs:</b>   | -30051   |
| <b>SQLSTATE or SQLSTATES:</b> | 58012  |

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| <b>SQ30052</b>                |  |
| <b>Message Text:</b>          | Program preparation assumptions not correct.   |
| <b>Cause Text:</b>            | The application requester did not understand the SQL statement and assumed all host variables were input, but this assumption was not correct.   |
| <b>Recovery Text:</b>         | Refer to the CRTSQLxxx (where xxx=CBL, PKG, PLI, RPG, CI, CPPI, RPGI, or CBLI) listing to find all SQL statements that were not recognized. Remove all unrecognized SQL statements that contain output host variables. Precompile the program again. |
| <b>SQLCODE or SQLCODEs:</b>   | -30052   |
| <b>SQLSTATE or SQLSTATES:</b> | 42932  |

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| <b>SQ30053</b>              |  |
| <b>Message Text:</b>        | Not authorized to create package for owner &1.                                   |
| <b>Cause Text:</b>          | Attempt to create the package failed because you are not authorized to owner &1. |
| <b>Recovery Text:</b>       | Obtain the required authorization to &1 and try again.                           |
| <b>SQLCODE or SQLCODEs:</b> | -30053   |



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| <b>SQ30053</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 42506 |

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| <b>SQ30060</b>                |  |
| <b>Message Text:</b>          | User is not authorized to relational database &1.  |
| <b>Cause Text:</b>            | If relational database &1 is DB2 for IBM i, a user exit program denied access to the user, or a failure in the user exit program occurred. |
| <b>Recovery Text:</b>         | Obtain authorization to relational database &1 and try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -30060   |
| <b>SQLSTATE or SQLSTATES:</b> | 08004  |

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| <b>SQ30061</b>                |  |
| <b>Message Text:</b>          | Relational database &1 not found.  |
| <b>Cause Text:</b>            | Relational database &1 was either not in the relational database directory or defined at the remote location.  |
| <b>Recovery Text:</b>         | Do one of the following: <ul style="list-style-type: none"> <li>• Use the Add Relational Database Directory Entry (ADDRDBDIRE) command to add the relational database name to the relational database directory.</li> <li>• Change the relational database name to match the relational database directory entry.</li> <li>• Verify the relational database name is defined on the remote location.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | -30061   |
| <b>SQLSTATE or SQLSTATES:</b> | 08004  |

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| <b>SQ30070</b>                |  |
| <b>Message Text:</b>          | Distributed Data Management (DDM) command &1 not supported.  |
| <b>Cause Text:</b>            | The remote system does not support the DDM command &1.<br><br>If the DDM command is '2012'X, the remote system does not support the SQL DESCRIBE TABLE statement. If the DDM command is not '2012'X, to determine which command is not supported, see the DDM Architecture Reference. For a list of DDM commands, refer to the Architecture Books section of the Bibliography in the Distributed database programming topic collection in the Database category in the IBM i Information Center, <a href="http://www.ibm.com/systems/i/infocenter/">http://www.ibm.com/systems/i/infocenter/</a> . |
| <b>Recovery Text:</b>         | Remove the SQL statement from the program and precompile the program.  |
| <b>SQLCODE or SQLCODEs:</b>   | -30070   |
| <b>SQLSTATE or SQLSTATES:</b> | 58014  |

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| <b>SQ30071</b>                |  |
| <b>Message Text:</b>          | Distributed Data Management (DDM) object &1 not supported.   |
| <b>Cause Text:</b>            | DDM object &1 was not supported.   |
| <b>Recovery Text:</b>         | See previous messages for more information. See the DDM Architecture Reference for additional information about code point &1. |
| <b>SQLCODE or SQLCODEs:</b>   | -30071   |
| <b>SQLSTATE or SQLSTATES:</b> | 58015  |

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| <b>SQ30072</b>                |   |
| <b>Message Text:</b>          | Distributed Data Management (DDM) parameter &1 not supported.   |
| <b>Cause Text:</b>            | DDM parameter &1 is not supported. The location code is &2 with an error code of &3.<br>The location codes are: <ul style="list-style-type: none"> <li>• '01'X -- The error was detected at the application requester.</li> <li>• '02'X -- The error was detected at the application server.</li> </ul> |
| <b>Recovery Text:</b>         | See previous messages for more information. See the DDM Architecture Reference for additional information about DDM parameter &1.   |
| <b>SQLCODE or SQLCODEs:</b>   | -30072  |
| <b>SQLSTATE or SQLSTATES:</b> | 58016   |

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| <b>SQ30073</b>       |  |
| <b>Message Text:</b> | Distributed Data Management (DDM) parameter value &1 not supported.  |
| <b>Cause Text:</b>   | DDM parameter value &1 is not supported. The location code is &2 with an error code of &3.<br>The location code are: <ul style="list-style-type: none"> <li>• '01'X -- The error was detected at the application requester.</li> <li>• '02'X -- The error was detected at the application server.</li> </ul> A possible list of DDM parameter values is: <ul style="list-style-type: none"> <li>• '0035'X -- The SBCS CCSID is not supported.</li> <li>• '119C'X -- The SBCS CCSID is not supported.</li> <li>• '2112'X -- The schema name or package name is longer than the maximum supported by the application server.</li> <li>• '2120'X -- The string delimiter is not supported.</li> <li>• '2121'X -- The decimal delimiter is not supported.</li> <li>• '2128'X -- The schema name is longer than the maximum supported by the application server.</li> <li>• '2131'X -- The userid is longer than the maximum supported by the application server.</li> </ul> If &1 is not in the list above, refer to the DDM Architecture Reference for a description of the parameter value that was not supported. |

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| <b>SQ30073</b>                |   |
| <b>Recovery Text:</b>         | See previous messages for more information. Change your job or SQL program to send a value that is supported by the application server and try again. |
| <b>SQLCODE or SQLCODEs:</b>   | -30073  |
| <b>SQLSTATE or SQLSTATES:</b> | 58017   |

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| <b>SQ30074</b>                |  |
| <b>Message Text:</b>          | Distributed Data Management (DDM) reply message &1 not supported.  |
| <b>Cause Text:</b>            | DDM reply message &1 was not supported.  |
| <b>Recovery Text:</b>         | See previous messages for more information. See the DDM Architecture Reference for additional information about code point &1. |
| <b>SQLCODE or SQLCODEs:</b>   | -30074   |
| <b>SQLSTATE or SQLSTATES:</b> | 58018  |

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| <b>SQ30080</b>              |  |
| <b>Message Text:</b>        | Communication error occurred during distributed database processing.   |
| <b>Cause Text:</b>          | <p>A communication error occurred. Possible reasons include:</p> <ul style="list-style-type: none"> <li>• The remote system is not available.</li> <li>• The communications network is not available.</li> <li>• The userid used to start the connection may not exist on the remote system.</li> <li>• The remote system may require the password to be encrypted.</li> <li>• The password may not be valid for the userid. The characters and case of the password specified must match exactly the password on the remote system.</li> <li>• A server authorization entry for the remote system, if used, may be incorrect. Server names must be in upper case. The QRETSVRSEC system value must be set to '1' to retain passwords.</li> </ul> <p>If message CPE3425 (connection refused) precedes this message, the cause may be:</p> <ul style="list-style-type: none"> <li>• The DDM/DRDA TCP/IP server is not started on the remote system.</li> <li>• An incorrect port was specified for the remote system.</li> <li>• The remote system is restricting DRDA ports.</li> <li>• The SOCKS server, if used, is not configured properly.</li> </ul> <p>The APPC major return code is &amp;1 and the minor return code is &amp;2. For TCP/IP, both return codes will be 00. If the return codes are not both 00, their meaning can be found in the APPC Programming topic in the Information Center, <a href="http://www.ibm.com/systems/i/infocenter/">http://www.ibm.com/systems/i/infocenter/</a>.</p> |
| <b>Recovery Text:</b>       | See previous messages for more information. Check the status of the remote system and the communications network for possible problems. If the application server is DB2 for IBM i, check the QSYSOPR message queue for error messages.  |
| <b>SQLCODE or SQLCODEs:</b> | -30080   |

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| <b>SQ30080</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 08001 |

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| <b>SQ30081</b>                |   |
| <b>Message Text:</b>          | Communication error has been detected during distributed database processing.   |
| <b>Cause Text:</b>            | A communication error has been detected. Possible reasons include: <ul style="list-style-type: none"> <li>• The local system timed out waiting for the connection to be started.</li> </ul>   |
| <b>Recovery Text:</b>         | See previous messages for more information. Check the status of the remote system and the communications network for possible problems. If the application server is DB2 for IBM i, check QSYSOPR message queue for error messages. |
| <b>SQLCODE or SQLCODEs:</b>   | -30081  |
| <b>SQLSTATE or SQLSTATES:</b> | 08001   |

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| <b>SQ30082</b>       |   |
| <b>Message Text:</b> | Authorization failure on distributed database connection attempt.   |
| <b>Cause Text:</b>   | A connection attempt failed with reason code &2. The reason codes and their meanings are as follows: <ul style="list-style-type: none"> <li>• 0 -- Unknown cause.</li> <li>• 1 -- Password expired.</li> <li>• 2 -- Password not valid.</li> <li>• 3 -- Password missing.</li> <li>• 4 -- Protocol violation.</li> <li>• 5 -- User ID not found.</li> <li>• 6 -- User ID not valid. For a DB2 for IBM i server, this could mean a damaged user profile or PASSWORD(*NONE).</li> <li>• 7 -- User ID revoked or disabled.</li> <li>• 15 -- Security processing at the server failed.</li> <li>• 16 -- The new password is not valid.</li> <li>• 17 -- The security mechanism requested by the client is not supported or allowed at the server. See recovery information below.</li> <li>• 22 -- Security processing at the client failed.</li> <li>• 23 -- CCSID conversion of the password failed.</li> </ul> |

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| <b>SQ30082</b>                |  |
| <b>Recovery Text:</b>         | <p>Correct the problem indicated by the reason code, if possible, and attempt to connect again. A common cause for reason code 17 is that the server requires a password, but because the client does not have a password to send, sends only a user ID. Or, the server requires an encrypted password and the client did not send an encrypted password. A password can be supplied by the user in two ways:</p> <ul style="list-style-type: none"> <li>• 1 -- By using the USER ... USING ... clause on the SQL CONNECT statement, or</li> <li>• 2 -- By using the ADDSVRAUTE CL command to add a server authorization entry for the remote server under the user's profile. The server name (DRDA RDB NAME) must be entered in upper case. &amp;N The DRDA server can be configured with the CHGDDMTCPA CL command to not require a password, or to not require an encrypted password.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | -30082   |
| <b>SQLSTATE or SQLSTATES:</b> | 08001  |

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| <b>SQ30089</b>                |   |
| <b>Message Text:</b>          | Communication error occurred during DB2 Multisystem processing.   |
| <b>Cause Text:</b>            | <p>A communication error occurred. A possible list of reasons may include:</p> <ul style="list-style-type: none"> <li>• The remote system is not available.</li> <li>• The communications network is not available.</li> <li>• The userid used to start the connection may not exist on the remote system.</li> </ul> |
| <b>Recovery Text:</b>         | See previous messages for more information. Check the status of the remote system and the communications network for possible problems. Check QSYSOPR message queue for error messages.   |
| <b>SQLCODE or SQLCODEs:</b>   | -30089  |
| <b>SQLSTATE or SQLSTATES:</b> | 08001   |

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| <b>SQ30090</b>                |   |
| <b>Message Text:</b>          | Change request not valid for read-only application server.  |
| <b>Cause Text:</b>            | <p>Application requester requested a read-only application server. The running of a statement which is not valid for a read-only application server was attempted.</p> <p>This message can occur when initially attempting to connect to a system other than DB2 for IBM i using interactive SQL with the COMMIT option set to *NONE.</p> |
| <b>Recovery Text:</b>         | Remove the change request from the program and try again. If the problem is due to the use of COMMIT(*NONE) to a system that is not DB2 for IBM i, change to a different commitment control level and try again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -30090  |
| <b>SQLSTATE or SQLSTATES:</b> | 25000, 2D528, 2D529   |

| <b>SQ30104</b>                |   |
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| <b>Message Text:</b>          | Bind or precompile option &1 with value &2 not valid.   |
| <b>Cause Text:</b>            | Supported values on the DB2 for IBM i application server are:<br>PATH -- schema-names<br>AS400NAMING -- SQL (Default) or SYSTEM<br>OS400NAMING -- SQL (Default) or SYSTEM<br>SORTSEQ -- HEX (Default) or JOBRUN<br>MAXSCALE -- between 0 and 31<br>MINDIVSCALE -- between 0 and 9, MINDIVSCALE must not exceed MAXSCALE<br>ROUNDING -- HALFEVEN (Default), CEILING, DOWN, FLOOR, HALFDOWN, HALFUP, or UP<br>EXTENDEDINDICATOR -- NO (Default) or YES<br>DATEOVERRIDE -- ISO (Default), USA, EUR, JIS<br>CONCURRENTACCESSRESOLUTION -- NO (Default) or YES |
| <b>Recovery Text:</b>         | Correct the generic bind option value and try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -30104  |
| <b>SQLSTATE or SQLSTATES:</b> | 56095   |

| <b>SQ30106</b>                |  |
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| <b>Message Text:</b>          | The input data for a multiple row insert is not valid.   |
| <b>Cause Text:</b>            | A data error has been detected on the client when processing a row for a multi-row input operation. A null indicator value of -2 (X'FE') was received from the client which indicates that the server should return an error SQLCA containing SQLSTATE 22527 over a null row. For an atomic multi-row input operation, such an error terminates processing of the multi-row input request, and any changes that have resulted from this request will be undone. For a non-atomic multi-row operation, such an error terminates processing of the multi-row input request, but any changes for this request are not undone. |
| <b>Recovery Text:</b>         | Determine which part of the multi-row input operation is in error and retry the request.   |
| <b>SQLCODE or SQLCODEs:</b>   | -30106   |
| <b>SQLSTATE or SQLSTATES:</b> | 22527  |

| <b>SQ30107</b>        |   |
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| <b>Message Text:</b>  | A request to release record read locks on close of cursor was ignored.  |
| <b>Cause Text:</b>    | DB2 for IBM i does not support this feature. To avoid this warning do the following. <ul style="list-style-type: none"> <li>• For embedded SQL remove the WITH RELEASE clause from the CLOSE.</li> <li>• For CLI remove the option to define cursors with release.</li> </ul> |
| <b>Recovery Text:</b> |   |

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| <b>SQ30107</b>                |        |
| <b>SQLCODE or SQLCODEs:</b>   | +30107 |
| <b>SQLSTATE or SQLSTATES:</b> | 01662  |

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| <b>SQL0007</b>                |  |
| <b>Message Text:</b>          | Character &1 (HEX &2) not valid in SQL statement.  |
| <b>Cause Text:</b>            | The character &1 specified in the SQL statement is not permitted. The hexadecimal representation for the character is &2. The character is ignored by the precompiler and processing of the statement continues. |
| <b>Recovery Text:</b>         | Correct the character. The character may need to be enclosed either in quotation marks or apostrophes. Precompile the program again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -007   |
| <b>SQLSTATE or SQLSTATES:</b> | 42601  |

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| <b>SQL0010</b>                |   |
| <b>Message Text:</b>          | String constant beginning &1 not delimited.   |
| <b>Cause Text:</b>            | The string delimiter is missing in the constant beginning with &1. The string is treated as if it were delimited by the end of the source file.   |
| <b>Recovery Text:</b>         | Delimit the string constant. Check for any missing or extra quotation marks and apostrophes. These errors are likely to cause other errors. Some statements may not have been processed as the result of either missing or extra string delimiters. Precompile the program again. |
| <b>SQLCODE or SQLCODEs:</b>   | -010  |
| <b>SQLSTATE or SQLSTATES:</b> | 42603   |

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| <b>SQL0011</b>                |   |
| <b>Message Text:</b>          | Comment not closed.   |
| <b>Cause Text:</b>            | A comment is not closed correctly with a comment delimiter. The comment is treated as if it were closed by the end of source file.  |
| <b>Recovery Text:</b>         | Make certain that the comment delimiter is specified properly and that it is between the specified margins. This error is likely to cause other errors. Some statements may not have been processed as a result of a missing comment delimiter. Precompile the program again. |
| <b>SQLCODE or SQLCODEs:</b>   | -011  |
| <b>SQLSTATE or SQLSTATES:</b> | 42601   |

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| <b>SQL0012</b>                |   |
| <b>Message Text:</b>          | Correlation without qualification occurred for column &1 to table &2.   |
| <b>Cause Text:</b>            | Column &1 which occurs in a subselect, is not explicitly qualified, and occurs in table &2 in library &3 specified in the FROM clause of an outer subselect or as the target of an update or delete operation. Consequently, the reference to the column in the subselect is an outer reference, and correlation will occur.  |
| <b>Recovery Text:</b>         | Ensure you intended to use the correlation. If you did not intend to use the correlation, the column does not exist in any of the tables or views identified in the FROM clause of the same level of the subselect that column &1 was referenced. Since it is a good practice to explicitly qualify any intended correlated references, it is recommended that the statement be changed so that the column &1 is qualified with a table designator. |
| <b>SQLCODE or SQLCODEs:</b>   | +012  |
| <b>SQLSTATE or SQLSTATES:</b> | 01545   |

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| <b>SQL0029</b>                |  |
| <b>Message Text:</b>          | INTO clause missing from embedded statement.   |
| <b>Cause Text:</b>            | SELECT and VALUES INTO statements embedded in a program must have an INTO clause to specify where the results of the statement are to be placed. |
| <b>Recovery Text:</b>         | Add the INTO clause to the statement and try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -029   |
| <b>SQLSTATE or SQLSTATES:</b> | 42601  |

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| <b>SQL0030</b>                |  |
| <b>Message Text:</b>          | Number of host variables less than result values.  |
| <b>Cause Text:</b>            | The number of host variables specified in the INTO clause is less than the number of result values. If the program is run, only the variables specified will have values assigned to them. |
| <b>Recovery Text:</b>         | If all values should be received, specify the proper number of host variables. Precompile the program again.   |
| <b>SQLCODE or SQLCODEs:</b>   | +030   |
| <b>SQLSTATE or SQLSTATES:</b> | 01503  |

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| <b>SQL0051</b>       |   |
| <b>Message Text:</b> | Cursor or procedure &1 previously declared.   |
| <b>Cause Text:</b>   | <p>One of the following has occurred:</p> <ul style="list-style-type: none"> <li>• Cursor &amp;1 has already been specified in a previous DECLARE CURSOR statement. A cursor name must be unique within the program.</li> <li>• Procedure &amp;1 specified on a CALL statement is ambiguous.</li> </ul> |



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| <b>SQL0051</b>                |  |
| <b>Recovery Text:</b>         | Make certain that the cursor names on all DECLARE CURSOR statements and the procedure names on all DECLARE PROCEDURE statements are unique in the program. Precompile the program again. |
| <b>SQLCODE or SQLCODEs:</b>   | -051   |
| <b>SQLSTATE or SQLSTATES:</b> | 3C000  |

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| <b>SQL0057</b>                |  |
| <b>Message Text:</b>          | RETURN statement in an SQL function must return a value.   |
| <b>Cause Text:</b>            | A RETURN statement is specified in an SQL function without a return value. The return value must be specified. |
| <b>Recovery Text:</b>         | Add a value to return. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -057   |
| <b>SQLSTATE or SQLSTATES:</b> | 42631  |

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| <b>SQL0058</b>                |  |
| <b>Message Text:</b>          | Value specified on RETURN statement must be an integer.  |
| <b>Cause Text:</b>            | A RETURN statement is specified in an SQL procedure but the value specified is not integer. The return value for an SQL procedure must be integer. |
| <b>Recovery Text:</b>         | Specify an integer value on the RETURN statement. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -058   |
| <b>SQLSTATE or SQLSTATES:</b> | 428F2  |

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| <b>SQL0060</b>                |  |
| <b>Message Text:</b>          | Value &3 for argument &1 of &2 function not valid.   |
| <b>Cause Text:</b>            | The length or scale specified as &3 for argument &1 of the &2 function is not valid. The length specified for numeric values must be an unsigned integer from 1 through 63. The scale specified for numeric values must be an unsigned integer between 0 and the specified length. |
| <b>Recovery Text:</b>         | Correct the length or scale specified for the function. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -060   |
| <b>SQLSTATE or SQLSTATES:</b> | 42815  |

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| <b>SQL0074</b>       |                                   |
| <b>Message Text:</b> | Descriptor COUNT &1 is not valid. |

| <b>SQL0074</b>                |   |
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| <b>Cause Text:</b>            | The value of COUNT for a descriptor is not between 0 and the maximum number of items assigned when the descriptor was allocated. Error types and their meanings are: <ul style="list-style-type: none"> <li>• 1 -- Top level count is incorrect</li> <li>• 2 -- SQDS_ITEMS is incorrect</li> <li>• 3 -- Level of array-related descriptor items is incorrect</li> </ul> |
| <b>Recovery Text:</b>         | Specify a different COUNT value using the SET DESCRIPTOR statement.   |
| <b>SQLCODE or SQLCODEs:</b>   | -074  |
| <b>SQLSTATE or SQLSTATES:</b> | 07008   |

| <b>SQL0075</b>                |   |
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| <b>Message Text:</b>          | Descriptor item number &1 is not correct.   |
| <b>Cause Text:</b>            | Descriptor item number &1 is not correct for one of the following reasons. <ul style="list-style-type: none"> <li>• The value given for the maximum number of items on an ALLOCATE DESCRIPTOR statement is not between 1 and 8000.</li> <li>• The item number given on a GET DESCRIPTOR or SET DESCRIPTOR statement is not between 1 and the maximum number of items assigned when the descriptor was allocated.</li> </ul> |
| <b>Recovery Text:</b>         | For the ALLOCATE DESCRIPTOR statement, ensure the maximum items specified is between 1 and 8000. For GET DESCRIPTOR and SET DESCRIPTOR statements, ensure the item number specified in VALUE is between 1 and the maximum number of items for the specified descriptor. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -075  |
| <b>SQLSTATE or SQLSTATES:</b> | 07009   |

| <b>SQL0076</b>              |  |
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| <b>Message Text:</b>        | DATA or INDICATOR item not correct.  |
| <b>Cause Text:</b>          | The DATA or INDICATOR item is not correct for one of the following reasons: <ul style="list-style-type: none"> <li>• The GET DESCRIPTOR statement requested the DATA or INDICATOR item, but the DATA or INDICATOR item has no value.</li> <li>• The GET DESCRIPTOR or SET DESCRIPTOR statements specified a host variable for the DATA item that is not valid. The host variable must match the DATA item in type, length, precision, scale, and CCSID.</li> </ul> |
| <b>Recovery Text:</b>       | If DATA or INDICATOR does not have a known value, perform an operation such as FETCH or use SET DESCRIPTOR to establish a DATA or INDICATOR value prior to the GET DESCRIPTOR. If the host variable on the GET DESCRIPTOR or SET DESCRIPTOR statement does not match the attributes of the DATA item, change the attributes of the host variable. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b> | -076   |

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| <b>SQL0076</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 22005 |

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| <b>SQL0077</b>                |   |
| <b>Message Text:</b>          | Descriptor name &1 not correct.   |
| <b>Cause Text:</b>            | Descriptor name &1 is not correct for one of the following reasons. <ul style="list-style-type: none"> <li>• The descriptor name is longer than 128 characters.</li> <li>• The descriptor name has not been allocated with an ALLOCATE DESCRIPTOR statement.</li> <li>• A descriptor with this name already exists for the connection and scope.</li> </ul> |
| <b>Recovery Text:</b>         | Make sure the name is not too long. Use the ALLOCATE DESCRIPTOR statement to define the descriptor before referring to it in another statement. If there is already a descriptor with the same name for the connection and scope, change the name in the ALLOCATE DESCRIPTOR statement. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -077  |
| <b>SQLSTATE or SQLSTATES:</b> | 33000   |

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| <b>SQL0078</b>                |  |
| <b>Message Text:</b>          | Parameter name required for routine &1 in &2.                |
| <b>Cause Text:</b>            | Parameter name must be specified when creating SQL routines. |
| <b>Recovery Text:</b>         | Specify a parameter name. Try the request again.             |
| <b>SQLCODE or SQLCODEs:</b>   | -078   |
| <b>SQLSTATE or SQLSTATES:</b> | 42629  |

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| <b>SQL0079</b>                |  |
| <b>Message Text:</b>          | Schema &2 for object &1 not valid.   |
| <b>Cause Text:</b>            | Object &1 cannot be qualified with schema &2. A table in the DECLARE GLOBAL TEMPORARY TABLE statement must be qualified with SESSION. A reference to a temporary table must be qualified with SESSION or QTEMP. Indexes and views over a temporary table must be created in the schema SESSION or QTEMP. |
| <b>Recovery Text:</b>         | Specify SESSION as the schema name. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -079   |
| <b>SQLSTATE or SQLSTATES:</b> | 428EK  |

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| <b>SQL0080</b>       |  |
| <b>Message Text:</b> | Indicator variable &1 not SMALLINT type. |

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| <b>SQL0080</b>                |  |
| <b>Cause Text:</b>            | The definition of indicator variable &1 must be a 2-byte binary with a zero scale.                         |
| <b>Recovery Text:</b>         | Specify an indicator variable that is defined as a 2-byte binary with a zero scale. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -080   |
| <b>SQLSTATE or SQLSTATES:</b> | 42978  |

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| <b>SQL0084</b>       |   |
| <b>Message Text:</b> | SQL statement not allowed.  |
| <b>Cause Text:</b>   | <p>The SQL statement is not allowed for one of the following reasons:</p> <ul style="list-style-type: none"> <li>• DECLARE CURSOR, DECLARE STATEMENT, FETCH, OPEN, CLOSE, WHENEVER, PREPARE, EXECUTE, EXECUTE IMMEDIATE, INCLUDE, SELECT INTO, VALUES INTO, DECLARE VARIABLE, DECLARE PROCEDURE, DESCRIBE, GET DIAGNOSTICS, SIGNAL, RESIGNAL, ALLOCATE CURSOR, ASSOCIATE LOCATOR, ALLOCATE DESCRIPTOR, DEALLOCATE DESCRIPTOR, GET DESCRIPTOR, and SET DESCRIPTOR are not allowed in interactive SQL, dynamic SQL, or when using the RUNSQLSTM or RUNSQL commands.</li> <li>• BEGIN DECLARE SECTION and END DECLARE SECTION are not allowed in interactive SQL, in dynamic SQL, in RPG, or in REXX.</li> <li>• A blocked INSERT statement is not allowed in interactive SQL or dynamic SQL.</li> <li>• The CONNECT, SET CONNECTION, RELEASE, and DISCONNECT statements are not allowed in dynamic SQL or REXX. CONNECT with constants specified for user ID and password is not allowed in a precompiled program.</li> <li>• SET ENCRYPTION PASSWORD with constants specified for user ID or hint is not allowed in a precompiled program.</li> <li>• SELECT and VALUES cannot be issued from an EXECUTE IMMEDIATE statement or the RUNSQLSTM or RUNSQL commands.</li> <li>• The SET OPTION statement is only allowed in REXX, in a precompiled program, or in SQL routines. In a precompiled program, it must be the first SQL statement in the program.</li> <li>• ALLOCATE CURSOR, ASSOCIATE LOCATORS, DECLARE STATEMENT, DECLARE VARIABLE, DECLARE PROCEDURE, GET DIAGNOSTICS, INCLUDE, SELECT INTO, SET CURRENT DEGREE, SET RESULT SETS, SIGNAL, WHENEVER, blocked INSERT, blocked FETCH, locator statements, and SQL descriptor statements are not allowed in REXX.</li> <li>• The SET TRANSACTION statement is not allowed when the current connection is to a remote database.</li> <li>• The SET SESSION AUTHORIZATION statement can only be run in the default activation group. It is not allowed in REXX, or when using the RUNSQLSTM or RUNSQL commands.</li> <li>• The WRAPPED keyword for functions, procedures, and triggers is not allowed in a precompiled program.</li> <li>• The SQL statement specified is not a valid statement on the current release of DB2 for IBM i. The statement may be valid on a future release of DB2 for IBM i or on some other system's implementation of SQL.</li> </ul> |

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| <b>SQL0084</b>                |  |
| <b>Recovery Text:</b>         | The statement cannot be run in this mode. For a CONNECT or SET ENCRYPTION PASSWORD statement in a precompiled program, specify host variables instead of constants. If in interactive SQL, you may syntax check a statement by setting the statement processing value to *SYN. |
| <b>SQLCODE or SQLCODEs:</b>   | +084, -084   |
| <b>SQLSTATE or SQLSTATES:</b> | 01505, 42612   |

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| <b>SQL0087</b>                |  |
| <b>Message Text:</b>          | Variable cannot be NULL.   |
| <b>Cause Text:</b>            | A global variable, SQL variable, or parameter was specified in an SQL statement where NULL is not allowed. |
| <b>Recovery Text:</b>         | Assign a value to the global variable, SQL variable, or parameter. Try the request again.                  |
| <b>SQLCODE or SQLCODEs:</b>   | -087   |
| <b>SQLSTATE or SQLSTATES:</b> | 22004  |

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| <b>SQL0088</b>                |  |
| <b>Message Text:</b>          | &1 applies to entire table.  |
| <b>Cause Text:</b>            | The UPDATE or DELETE statement does not have a WHERE clause and will delete or update all the rows in the specified table.   |
| <b>Recovery Text:</b>         | Do one of the following: <ul style="list-style-type: none"> <li>• Verify that all the rows in the specified table need to be deleted or updated and try the statement again.</li> <li>• If the rows in the specified table do not need to be deleted or updated, add a WHERE clause and precompile the program again.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | +088   |
| <b>SQLSTATE or SQLSTATES:</b> | 01504  |

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| <b>SQL0090</b>       |                                   |
| <b>Message Text:</b> | Host variable not permitted here. |

| <b>SQL0090</b>                |   |
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| <b>Cause Text:</b>            | <p>Host variable &amp;1 is not allowed as used in this statement. Host variables are not allowed:</p> <ul style="list-style-type: none"> <li>• In a CREATE VIEW, CREATE TABLE, CREATE INDEX, CREATE MASK, CREATE PERMISSION, or ALTER TABLE statement.</li> <li>• In a default value clause for a parameter in a CREATE PROCEDURE or CREATE FUNCTION statement.</li> <li>• In any interactive SQL statement when the statement processing value is *RUN or *VLD.</li> <li>• In an SQL statement processed by the RUNSQLSTM or RUNSQL commands.</li> <li>• In an INSERT, UPDATE, DELETE, CALL, or DECLARE CURSOR statement in REXX.</li> </ul> |
| <b>Recovery Text:</b>         | <p>Do one of the following and try the request again.</p> <ul style="list-style-type: none"> <li>• Specify either a constant or a column name to replace the host variable. The colon indicates that the name that follows is a host variable. Remove the colon to specify a column name.</li> <li>• If in interactive SQL, set the statement processing value to *SYN to syntax check a statement that contains a host variable.</li> <li>• If in REXX, change the host variables to parameter markers and prepare the INSERT, UPDATE, DELETE, CALL, or DECLARE CURSOR statement.</li> </ul>   |
| <b>SQLCODE or SQLCODEs:</b>   | -090  |
| <b>SQLSTATE or SQLSTATEs:</b> | 42618   |

| <b>SQL0097</b>                |  |
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| <b>Message Text:</b>          | Use of data type not valid.  |
| <b>Cause Text:</b>            | <p>A data type specified in the statement is not allowed where it is used.</p> <ul style="list-style-type: none"> <li>• LONG VARCHAR, LONG VARGRAPHIC, and LONG VARBINARY can only be specified for column definitions in the CREATE TABLE statement.</li> <li>• In the XMLTABLE function, BINARY, VARBINARY, BLOB, ROWID, DATALINK, and user defined types are not allowed as input arguments or as result column types.</li> </ul> |
| <b>Recovery Text:</b>         | Change the data type to one that is allowed in this context. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -097   |
| <b>SQLSTATE or SQLSTATEs:</b> | 42601  |

| <b>SQL0100</b>       |                       |
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| <b>Message Text:</b> | Row not found for &1. |

| <b>SQL0100</b>                |   |
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| <b>Cause Text:</b>            | <p>One of the following conditions has occurred:</p> <ul style="list-style-type: none"> <li>• If this is a FETCH statement, no more rows satisfy the selection values (end of file). The name of the cursor is &amp;1 and the result set identifier is &amp;2. If the result set identifier is non-zero, the result table for this cursor was being accessed as a stored procedure result set.</li> <li>• If this is a FETCH statement for a scrollable cursor, a record was not found. If NEXT was specified, end of file was reached. If PRIOR was specified, the beginning of the file was reached. If RELATIVE was specified, either the beginning of file or the end of file was reached, depending on the value specified. If FIRST or LAST was specified, then no records satisfy the selection criteria. The name of the cursor is &amp;1.</li> <li>• If this is an embedded SELECT statement, no rows satisfy the selection values.</li> <li>• If this is an UPDATE, INSERT, DELETE, or MERGE statement, no rows satisfy the subselect, WHERE clause, or MERGE criteria. No rows were updated, inserted, or deleted.</li> <li>• If SKIP LOCKED DATA is specified, no available rows qualified for return.</li> </ul> |
| <b>Recovery Text:</b>         | No recovery is necessary.   |
| <b>SQLCODE or SQLCODEs:</b>   | +100  |
| <b>SQLSTATE or SQLSTATES:</b> | 02000   |

| <b>SQL0101</b>        |  |
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| <b>Message Text:</b>  | SQL statement too long or complex.   |
| <b>Cause Text:</b>    | <p>The SQL statement is longer than the limit allowed for length or complexity. The reason code is &amp;1. One of the following reason codes indicates the error:</p> <ul style="list-style-type: none"> <li>• 1 - The total number of subselects combined using UNION, EXCEPT, and INTERSECT is greater than 256.</li> <li>• 2 - The total number of columns, constants, and operators is greater than the SQL limits.</li> <li>• 3 - The sum of the lengths of the non-LOB and XML columns in a select list, table, view definition, or user defined table function is greater than 32766 or the definition contains LOB or XML columns and the sum of the lengths specified on the ALLOCATE clause for varying-length fields and the non-varying field lengths is greater than 32740. The maximum length is reduced if any of the columns are varying-length or allow null values.</li> <li>• 4 - The total number of subselects referenced in an outer subselect is greater than 256.</li> <li>• 5 - The total length of the statement text is greater than 2097152, or the total length of the prepare attribute string text is greater than 65535.</li> <li>• 6 - The relative position value specified on the FETCH statement is outside the range of valid values.</li> <li>• 7 - A system name could not be generated.</li> </ul> |
| <b>Recovery Text:</b> | Simplify the statement or divide the statement up into more than one statement and try the request again. For reason code 7, specify a different name for the table, view, index, or alias.  |

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| <b>SQL0101</b>                |                     |
| <b>SQLCODE or SQLCODEs:</b>   | -101                |
| <b>SQLSTATE or SQLSTATES:</b> | 54001, 54010, 54011 |

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| <b>SQL0102</b>                |   |
| <b>Message Text:</b>          | String constant beginning with &1 too long.   |
| <b>Cause Text:</b>            | The string constant beginning with &1 is larger than 32740 bytes. If this is a graphic string constant, the string cannot be longer than 16370 DBCS characters. |
| <b>Recovery Text:</b>         | Reduce the length of the string. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -102  |
| <b>SQLSTATE or SQLSTATES:</b> | 54002   |

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| <b>SQL0103</b>                |   |
| <b>Message Text:</b>          | Numeric constant &1 not valid.  |
| <b>Cause Text:</b>            | The token &1 begins with a digit, but the token is not a valid integer, decimal, or floating point constant. Identifiers cannot begin with a digit except in a COBOL program.   |
| <b>Recovery Text:</b>         | Do one of the following: <ul style="list-style-type: none"> <li>• Verify that token &amp;1 is valid. Use apostrophes or quotation marks if a character constant is required.</li> <li>• Remove the character or characters that are not valid if a number is required.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | -103  |
| <b>SQLSTATE or SQLSTATES:</b> | 42604   |

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| <b>SQL0104</b>              |  |
| <b>Message Text:</b>        | Token &1 was not valid. Valid tokens: &2.  |
| <b>Cause Text:</b>          | A syntax error was detected at token &1. Token &1 is not a valid token. A partial list of valid tokens is &2. This list assumes that the statement is correct up to the token. The error may be earlier in the statement, but the syntax of the statement appears to be valid up to this point.  |
| <b>Recovery Text:</b>       | Do one or more of the following and try the request again: <ul style="list-style-type: none"> <li>• Verify the SQL statement in the area of the token &amp;1. Correct the statement. The error could be a missing comma or quotation mark, it could be a misspelled word, or it could be related to the order of clauses.</li> <li>• If the error token is &lt;END-OF-STATEMENT&gt;, correct the SQL statement because it does not end with a valid clause.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b> | -104   |



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| <b>SQL0104</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 42601 |

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| <b>SQL0105</b>                |  |
| <b>Message Text:</b>          | Mixed, graphic, or UTF-8 string constant not valid.  |
| <b>Cause Text:</b>            | <p>Mixed, graphic, UTF-8 constants that are not valid were found in the value beginning &amp;1. One of the following occurred:</p> <ul style="list-style-type: none"> <li>• An odd number of bytes were found between the shift-out and shift-in characters.</li> <li>• Multiple shift-out characters were found before a shift-in character was found.</li> <li>• A shift-out and shift-in were not found in the first and last byte, respectively, or were found in a position other than the first and last byte of a graphic string constant.</li> <li>• The PL/I form of the graphic string was used but the program is not PL/I.</li> <li>• A shift-out was found indicating a PL/I graphic string. The shift-out was not followed by a DBCS apostrophe, an even number of DBCS characters, another DBCS apostrophe, a DBCS G, and a shift-in.</li> </ul> <p>If this is a LABEL ON statement for a column, and the string is longer than 20 bytes, then one of the 20-byte segments has a DBCS constant that is not valid.</p> |
| <b>Recovery Text:</b>         | Specify the correct format for the constant. If this is a LABEL ON statement for a column, ensure each 20-byte segment is in the correct format. Check for a quotation mark, an apostrophe, shift-out or shift-in character, or an odd number of characters between the shift-out and shift-in characters. Ensure graphic string constants are specified in the correct form for the language. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -105   |
| <b>SQLSTATE or SQLSTATES:</b> | 42604  |

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| <b>SQL0106</b>                |   |
| <b>Message Text:</b>          | Precision specified for FLOAT or DECFLOAT not valid.  |
| <b>Cause Text:</b>            | <p>The precision specified for FLOAT or DECFLOAT is not valid.</p> <ul style="list-style-type: none"> <li>• DECFLOAT precision must be either 16 or 34.</li> <li>• FLOAT precision must be in the range 1-53. If 1-23 is specified, the data type is single-precision floating point. If 24-53 is specified, the data type is double-precision floating point.</li> </ul> |
| <b>Recovery Text:</b>         | Change the precision specified. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -106  |
| <b>SQLSTATE or SQLSTATES:</b> | 42611   |

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| <b>SQL0107</b>       |                                     |
| <b>Message Text:</b> | &1 too long. Maximum &2 characters. |

| <b>SQL0107</b>                |  |
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| <b>Cause Text:</b>            | <p>The name or string beginning with &amp;1 is too long. The maximum length allowed is &amp;2. The maximum length for names depends on the type of the name:</p> <ul style="list-style-type: none"> <li>• System names cannot exceed 10 characters.</li> <li>• SQL names cannot exceed 128 characters.</li> <li>• Relational database names cannot exceed 18 characters.</li> <li>• Procedure or function names cannot exceed 128 characters. If the external program name is not specified, the name cannot exceed 10 characters because it is used for the program name.</li> <li>• Host variable names in C and C++ cannot exceed 128 characters. Host variable names in all other languages cannot exceed 64 characters.</li> </ul> <p>The maximum length of the string for a password is 128.</p> <p>The maximum length of the string for a COMMENT ON statement is 2000. The string for COMMENT ON SEQUENCE cannot exceed 500 characters.</p> <p>The maximum length of the string for a LABEL ON statement is 50. If the label is specified as a column heading, the maximum is 60.</p> <p>The maximum length of the string for a package version is 64.</p> |
| <b>Recovery Text:</b>         | Change the name or string to a length of &2 or less. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -107   |
| <b>SQLSTATE or SQLSTATES:</b> | 42622  |

| <b>SQL0109</b>       |   |
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| <b>Message Text:</b> | &1 clause not allowed.  |
| <b>Cause Text:</b>   | <p>One of the following conditions was not allowed:</p> <ul style="list-style-type: none"> <li>• SELECT INTO and VALUES INTO statements cannot include the FOR UPDATE clause, the FOR READ ONLY clause, the OPTIMIZE clause, or the UNION, EXCEPT or INTERSECT operator.</li> <li>• A SELECT or VALUES statement used in cursor declarations or subselects cannot have an INTO clause.</li> <li>• CREATE VIEW statements may not have an INTO, ORDER BY, FOR UPDATE, FOR READ ONLY, or OPTIMIZE clause.</li> <li>• INSERT statements may not have an INTO clause in a subselect, a FOR UPDATE, FOR READ ONLY, or an OPTIMIZE clause.</li> <li>• WHERE CURRENT OF cursor clause is not allowed in statements processed in interactive SQL or statements processed by the RUNSQLSTM command.</li> <li>• The NOT NULL clause is not allowed in the definition of a column being added to a table unless a default value is specified.</li> <li>• OVERRIDING USER VALUE and OVERRIDING SYSTEM VALUE are only valid if the statement is changing a column that is defined with GENERATED ALWAYS.</li> <li>• The INSERTING, UPDATING, and DELETING trigger event predicates are only allowed in a trigger.</li> <li>• The RAISE_ERROR function cannot be specified alone in the select list or in a CASE expression.</li> </ul> |

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| <b>SQL0109</b>                |   |
| <b>Recovery Text:</b>         | Remove the clause. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -109                                      |
| <b>SQLSTATE or SQLSTATES:</b> | 42601                                     |

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| <b>SQL0110</b>                |   |
| <b>Message Text:</b>          | Hexadecimal constant beginning with &1 not valid.   |
| <b>Cause Text:</b>            | Either the hexadecimal constant &1 contains one or more characters that are not valid or the number of characters between the string delimiters is not valid. All embedded blank (X'40') characters are removed from the string before verification is done. Hexadecimal constants must contain an even number of characters. The length of a hexadecimal graphic string must be a multiple of 4 to ensure that it contains a valid number of DBCS characters. Hexadecimal constants representing MIXED data must have an even number of bytes between the shift-out (X'0E') and shift-in (X'0F') characters and must have paired shift characters. Hexadecimal graphic constants cannot contain a shift-out or a shift-in. |
| <b>Recovery Text:</b>         | Correct the constant. Ensure that the constant contains an even number of digits and that the length for a hexadecimal graphic constant is a multiple of 4. The valid characters for hexadecimal digits are characters 0 through 9 and uppercase or lowercase A through F. Ensure MIXED data is in the correct format. Remove shift-out or shift-in characters from a hexadecimal graphic constant. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -110  |
| <b>SQLSTATE or SQLSTATES:</b> | 42606   |

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| <b>SQL0112</b>                |  |
| <b>Message Text:</b>          | Argument of function &1 contains another function.   |
| <b>Cause Text:</b>            | The argument of aggregate function &1 contains another aggregate function. Only expressions without aggregate functions are allowed as arguments of an aggregate function. |
| <b>Recovery Text:</b>         | Correct the function specification. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -112   |
| <b>SQLSTATE or SQLSTATES:</b> | 42607  |

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| <b>SQL0113</b>       |                      |
| <b>Message Text:</b> | Name &1 not allowed. |

| <b>SQL0113</b>                |  |
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| <b>Cause Text:</b>            | <p>&amp;1 contains a character that is not allowed or does not contain any characters.</p> <p>An ordinary identifier must begin with (A-Z, \$, #, or @) and be followed by zero or more (A-Z, 0-9, \$, #, @, or _).</p> <p>A delimited identifier is a string of characters within SQL escape characters. The characters allowed in delimited names depends on the type of name.</p> <ul style="list-style-type: none"> <li>• The characters between the escape characters for system table names, schema names, package names and other system object names can be any characters except Hex 00-3F, Hex 40 (space), Hex 5C (*), Hex 6F (?), Hex 7D ('), Hex 7F ("), and Hex FF.</li> <li>• The characters between the escape characters for SQL names can be any characters except Hex 00-3F and Hex FF.</li> <li>• Delimited system column names must begin with (A-Z, \$, #, or @) and be followed by zero or more (A-Z, 0-9, \$, #, @, or an _).</li> </ul> <p>A relational database name must begin with A-Z and be followed by 0 or more letters, numbers 0-9, or an _.</p> <p>Ordinary identifiers that are contained within host variables must not include lowercase letters because they are not converted to uppercase.</p> |
| <b>Recovery Text:</b>         | Correct the name. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -113   |
| <b>SQLSTATE or SQLSTATES:</b> | 28000, 2E000, 42602  |

| <b>SQL0114</b>                |   |
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| <b>Message Text:</b>          | Relational database &1 not the same as current relational database &2.  |
| <b>Cause Text:</b>            | Relational database &1 was specified in a 3 part name in the statement. However, the name is not the same as the current relational database. |
| <b>Recovery Text:</b>         | Change the statement so the relational database name specified is the same as the current relational database name.                           |
| <b>SQLCODE or SQLCODEs:</b>   | +114, -114  |
| <b>SQLSTATE or SQLSTATES:</b> | 01536, 42961  |

| <b>SQL0115</b>                |   |
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| <b>Message Text:</b>          | Comparison operator &1 not valid.   |
| <b>Cause Text:</b>            | Simple comparison operators other than equal and not equal cannot be used with a list of items. ANY, ALL, and SOME comparison operators must be followed by a fullselect, rather than an expression or a list of items. Subqueries cannot be specified in a JOIN condition or in a CASE expression. |
| <b>Recovery Text:</b>         | Change either the comparison or the operand. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -115  |
| <b>SQLSTATE or SQLSTATES:</b> | 42601   |

| <b>SQL0117</b>                |   |
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| <b>Message Text:</b>          | Statement contains wrong number of values.  |
| <b>Cause Text:</b>            | <p>One of the following conditions may exist:</p> <ul style="list-style-type: none"> <li>• For an INSERT or UPDATE statement, the number of values is not the same as the number of columns.</li> <li>• For an UPDATE statement, the number of entries in the select list of a row fullselect does not match the number of columns listed in the SET clause.</li> <li>• For an INSERT with subselect, the number of entries in the select list is not the same as the number of columns for the INSERT.</li> <li>• For an INSERT statement, one or more of the columns omitted from the column list was created as NOT NULL.</li> <li>• For an INSERT statement, one or more of the columns specified for the INSERT was created as NOT NULL, and the statement specified DEFAULT as the value to be inserted.</li> <li>• For SET or VALUES INTO, the number of values is not the same as the number of target host variables.</li> </ul> |
| <b>Recovery Text:</b>         | Correct the statement to specify one value for each column. Ensure that the character designated as the decimal point is used correctly in any numeric literals. If any columns not specified in the INSERT column list were created as NOT NULL, specify values for those columns. If a data change INSERT statement contains an INCLUDE clause, ensure values are specified for all INCLUDE columns. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -117  |
| <b>SQLSTATE or SQLSTATEs:</b> | 42802   |

| <b>SQL0118</b>                |  |
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| <b>Message Text:</b>          | Table &1 in &2 also specified in a FROM clause.  |
| <b>Cause Text:</b>            | Table &1 in &2 was specified as the object table of this INSERT, UPDATE, or DELETE statement and in a FROM clause of the subselect or the FROM clause of a subquery. The table that is the object of the operation cannot also be specified in a subselect. This also applies to any base tables or views referred to in the statement. Overrides which specify a TOFILE parameter of the same name as the object of the operation may have caused this error. |
| <b>Recovery Text:</b>         | Remove the override or change the statement so the table that is the object of the operation is not also specified in a subselect, then try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -118   |
| <b>SQLSTATE or SQLSTATEs:</b> | 42902  |

| <b>SQL0119</b>       |   |
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| <b>Message Text:</b> | Column &1 or expression in HAVING clause not valid. |

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| <b>SQL0119</b>                |   |
| <b>Cause Text:</b>            | One of the following has occurred: <ul style="list-style-type: none"> <li>• Column &amp;1 specified in a HAVING clause is not within an aggregate function and is not in the GROUP BY clause.</li> <li>• An expression specified in a HAVING clause is not within an aggregate function and is not in the GROUP BY clause.</li> </ul> |
| <b>Recovery Text:</b>         | Remove the column or expression from the HAVING clause or add the column or expression to the GROUP BY clause. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -119  |
| <b>SQLSTATE or SQLSTATES:</b> | 42803   |

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| <b>SQL0120</b>                |   |
| <b>Message Text:</b>          | Use of function &1 not valid.   |
| <b>Cause Text:</b>            | Function &1 cannot be used where it was specified: <ul style="list-style-type: none"> <li>• An aggregate function or user-defined function sourced on an aggregate function cannot be specified in a SET clause, in a GROUP BY clause, in a START WITH clause, in a CONNECT BY clause, in a JOIN condition, as the return expression for a RETURN statement, as an argument of a table function, or as an expression in a SET statement, a VALUES INTO statement, or a MERGE statement. An aggregate function or user-defined function sourced on an aggregate function is allowed in a WHERE clause only if the WHERE clause appears within a subquery of a HAVING clause.</li> <li>• The ARRAY_AGG function can only be specified in the select list of a SELECT INTO statement or in a scalar subquery on the right side of a SET statement. DISTINCT cannot be specified with ARRAY_AGG.</li> <li>• An OLAP specification cannot be used in a WHERE clause, in a VALUES clause, in a GROUP BY clause, in a HAVING clause, in a START WITH clause, in a CONNECT BY clause, or in a JOIN condition. An OLAP specification cannot be used as an expression in a SET statement, VALUES INTO statement, CALL statement, or MERGE statement, in the SET clause of an UPDATE statement, in a key definition of a CREATE INDEX statement, in an XMLTABLE function, or as the return expression for a RETURN statement.</li> </ul> |
| <b>Recovery Text:</b>         | Remove the function. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -120  |
| <b>SQLSTATE or SQLSTATES:</b> | 42903   |

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| <b>SQL0121</b>       |                                |
| <b>Message Text:</b> | Duplicate name &1 not allowed. |

| <b>SQL0121</b>                |  |
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| <b>Cause Text:</b>            | Name &1 is specified more than once in the column list of an INSERT statement, in the SET clause of an UPDATE statement, in an INSERT or UPDATE within a MERGE statement, or in the list of target host variables in the SET or VALUES INTO statement. For a data change INSERT statement, each column name in the INCLUDE clause must be unique and must not duplicate any column name in the INSERT table. If the specified names are not the same, then one of the following has occurred: <ul style="list-style-type: none"> <li>• If the object is a view, two columns in the view may identify the same column in the base table.</li> <li>• The names may correspond to the same system column name.</li> </ul> |
| <b>Recovery Text:</b>         | Do one of the following and try the request again: <ul style="list-style-type: none"> <li>• Remove the duplicate column.</li> <li>• Specify a column list on the statement to remove the duplicate column.</li> </ul>  |
| <b>SQLCODE or SQLCODEs:</b>   | -121   |
| <b>SQLSTATE or SQLSTATES:</b> | 42701  |

| <b>SQL0122</b>                |  |
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| <b>Message Text:</b>          | Column &1 or expression in SELECT list not valid.  |
| <b>Cause Text:</b>            | One of the following has occurred: <ul style="list-style-type: none"> <li>• The statement contains column name &amp;1 and an aggregate function in the SELECT clause and no GROUP BY clause is specified.</li> <li>• Column name &amp;1 is specified in the SELECT clause but not in the GROUP BY clause.</li> <li>• An expression is specified in the SELECT clause but not in the GROUP BY clause.</li> <li>• A column or expression that is specified in the ORDER BY clause, but not in the SELECT clause, does not conform to the grouping rules listed above.</li> </ul> |
| <b>Recovery Text:</b>         | Do one of the following and try the request again: <ul style="list-style-type: none"> <li>• If a GROUP BY clause is required, make certain that all columns or expressions in the SELECT list and ORDER BY clause are also in the GROUP BY clause.</li> <li>• If a GROUP BY clause is not needed, the SELECT list and ORDER BY clause should not contain aggregate functions with column names.</li> </ul>   |
| <b>SQLCODE or SQLCODEs:</b>   | -122   |
| <b>SQLSTATE or SQLSTATES:</b> | 42803  |

| <b>SQL0125</b>        |   |
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| <b>Message Text:</b>  | ORDER BY column number &1 not valid.  |
| <b>Cause Text:</b>    | The ORDER BY clause in the statement contains a column number that is either greater than the maximum number of values that can be selected (8000), or is greater than the number of columns in the result table select list. |
| <b>Recovery Text:</b> | Correct the column number in the ORDER BY clause to specify a column in the result table. Try the request again.  |

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| <b>SQL0125</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | -125  |
| <b>SQLSTATE or SQLSTATES:</b> | 42805 |

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| <b>SQL0128</b>                |  |
| <b>Message Text:</b>          | Use of NULL is not valid.  |
| <b>Cause Text:</b>            | The keyword NULL is not valid with the operator specified. NULL is only allowed in a predicate following IS or IS NOT. NULL is a reserved keyword and can only be used as the name of a column if the name is delimited when used in an SQL statement. |
| <b>Recovery Text:</b>         | Either change the operator to IS or IS NOT or, if the word NULL was meant to be a column name, specify the name within delimiters.   |
| <b>SQLCODE or SQLCODEs:</b>   | -128   |
| <b>SQLSTATE or SQLSTATES:</b> | 42601  |

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| <b>SQL0129</b>                |  |
| <b>Message Text:</b>          | Too many tables in SQL statement.  |
| <b>Cause Text:</b>            | The SQL statement contains too many tables or views. A single SQL statement can refer to a maximum of 1000 tables or views. A CREATE TABLE AS or a CREATE VIEW statement can only refer to 256 tables. This number includes the base tables of a view.   |
| <b>Recovery Text:</b>         | Do one of the following and try the request again: <ul style="list-style-type: none"> <li>• Split the SQL statement into two or more simpler statements with a maximum of 1000 tables in each.</li> <li>• If this is a CREATE VIEW or CREATE TABLE AS statement, reduce the number of tables to a maximum of 256.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | -129   |
| <b>SQLSTATE or SQLSTATES:</b> | 54004  |

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| <b>SQL0130</b>       |   |
| <b>Message Text:</b> | ESCAPE character &1 or LIKE pattern is not valid. |



| <b>SQL0130</b>                |  |
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| <b>Cause Text:</b>            | <p>Either ESCAPE character &amp;1 is not valid or the use of the ESCAPE character in the LIKE pattern is not valid.</p> <p>The ESCAPE character is not valid if:</p> <ul style="list-style-type: none"> <li>• The length is not 1 SBCS character or 1 graphic character.</li> <li>• The shift-in (X'0E') and the shift-out (X'0F') characters are specified.</li> </ul> <p>The LIKE pattern is not valid if:</p> <ul style="list-style-type: none"> <li>• The character string expression forming the pattern contains an ESCAPE character that is not followed by a percent sign, an underscore, or another ESCAPE character.</li> <li>• The graphic string expression forming the pattern contains an ESCAPE character that is not followed by a DBCS percent sign, a DBCS underscore, or another ESCAPE character.</li> </ul> |
| <b>Recovery Text:</b>         | Specify a valid LIKE pattern and ESCAPE character. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -130   |
| <b>SQLSTATE or SQLSTATES:</b> | 22019, 22025   |

| <b>SQL0131</b>                |   |
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| <b>Message Text:</b>          | Operands of LIKE not compatible or not valid.   |
| <b>Cause Text:</b>            | <p>The arguments of the LIKE predicate must be character, binary, graphic, or numeric. One of the following errors has occurred:</p> <ul style="list-style-type: none"> <li>• The operand to the right of the LIKE operator is not character, binary, graphic, or numeric.</li> <li>• The operands of the LIKE predicate are not compatible.</li> <li>• The ESCAPE character is not character, binary, or graphic.</li> </ul> |
| <b>Recovery Text:</b>         | Ensure the operands for the LIKE predicate are character, binary, graphic, or numeric. The ESCAPE character must be character, binary, or graphic. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -131  |
| <b>SQLSTATE or SQLSTATES:</b> | 42818   |

| <b>SQL0132</b>                |   |
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| <b>Message Text:</b>          | LIKE predicate not valid.   |
| <b>Cause Text:</b>            | Either the second operand or the ESCAPE character specified in a LIKE predicate is not valid. The second operand must be a string or numeric expression. The ESCAPE character must be a string expression but cannot be a special register. |
| <b>Recovery Text:</b>         | Change the incorrect operand or the operator. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -132  |
| <b>SQLSTATE or SQLSTATES:</b> | 42824   |

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| <b>SQL0133</b>                |   |
| <b>Message Text:</b>          | Operator on correlated column in SQL function not valid.  |
| <b>Cause Text:</b>            | An aggregate function appearing in a subquery of a HAVING clause is not valid if the argument of the function is an expression that contains an operator (+, -, *, /, **,   ) or a scalar function that is applied to a correlated reference. An operation cannot be performed on a correlated reference since the computed value of the group cannot be determined in the outer (correlated) subselect without a possible value from the inner subselect.        |
| <b>Recovery Text:</b>         | If the operator is a scalar function, make the aggregate function the argument of the scalar function. Otherwise, remove the operator on the correlated reference or move the operator so it is not in the argument of the aggregate function. For example, specifying the expression in the form:<br><br>AVG( outertable.column1 + innertable.column2 )<br>is not valid, while the expression<br><br>AVG( outertable.column1 ) + innertable.column2<br>is valid. |
| <b>SQLCODE or SQLCODEs:</b>   | -133  |
| <b>SQLSTATE or SQLSTATEs:</b> | 42906   |

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| <b>SQL0134</b>                |   |
| <b>Message Text:</b>          | String, argument, or path too long.   |
| <b>Cause Text:</b>            | One of the following errors has occurred: <ul style="list-style-type: none"> <li>• The argument of a COUNT function is too long. The argument of a COUNT function cannot be longer than 2000 bytes if DISTINCT is specified. If the argument is graphic, then the argument cannot be longer than 1000 DBCS characters.</li> <li>• More than 268 libraries were specified on the SET PATH statement or on the SET OPTION SQLPATH statement.</li> </ul> |
| <b>Recovery Text:</b>         | Change the argument of the function or the number of libraries in the path so that the length does not exceed the maximum. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -134  |
| <b>SQLSTATE or SQLSTATEs:</b> | 42907   |

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| <b>SQL0136</b>       |   |
| <b>Message Text:</b> | ORDER BY, GROUP BY, or join expressions too long. |

| <b>SQL0136</b>                |  |
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| <b>Cause Text:</b>            | <p>The total length of all expressions cannot exceed 3.5 gigabytes for the following operations:</p> <ul style="list-style-type: none"> <li>• ORDER BY</li> <li>• GROUP BY</li> <li>• OUTER JOIN and EXCEPTION JOIN</li> <li>• OLAP ordering</li> <li>• ARRAY_AGG function</li> <li>• XMLAGG function</li> </ul> <p>If the allow copy data option is ALWCPYDTA(*NO), the total length of all expressions cannot exceed 32766 bytes.</p> <p>CUBE grouping can have a maximum of 10 expressions.</p> |
| <b>Recovery Text:</b>         | Change the statement so that the length of the order, group, or join values does not exceed the limit. One or more expressions must be removed from the clause. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -136   |
| <b>SQLSTATE or SQLSTATES:</b> | 54005  |

| <b>SQL0137</b>                |  |
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| <b>Message Text:</b>          | Result too long.   |
| <b>Cause Text:</b>            | <p>A concatenation operator or a HEX scalar function was specified, but the resulting length of the operation exceeds the maximum allowed. The maximum length is:</p> <ul style="list-style-type: none"> <li>• 32766 bytes if the result is fixed-length character or fixed-length binary.</li> <li>• 32740 bytes if the result is varying-length character or varying-length binary.</li> <li>• 16383 DBCS characters if the result is fixed-length graphic.</li> <li>• 16370 DBCS characters if the result is varying-length graphic.</li> <li>• 2147483647 bytes if the result is a binary or character LOB.</li> <li>• 1073741823 DBCS characters if the result is a double-byte character LOB.</li> </ul> |
| <b>Recovery Text:</b>         | Change the expression to decrease the resulting length to less than or equal to the maximum allowed. If converting from graphic to character data, the result length specified on the scalar function must be less than 8191. The SUBSTR scalar function can be used to decrease the length of an operand. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -137   |
| <b>SQLSTATE or SQLSTATES:</b> | 54006  |

| <b>SQL0138</b>       |   |
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| <b>Message Text:</b> | Argument &1 of substringing function not valid. |

| <b>SQL0138</b>                |  |
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| <b>Cause Text:</b>            | <p>Argument 2 or 3 of the SUBSTRING function or argument 2 of the LEFT function is either out of range or is an expression that does not evaluate to an integer.</p> <ul style="list-style-type: none"> <li>• For the SUBSTRING function, argument 2 specifies the position of the first character of the result and argument 3 specifies the length of the result. Argument 2 must be a valid position of the first argument. Argument 3 must not exceed the length of argument 1 between argument 2 and the end of the string.</li> <li>• For the LEFT function, argument 2 specifies the length of the result. Argument 2 must not exceed the length of argument 1.</li> <li>• If argument 1 is a character string or a binary string, a character is a byte, and if argument 1 is graphic string, a character is a DBCS character.</li> <li>• If the argument is *N, then one of the arguments is not valid but the argument number is not known.</li> </ul> |
| <b>Recovery Text:</b>         | <p>If the argument is *N, display the previously listed messages in the job log (DSPJOBLOG command) or press F10 (Display messages in job log) from this display to determine which argument is in error. Change one or more of the arguments specified in the SUBSTR function. The INTEGER scalar function may be used to convert the argument into an integer result. Try the request again.</p>   |
| <b>SQLCODE or SQLCODEs:</b>   | +138, -138   |
| <b>SQLSTATE or SQLSTATES:</b> | 01544, 22011   |

| <b>SQL0142</b>                |  |
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| <b>Message Text:</b>          | SET SESSION AUTHORIZATION statement is not allowed.                                  |
| <b>Cause Text:</b>            | Use of the SET SESSION AUTHORIZATION statement is restricted through this interface. |
| <b>Recovery Text:</b>         | Use the SET SESSION AUTHORIZATION statement through a different interface.           |
| <b>SQLCODE or SQLCODEs:</b>   | -142   |
| <b>SQLSTATE or SQLSTATES:</b> | 42612  |

| <b>SQL0143</b>                |  |
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| <b>Message Text:</b>          | Statement &1 ignored.  |
| <b>Cause Text:</b>            | Statement &1 is not supported by DB2 for IBM i. It has been ignored. |
| <b>Recovery Text:</b>         | No action is required.   |
| <b>SQLCODE or SQLCODEs:</b>   | +143   |
| <b>SQLSTATE or SQLSTATES:</b> | 01505  |

| <b>SQL0144</b>       |  |
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| <b>Message Text:</b> | Section number &1 not valid. Current high section number is &3. Reason &2. |

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| <b>SQL0144</b>                |   |
| <b>Cause Text:</b>            | Reason code is &2.<br>Reason code 1, section number &1 has already been assigned.<br>Reason code 2, section number &1 is smaller than next possible number.<br>Reason code 3, section number on ENDBND is smaller than highest one assigned.<br>Reason code 4, section number is not in the SQL package.<br>Reason code 5, section number of zero is not valid. |
| <b>Recovery Text:</b>         | Contact your IBM representative to report the problem.  |
| <b>SQLCODE or SQLCODEs:</b>   | -144  |
| <b>SQLSTATE or SQLSTATES:</b> | 58003   |

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| <b>SQL0145</b>                |   |
| <b>Message Text:</b>          | Recursion not supported for application server other than &ibmdb2i..  |
| <b>Cause Text:</b>            | Program &1 in &2 was called recursively when connected to an application server that is not DB2 for IBM i. The program was connected to application server &3 with product identification of &4. If the application server is an IBM product, the identification is in the form pppvrrm, where:<br><br>ppp identifies the product as follows:<br>DSN for DB2 for z/OS®<br>ARI for VM and VSE<br>QSQ for DB2 for IBM i<br>SQL for all other DB2 products<br><br>vv is a two-digit version identifier such as '07'<br><br>rr is a two-digit release identifier such as '01'<br><br>m is a one-digit modification level such as '0' .<br><br>For example, if the application server is Version 7 Release 1 of DB2 for z/OS, the value of the product identification is 'DSN07010'. |
| <b>Recovery Text:</b>         | Change your application so that it is not recursively called when connected to a server that is not DB2 for IBM i.  |
| <b>SQLCODE or SQLCODEs:</b>   | -145  |
| <b>SQLSTATE or SQLSTATES:</b> | 55005   |

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| <b>SQL0150</b>       |  |
| <b>Message Text:</b> | View or logical file &1 in &2 read-only. |

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| <b>SQL0150</b>                |   |
| <b>Cause Text:</b>            | <p>Update, delete, insert, merge, or truncate is not allowed. &amp;1 in &amp;2 can be used only for read operations.</p> <p>A view or logical file can be used only for read operations if one or more of the following conditions are true:</p> <ul style="list-style-type: none"> <li>-- The view contains a DISTINCT keyword, GROUP BY clause, HAVING clause, CONNECT BY clause, or an aggregate function in the outer fullselect.</li> <li>-- The view or logical file references more than one table in the outer fullselect.</li> <li>-- The view contains a subquery that refers to the same table as the table of the outer fullselect. A view of this type may be used for inserting rows.</li> <li>-- The view contains UNION, EXCEPT, or INTERSECT in the outer fullselect.</li> <li>-- All the columns of the view are expressions, constants, or special registers.</li> <li>-- All the columns of the logical file are input only.</li> <li>-- The select list of the view omits a column of the based on table that does not allow null values or default values. Inserting into the view is not allowed.</li> </ul> |
| <b>Recovery Text:</b>         | Change the statement to insert, delete, update, merge, or truncate data using the base table of view &1. All columns of the table that do not allow null values or default values must be assigned a value when inserting a row into a table or view unless an INSTEAD OF trigger is defined for the view. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -150  |
| <b>SQLSTATE or SQLSTATES:</b> | 42807   |

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| <b>SQL0151</b>                |  |
| <b>Message Text:</b>          | Column &1 in table &2 in &3 is not updatable.  |
| <b>Cause Text:</b>            | <p>&amp;1 is a column of an implicit or explicit column list for an INSERT statement or a SET clause on an UPDATE statement. &amp;1 is read only because it is:</p> <ul style="list-style-type: none"> <li>• Derived from an expression, a constant, or a special register.</li> <li>• Defined on a column of an underlying view that cannot be updated.</li> <li>• A column of a logical file that is defined as input only.</li> </ul> <p>Either extended indicator support is not enabled or extended indicator support is enabled but the indicator value is not UNASSIGNED.</p> |
| <b>Recovery Text:</b>         | Remove column &1 from the column list or the SET clause. If this is an INSERT and a column list was not specified, then specify a column list to remove column &1. If extended indicator support is enabled, specify an indicator variable that contains the UNASSIGNED value. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -151   |
| <b>SQLSTATE or SQLSTATES:</b> | 42808  |

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| <b>SQL0152</b>       |  |
| <b>Message Text:</b> | Constraint type not valid for constraint &1 in &2. |

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| <b>SQL0152</b>                |   |
| <b>Cause Text:</b>            | An attempt was made to drop constraint &1 in &2 using an ALTER TABLE statement. The constraint was specified as CHECK, UNIQUE, PRIMARY, or FOREIGN KEY and is not the same as the constraint found. |
| <b>Recovery Text:</b>         | Verify the name and type of the constraint you want to drop. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -152  |
| <b>SQLSTATE or SQLSTATEs:</b> | 42809   |

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| <b>SQL0153</b>                |   |
| <b>Message Text:</b>          | Column list required.   |
| <b>Cause Text:</b>            | <p>A column list must be specified because the result columns are unnamed. Result columns are unnamed for one of the following reasons:</p> <ul style="list-style-type: none"> <li>• An element of the SELECT list is not a column and the AS clause is not specified.</li> <li>• Corresponding columns of the subselects in a UNION, EXCEPT, or INTERSECT do not have the same name.</li> <li>• Two result columns have the same column name. Every column name and system-column name must be unique in a table or view definition. If two column names are the same, the column name is &amp;1.</li> </ul> |
| <b>Recovery Text:</b>         | <p>Do one of the following and try the request again:</p> <ul style="list-style-type: none"> <li>• Provide a list of names for the columns in the table, view, or derived table.</li> <li>• Specify an AS clause to assign a unique name to the unnamed elements or to rename the duplicate columns in the SELECT list.</li> </ul>  |
| <b>SQLCODE or SQLCODEs:</b>   | -153  |
| <b>SQLSTATE or SQLSTATEs:</b> | 42908   |

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| <b>SQL0155</b>                |  |
| <b>Message Text:</b>          | Transition table &1 read-only.   |
| <b>Cause Text:</b>            | Statement is not allowed. Transition table &1 in an SQL trigger can be used only for read operations.  |
| <b>Recovery Text:</b>         | Change the statement to specify a table other than the transition table or remove the statement. Transition tables can be specified on SELECT statements. Qualify table names in an SQL trigger that may have the same name as transition tables. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -155   |
| <b>SQLSTATE or SQLSTATEs:</b> | 42807  |

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| <b>SQL0156</b>       |                            |
| <b>Message Text:</b> | &1 in &2 not correct type. |

| <b>SQL0156</b>                |  |
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| <b>Cause Text:</b>            | A DROP TABLE, CREATE INDEX, LOCK TABLE, ALTER TABLE, CREATE MASK, CREATE PERMISSION, CREATE TRIGGER, or ALTER PROCEDURE statement was specified but &1 in &2 is the wrong type. DROP TABLE, CREATE INDEX, LOCK TABLE, ALTER TABLE, CREATE MASK, and CREATE PERMISSION must specify a table. CREATE TRIGGER for a BEFORE or AFTER trigger must specify a table. CREATE TRIGGER for an INSTEAD OF trigger must specify a view. |
| <b>Recovery Text:</b>         | Change the statement to use the correct object type. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -156   |
| <b>SQLSTATE or SQLSTATES:</b> | 42809  |

| <b>SQL0157</b>                |  |
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| <b>Message Text:</b>          | &1 in &2 not valid in FOREIGN KEY clause.  |
| <b>Cause Text:</b>            | View or logical file &1 in &2 was specified in the REFERENCES clause in the definition of a FOREIGN KEY referential constraint on a CREATE TABLE or an ALTER TABLE statement. Views and logical files cannot be specified in a FOREIGN KEY clause. |
| <b>Recovery Text:</b>         | Specify the base table that contains the parent key in the FOREIGN KEY clause. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -157   |
| <b>SQLSTATE or SQLSTATES:</b> | 42810  |

| <b>SQL0158</b>                |   |
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| <b>Message Text:</b>          | Number of columns specified not consistent.   |
| <b>Cause Text:</b>            | <p>One of the following has occurred:</p> <ul style="list-style-type: none"> <li>• The number of column names specified for a view in a CREATE VIEW statement is not the same as the number of elements specified in the following fullselect.</li> <li>• The number of column names specified for a table in a CREATE TABLE statement is not the same as the number of elements specified in the following fullselect.</li> <li>• The number of column names specified in a correlation clause is not the same as the number of elements in the table, derived table, table function, data change table reference, or UNNEST.</li> <li>• The number of column names specified in a column list of a common table expression is not the same as the number of elements specified in the fullselect.</li> <li>• The number of columns specified in the RETURNS TABLE clause of a user defined table function is not the same as the number of elements specified in the fullselect in the RETURN statement.</li> </ul> |
| <b>Recovery Text:</b>         | Specify a column name for each column in the result. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -158  |
| <b>SQLSTATE or SQLSTATES:</b> | 42811   |



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| <b>SQL0159</b>                |  |
| <b>Message Text:</b>          | &1 in &2 not correct type.   |
| <b>Cause Text:</b>            | <p>A DROP INDEX, DROP VIEW, DROP ALIAS, COMMENT ON INDEX, COMMENT ON ALIAS, RENAME INDEX, or REFRESH TABLE statement was specified but &amp;1 in &amp;2 is not the correct type. DROP INDEX can only be used to drop an index. DROP VIEW can only be used to drop a view. DROP ALIAS can only be used to drop an alias. COMMENT ON INDEX can only be used to comment on an index. COMMENT ON ALIAS can only be used to comment on an alias. RENAME INDEX can only be used to rename an index. REFRESH TABLE can only be used to refresh a materialized query table.</p> <p>CREATE TRIGGER must specify a table if it is a BEFORE or AFTER trigger. CREATE TRIGGER must specify a view if it is an INSTEAD OF trigger.</p> <p>A GRANT or REVOKE with the USER keyword must specify a user profile. A GRANT or REVOKE with the GROUP keyword must specify a group profile.</p>   |
| <b>Recovery Text:</b>         | <p>Do one of the following to correct the problem and try the request again:</p> <p>If this is a DROP statement:</p> <ul style="list-style-type: none"> <li>• If &amp;1 is an index, use a DROP INDEX statement.</li> <li>• If &amp;1 is a view, use a DROP VIEW statement.</li> <li>• If &amp;1 is a table, use a DROP TABLE statement.</li> <li>• If &amp;1 is an alias, use a DROP ALIAS statement.</li> </ul> <p>If this is a COMMENT ON INDEX or COMMENT ON ALIAS statement and &amp;1 is a table or view, use a COMMENT ON TABLE statement.</p> <p>If this is a RENAME INDEX statement and &amp;1 is a table or view, use a RENAME TABLE statement.</p> <p>If this is a REFRESH TABLE statement, specify a materialized query table.</p> <p>If this is a CREATE TRIGGER, specify a table for a BEFORE or AFTER trigger, or a view for an INSTEAD OF trigger.</p> <p>If this is a GRANT or REVOKE statement, specify the correct type of profile or remove the USER or GROUP keyword.</p> |
| <b>SQLCODE or SQLCODEs:</b>   | -159   |
| <b>SQLSTATE or SQLSTATES:</b> | 42809  |
| <b>SQL0160</b>                |  |
| <b>Message Text:</b>          | WITH CHECK OPTION not allowed for view &1 in &2.   |

| <b>SQL0160</b>                |  |
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| <b>Cause Text:</b>            | <p>The WITH CHECK OPTION clause is not allowed in the CREATE VIEW statement for view &amp;1 in &amp;2 because the fullselect contains one of the following:</p> <ul style="list-style-type: none"> <li>• The first FROM clause identifies more than one table or view.</li> <li>• The first SELECT clause contains the DISTINCT keyword.</li> <li>• A UNION, EXCEPT, or INTERSECT was specified.</li> <li>• The outer subselect contains a GROUP BY clause.</li> <li>• The outer subselect contains a HAVING clause.</li> <li>• The outer subselect contains an aggregate function.</li> <li>• The outer subselect contains a UNION, EXCEPT, or INTERSECT.</li> <li>• All the select items in the outer subselect are expressions.</li> <li>• The WHERE clause contains a global variable.</li> <li>• The SELECT statement contains a scalar subselect.</li> <li>• The WITH CASCADED CHECK OPTION clause was specified and a view in the FROM clause contains a scalar subselect.</li> <li>• A special register or a function that is not deterministic, MODIFIES SQL DATA, or EXTERNAL ACTION is somewhere other than the outer select list.</li> <li>• A view in the FROM clause has an INSTEAD OF trigger defined on it.</li> <li>• The WHERE clause contains the VERIFY_GROUP_FOR_USER scalar function.</li> </ul> |
| <b>Recovery Text:</b>         | Remove the WITH CHECK OPTION clause.   |
| <b>SQLCODE or SQLCODEs:</b>   | -160   |
| <b>SQLSTATE or SQLSTATES:</b> | 42813  |
| <b>SQL0161</b>                |  |
| <b>Message Text:</b>          | INSERT or UPDATE not allowed because a resulting row does not satisfy view definition &1 in &2.  |
| <b>Cause Text:</b>            | The INSERT or UPDATE could not be done because a resulting row did not satisfy the view definition for &1 in &2. Either the view or an underlying view contains a WITH CHECK OPTION clause. For an INSERT data change table reference, a view is treated as if it contains a WITH CASCADED CHECK OPTION clause.  |
| <b>Recovery Text:</b>         | Change the data being inserted or updated so that it conforms to the view definition.  |
| <b>SQLCODE or SQLCODEs:</b>   | -161   |
| <b>SQLSTATE or SQLSTATES:</b> | 44000  |
| <b>SQL0170</b>                |  |
| <b>Message Text:</b>          | Number of arguments for function &1 not valid.   |

| <b>SQL0170</b>                |   |
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| <b>Cause Text:</b>            | <p>A built-in function has been specified with an incorrect number of arguments. If this function is meant to be a user defined function reference, a function with this signature was not found using the current path.</p> <ul style="list-style-type: none"> <li>• The CURDATE, CURTIME, DATABASE, GENERATE_UNIQUE, IDENTITY_VAL_LOCAL, NOW, and PI functions must be specified without any arguments.</li> <li>• The ADD_MONTHS, CONCAT, IFNULL, LEFT, MOD, MULTIPLY_ALT, NEXT_DAY, NULLIF, POSSTR, POWER, RAISE_ERROR, REPEAT, RIGHT, ROUND, TIMESTAMP_FORMAT, TRUNCATE, and VARCHAR_FORMAT functions must have two arguments.</li> <li>• The REPLACE function must have three arguments.</li> <li>• The INSERT function must have four arguments.</li> <li>• The RAND function may have zero or one argument.</li> <li>• The BINARY, BLOB, CHAR, and TIMESTAMP functions may have one or two arguments.</li> <li>• The CLOB, DBCLOB, GRAPHIC, STRIP, VARCHAR, VARGRAPHIC, and the encryption and decryption functions may have between one and three arguments.</li> <li>• The DECIMAL, TRANSLATE, and ZONED functions may have between one and four arguments.</li> <li>• The COALESCE, MAX, and MIN functions must have at least two arguments.</li> <li>• The LOCATE and SUBSTRING functions may have two or three arguments.</li> </ul> |
| <b>Recovery Text:</b>         | Correct the number of arguments specified for the function. If this is a user defined function, correct the path or the function signature. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -170  |
| <b>SQLSTATE or SQLSTATES:</b> | 42605   |

| <b>SQL0171</b>                |   |
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| <b>Message Text:</b>          | Argument &1 of function &2 not valid.   |
| <b>Cause Text:</b>            | The data type, length, or value of argument &1 of function &2 specified is not valid.   |
| <b>Recovery Text:</b>         | Refer to the DB2 for IBM i SQL Reference topic collection in the Database category in the IBM i Information Center for more information on scalar functions. Correct the arguments specified for the function. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -171  |
| <b>SQLSTATE or SQLSTATES:</b> | 42815   |

| <b>SQL0172</b>       |  |
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| <b>Message Text:</b> | Function &1 not allowed in INCLUDE.  |
| <b>Cause Text:</b>   | Function &1 cannot be specified in the INCLUDE clause. Only the aggregate functions AVG, COUNT, COUNT_BIG, SUM, STDDEV, STDDEV_SAMP, VARIANCE, and VARIANCE_SAMP and functions sourced on these functions are allowed in the INCLUDE clause. |

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| <b>SQL0172</b>                |  |
| <b>Recovery Text:</b>         | Change the function to be a supported aggregate function. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -172   |
| <b>SQLSTATE or SQLSTATES:</b> | 42601  |

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| <b>SQL0175</b>                |   |
| <b>Message Text:</b>          | COMMIT, ROLLBACK, or SAVEPOINT failed.  |
| <b>Cause Text:</b>            | A commit, rollback, savepoint failed due to reason code &2. The logical unit of work identifier is &1. Reason codes and their meanings are: <ul style="list-style-type: none"> <li>• 1 -- A transaction program error occurred.</li> <li>• 2 -- A commit resulted in a rollback.</li> <li>• 3 -- The requested transaction operation failed.</li> <li>• 4 -- The savepoint operation failed.</li> </ul> |
| <b>Recovery Text:</b>         | Display the previous messages in the joblog and take the appropriate action.  |
| <b>SQLCODE or SQLCODEs:</b>   | -175  |
| <b>SQLSTATE or SQLSTATES:</b> | 3B504, 58028  |

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| <b>SQL0177</b>                |  |
| <b>Message Text:</b>          | CHECK condition text too long.   |
| <b>Cause Text:</b>            | The CHECK condition text for a CHECK constraint is longer than 2000 bytes and does not fit in the SYSCHKCST catalog view. The CHECK condition text cannot be stored in the system catalog views. The CHECK_CLAUSE column of the SYSCHKCST catalog view will contain the null values for this constraint. |
| <b>Recovery Text:</b>         | No recovery is necessary. If the complete text is required in the system catalog views, consider using multiple CHECK constraints instead of one large CHECK constraint.   |
| <b>SQLCODE or SQLCODEs:</b>   | +177   |
| <b>SQLSTATE or SQLSTATES:</b> | 01009  |

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| <b>SQL0178</b>        |   |
| <b>Message Text:</b>  | Query expression text for view &1 in &2 too long.   |
| <b>Cause Text:</b>    | The query expression text for view &1 in &2 is longer than 10000 bytes and does not fit in the SYSVIEWS catalog view. The statement text cannot be stored in the system catalog views. The VIEW_DEFINITION column of the SYSVIEWS catalog view will contain the null value for this view. |
| <b>Recovery Text:</b> | No recovery is necessary. If the complete text is required in the system catalog views, recreate the view with the length of the query expression less than or equal to 10000 bytes.  |

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| <b>SQL0178</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | +178  |
| <b>SQLSTATE or SQLSTATES:</b> | 0100A |

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| <b>SQL0180</b>                |   |
| <b>Message Text:</b>          | Syntax of date, time, or timestamp value not valid.   |
| <b>Cause Text:</b>            | The string representation of a date, time, or timestamp value does not conform to the syntax for the specified or implied data type and format. &2 is either the character string constant that is not valid or the column or host variable that contained the string. If the name is *N, then the value is an expression specified in the statement. If the string was found in a host variable, the host variable number is &1. |
| <b>Recovery Text:</b>         | Ensure that the date, time, or timestamp value conforms to the syntax for the data type it represents. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | +180, -180  |
| <b>SQLSTATE or SQLSTATES:</b> | 01534, 22007  |

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| <b>SQL0181</b>              |   |
| <b>Message Text:</b>        | Value in date, time, or timestamp string not valid.   |
| <b>Cause Text:</b>          | <p>The string representation of a date, time or timestamp value is not in the acceptable range. &amp;2 is either the character string constant that is not valid or the column or host variable that contained the string. If the name is *N, then the value was found in an expression specified in the statement. If the value was found in a host variable, then the host variable number is &amp;1. The proper ranges for date, time, or timestamp values are as follows:</p> <ul style="list-style-type: none"> <li>• The range for years is from 0001 to 9999. For date formats *MDY, *YMD, *DMY, and *JUL, the year must be in the range 1940 to 2039.</li> <li>• The range for months is from 1 to 12.</li> <li>• The range for days is from 1 - 30 for April, June, September, and November, from 1 - 28 for February and from 1 to 31 for all other months. In a leap year, the range for February can be from 1 to 29.</li> <li>• The range for days in a Julian date is from 001 to 366 for a leap year or 001 to 365 days for all other years.</li> <li>• The range for hours is from 0 to 24. If the hour is 24, then the other parts of the time values must be zeros. If the time format is USA, then the hour cannot be greater than 12.</li> <li>• The range for minutes is from 0 to 59.</li> <li>• The range for seconds is from 0 to 59.</li> <li>• The range for fractional seconds is from 0 to 999999999999.</li> </ul> |
| <b>Recovery Text:</b>       | Ensure that the date, time, or timestamp value conforms to the ranges for the data type it represents. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b> | +181, -181  |

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| <b>SQL0181</b>                |              |
| <b>SQLSTATE or SQLSTATES:</b> | 01534, 22007 |

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| <b>SQL0182</b>                |  |
| <b>Message Text:</b>          | A date, time, or timestamp expression not valid.   |
| <b>Cause Text:</b>            | <p>One of the following has occurred:</p> <ul style="list-style-type: none"> <li>• An operand of addition is a date and the other is not a date duration.</li> <li>• An operand of addition is a time and the other is not a time duration.</li> <li>• An operand of addition is a timestamp and the other is not a duration.</li> <li>• An operand of subtraction is a date and the other is not a date, character, or date duration.</li> <li>• An operand of subtraction is a time and the other is not a time, character, or time duration.</li> <li>• An operand of subtraction is a timestamp and the other is not a timestamp, character, or duration.</li> </ul> |
| <b>Recovery Text:</b>         | Correct the arithmetic expression so that it contains a valid date, time, or timestamp expression. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -182   |
| <b>SQLSTATE or SQLSTATES:</b> | 42816  |

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| <b>SQL0183</b>                |  |
| <b>Message Text:</b>          | Result of date or timestamp expression not valid.  |
| <b>Cause Text:</b>            | The result of an arithmetic operation is a date or timestamp that is not within the valid range of dates which are between 0001-01-01 and 9999-12-31. If the result is a date in the format YMD, MDY, DMY, or JUL then the year must be between 1940 and 2039. If this is a FETCH, embedded SELECT, SET or VALUES INTO, then the relative position of the host variable in the INTO clause is &1 and the host variable name is &2. |
| <b>Recovery Text:</b>         | Correct the arithmetic expression or the data that was being processed at the time the error occurred. If the date format is YMD, MDY, DMY or JUL and the result is not between 1940 and 2039, then specify USA, ISO, EUR, or JIS for the date format. The date format can be specified on the STRSQL or CRTSQLxxx commands or can be changed for the job by using the CHGJOB command. Try the request again.                      |
| <b>SQLCODE or SQLCODEs:</b>   | +183, -183   |
| <b>SQLSTATE or SQLSTATES:</b> | 01535, 22008   |

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| <b>SQL0184</b>        |   |
| <b>Message Text:</b>  | Parameter marker not valid in expression.   |
| <b>Cause Text:</b>    | A parameter marker cannot be used as an operand in a date/time arithmetic expression. |
| <b>Recovery Text:</b> | Correct the arithmetic expression. Try the request again.                             |

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| <b>SQL0184</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | -184  |
| <b>SQLSTATE or SQLSTATES:</b> | 42610 |

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| <b>SQL0187</b>                |   |
| <b>Message Text:</b>          | Use of labeled duration not valid.  |
| <b>Cause Text:</b>            | <p>One of the following has occurred:</p> <ul style="list-style-type: none"> <li>• A labeled duration is specified but is not the operand of the operators plus or minus.</li> <li>• A labeled duration of years, months, or days is specified as the operand of addition or subtraction and the other operand is not date or timestamp.</li> <li>• A labeled duration of hours, minutes, or seconds is specified as the operand of addition or subtraction and the other operand is not time or timestamp.</li> <li>• A labeled duration of microseconds is specified as the operand of addition or subtraction and the other operand is not timestamp.</li> <li>• A labeled duration is specified as the left operand of subtraction.</li> <li>• The value specified for the labeled duration is not a numeric type.</li> </ul> |
| <b>Recovery Text:</b>         | Correct the use of the labeled duration. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -187  |
| <b>SQLSTATE or SQLSTATES:</b> | 42816   |

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| <b>SQL0188</b>              |   |
| <b>Message Text:</b>        | &1 not a valid string representation of a name.   |
| <b>Cause Text:</b>          | <p>The host variable contains a string representation of a name that is not valid for one of the following reasons:</p> <ul style="list-style-type: none"> <li>• The host variable is empty.</li> <li>• The first character is a period, a slash, or a blank.</li> <li>• The number of identifiers is greater than the maximum allowed for the name of the object. For example, the host variable identifies a table name but the host variable contains 4 or more identifiers. A table name can contain a maximum of 3 identifiers. A relational database name can contain a maximum of 1 identifier.</li> <li>• An identifier is too long.</li> <li>• A period not contained in a delimited identifier is followed by a period or a blank.</li> <li>• A slash not contained in a delimited identifier is followed by a slash or a blank.</li> <li>• A blank is followed by characters other than blanks.</li> <li>• A delimited identifier contains no characters.</li> <li>• A delimited identifier is followed by a character other than a period, a slash or a blank.</li> <li>• The ending delimiter is missing from a delimited identifier.</li> </ul> |
| <b>Recovery Text:</b>       | Change the name. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b> | -188  |

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| <b>SQL0188</b>                |                     |
| <b>SQLSTATE or SQLSTATES:</b> | 22503, 28000, 2E000 |

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| <b>SQL0189</b>                |  |
| <b>Message Text:</b>          | Coded Character Set Identifier &1 not valid.   |
| <b>Cause Text:</b>            | <p>Coded Character Set Identifier (CCSID) &amp;1 is not valid for one of the following reasons:</p> <ul style="list-style-type: none"> <li>• The CCSID is not EBCDIC.</li> <li>• The CCSID is not supported by the system.</li> <li>• The CCSID is not valid for the data type.</li> <li>• If the CCSID is specified for graphic data, then the CCSID must be a DBCS CCSID.</li> <li>• If the CCSID is specified for UCS-2 or UTF-16 data, then the CCSID must be a UCS-2 or UTF-16 CCSID.</li> <li>• If the CCSID is specified for XML data, then the CCSID must be SBCS or Unicode. It must not be DBCS or 65535.</li> <li>• If the CCSID is specified for CLOB, DBCLOB, or DATALINK data, then the CCSID must not be 65535.</li> <li>• If the CCSID is specified for a result column of the XMLTABLE function, the CCSID must not be 65535.</li> <li>• If there are multiple DataLink columns with FILE LINK CONTROL, they must all have the same CCSID.</li> <li>• The NORMALIZED clause can only be specified for a UTF-8 or UTF-16 CCSID.</li> </ul> |
| <b>Recovery Text:</b>         | Ensure that all CCSID values in the statement are supported by the system and are valid for the data type. For a list of valid CCSID values, refer to the DB2 for i SQL Reference topic collection in the Database category in the IBM i Information Center, <a href="http://www.ibm.com/systems/i/infocenter/">http://www.ibm.com/systems/i/infocenter/</a> .   |
| <b>SQLCODE or SQLCODEs:</b>   | -189   |
| <b>SQLSTATE or SQLSTATES:</b> | 22522  |

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| <b>SQL0190</b>       |   |
| <b>Message Text:</b> | Attributes of column &3 in &1 in &2 not compatible. |



| <b>SQL0190</b>                |   |
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| <b>Cause Text:</b>            | <p>The attributes specified for column &amp;3 in &amp;1 in &amp;2 are not compatible with the attributes of the existing column. Either the data type, the length, or the clause is not valid.</p> <ul style="list-style-type: none"> <li>• A numeric column cannot be changed to a type that is not numeric.</li> <li>• A character column cannot be changed to a DATE, TIME, TIMESTAMP, or a numeric column.</li> <li>• A DATE, TIME, or TIMESTAMP column can only be changed to a column of the same type.</li> <li>• A character column cannot be changed to DBCS-only column.</li> <li>• A character, graphic, DataLink, or Unicode column cannot be changed to a column with an incompatible CCSID.</li> <li>• A binary column cannot be changed to a column that is not binary.</li> <li>• A column that is not binary cannot be changed to a binary column.</li> <li>• A DataLink column cannot be changed to a column with a shorter length.</li> <li>• A column can be changed to a user-defined type if the type is promotable to the new type. A column that is a user-defined type cannot be changed to a different type.</li> <li>• Columns cannot be changed to or from a DataLink, a ROWID, or an XML data type.</li> <li>• The length of a column that allows null values cannot be greater than 32765 for fixed-length character or fixed-length binary, 32739 for varying-length character or varying-length binary, 16382 for fixed-length graphic, and 16369 for varying-length graphic. The length of a DataLink column cannot be greater than 32717. The length of a binary LOB, character LOB, or XML column cannot be greater than 2147483647. The length of a double-byte LOB column cannot be greater than 1073741823. The length of a DBCS-open column cannot be less than 4.</li> <li>• Identity attributes can only be specified for a column defined as an identity column. DROP NOT NULL cannot be specified for an identity column.</li> <li>• DROP DEFAULT can only be specified if a default value is defined for the existing column and the default is not NULL.</li> <li>• DROP FIELDPROC can only be specified if a field procedure is defined for the existing column.</li> <li>• ADD FIELDPROC can only be specified if a field procedure is not defined for the existing column.</li> <li>• Only the CCSID can be altered for an XML column.</li> </ul> |
| <b>Recovery Text:</b>         | Specify attributes that are compatible with column &3. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -190  |
| <b>SQLSTATE or SQLSTATES:</b> | 42837   |

| <b>SQL0191</b>       |   |
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| <b>Message Text:</b> | Mixed data or UTF-8 data not properly formed.   |
| <b>Cause Text:</b>   | A mixed data string or UTF-8 data string does not have the proper format. For mixed data, every shift-out character ('OE'X) must have a corresponding shift-in character ('OF'X). If these characters are not paired, the data is not valid. For upper-case CCSID's, lower-case characters are not valid. The conversion was from column or host variable &2 to column or host variable &4. |

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| <b>SQL0191</b>                |  |
| <b>Recovery Text:</b>         | Ensure that all mixed character data has paired shift characters and that all UTF-8 data is valid. For more information about UTF-8, refer to the Programming support topic in the Information Center, <a href="http://www.ibm.com/systems/i/infocenter/">http://www.ibm.com/systems/i/infocenter/</a> . |
| <b>SQLCODE or SQLCODEs:</b>   | +191, -191   |
| <b>SQLSTATE or SQLSTATES:</b> | 01547, 22504   |

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| <b>SQL0192</b>                |   |
| <b>Message Text:</b>          | Argument of translation function not valid.   |
| <b>Cause Text:</b>            | The argument of the TRANSLATE, UCASE, UPPER, LCASE, or LOWER scalar function is a DBCS-only string. The argument must be SBCS, DBCS-open, or DBCS-either. |
| <b>Recovery Text:</b>         | Change the argument of the function to one that is valid. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -192  |
| <b>SQLSTATE or SQLSTATES:</b> | 42937   |

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| <b>SQL0194</b>                |   |
| <b>Message Text:</b>          | KEEP LOCKS not allowed.   |
| <b>Cause Text:</b>            | KEEP LOCKS was specified for cursor &1 but is not allowed because the cursor is not opened for read only. The cursor must be opened for read only to allow locks to be kept. For an explanation of read only cursors, see the DB2 for i SQL programming topic collection in the Database category in the IBM i Information Center |
| <b>Recovery Text:</b>         | Do not specify KEEP LOCKS, or specify a cursor that is read only.   |
| <b>SQLCODE or SQLCODEs:</b>   | -194  |
| <b>SQLSTATE or SQLSTATES:</b> | 42848   |

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| <b>SQL0195</b>                |  |
| <b>Message Text:</b>          | Last column of &1 in &2 cannot be dropped.   |
| <b>Cause Text:</b>            | An attempt was made to drop one or more columns using an ALTER TABLE statement. The columns cannot be dropped from table &1 in &2 because at least one of the existing columns must be preserved when altering a table.                            |
| <b>Recovery Text:</b>         | Ensure table &1 in &2 will have at least one column once the ALTER statement is complete. Either remove the DROP of one of the columns and try the request again, or, if all of the columns should be removed, drop the table and create it again. |
| <b>SQLCODE or SQLCODEs:</b>   | -195   |
| <b>SQLSTATE or SQLSTATES:</b> | 42814  |

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| <b>SQL0196</b>                |  |
| <b>Message Text:</b>          | Column &3 in &1 in &2 cannot be dropped.   |
| <b>Cause Text:</b>            | An attempt was made to drop column &3. The column cannot be dropped because a view, a constraint, a trigger, or an index is dependent on the column and RESTRICT was specified, or the column is part of the partition key, or the column is referenced by a text search index.  |
| <b>Recovery Text:</b>         | Specify CASCADE on the ALTER TABLE statement to drop the column and the views, constraints, triggers, and indexes that are dependent on it. If the column is part of the partition key, specify DROP PARTITIONING on the ALTER TABLE statement to remove the partitioning for the table. Try the request again. If the column is part of a text search index, the text search index should be dropped using the SYSPROC.SYSTS_DROP stored procedure. |
| <b>SQLCODE or SQLCODEs:</b>   | -196   |
| <b>SQLSTATE or SQLSTATES:</b> | 42817  |

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| <b>SQL0197</b>                |   |
| <b>Message Text:</b>          | Column &1 cannot be qualified.  |
| <b>Cause Text:</b>            | Column names in an ORDER BY clause of a SELECT statement cannot be qualified if a UNION, EXCEPT, or INTERSECT operator is specified.                      |
| <b>Recovery Text:</b>         | Remove the qualifier from the column name. Ensure the name specified in the ORDER BY clause is a named column of the result table. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -197  |
| <b>SQLSTATE or SQLSTATES:</b> | 42877   |

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| <b>SQL0198</b>                |   |
| <b>Message Text:</b>          | SQL statement empty or blank.   |
| <b>Cause Text:</b>            | The SQL statement is empty or blank. One of the following has occurred: <ul style="list-style-type: none"> <li>• During precompiling, the SQL statement referred to has no text between the EXEC SQL and the ending delimiter. The statement is ignored.</li> <li>• While running a program containing SQL statements, the operand of a PREPARE or EXECUTE IMMEDIATE statement is blank or empty. The operand, host variable, global variable, or literal string that was the object of either the PREPARE or EXECUTE IMMEDIATE statement contained all blanks or was an empty string.</li> </ul> |
| <b>Recovery Text:</b>         | If precompiling, correct the statement or remove it and precompile the program again. If running a program containing SQL statements, correct the logic of the program to make certain that a valid SQL statement is provided before issuing a PREPARE or EXECUTE IMMEDIATE statement.  |
| <b>SQLCODE or SQLCODEs:</b>   | -198  |
| <b>SQLSTATE or SQLSTATES:</b> | 42617   |

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| <b>SQL0199</b>                |  |
| <b>Message Text:</b>          | Keyword &1 not expected. Valid tokens: &2.   |
| <b>Cause Text:</b>            | The keyword &1 was not expected here. A syntax error was detected at keyword &1. The partial list of valid tokens is &2. This list assumes that the statement is correct up to the unexpected keyword. The error may be earlier in the statement but the syntax of the statement seems to be valid up to this point. |
| <b>Recovery Text:</b>         | Examine the SQL statement in the area of the specified keyword. A colon or SQL delimiter may be missing. SQL requires reserved words to be delimited when they are used as a name. Correct the SQL statement and try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -199   |
| <b>SQLSTATE or SQLSTATES:</b> | 42601  |

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| <b>SQL0203</b>                |   |
| <b>Message Text:</b>          | Name &1 is ambiguous.   |
| <b>Cause Text:</b>            | The name &1 is ambiguous for one of the following reasons: <ul style="list-style-type: none"> <li>• Two or more of the tables specified in a FROM clause contain columns with the name &amp;1. The name specified can refer to a column name or a system column name in the table.</li> <li>• The name is specified in an ORDER BY clause and is the same as more than 1 result column name.</li> <li>• OLD_ROW and NEW_ROW are specified for an SQL trigger and a transition variable specified in the routine body is not qualified.</li> </ul> |
| <b>Recovery Text:</b>         | Qualify the column name with a table name or correlation name or use the AS clause to provide a unique result column name that can be specified in the ORDER BY clause. Qualify the transition variable in the trigger with the name specified for OLD_ROW or NEW_ROW. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -203  |
| <b>SQLSTATE or SQLSTATES:</b> | 42702   |

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| <b>SQL0204</b>       |  |
| <b>Message Text:</b> | &1 in &2 type *&3 not found.   |
| <b>Cause Text:</b>   | &1 in &2 type *&3 was not found. If the member name is *ALL, the table is not partitioned. If this is an ALTER TABLE statement and the type is *N, a constraint or partition was not found. If this is not an ALTER TABLE statement and the type is *N, a function, procedure, trigger or sequence object was not found.<br><br>If a function was not found, &1 is the service program that contains the function. The function will not be found unless the external name and usage name match exactly. Examine the job log for a message that gives more details on which function name is being searched for and the name that did not match. |

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| <b>SQL0204</b>                |  |
| <b>Recovery Text:</b>         | Change the name and try the request again. If the object is a node group, ensure that the DB2 Multisystem product is installed on your system and create a nodegroup with the CRTNODGRP CL command. If an external function was not found, be sure that the case of the EXTERNAL NAME on the CREATE FUNCTION statement exactly matches the case of the name exported by the service program. |
| <b>SQLCODE or SQLCODEs:</b>   | +204, -204   |
| <b>SQLSTATE or SQLSTATES:</b> | 01532, 42704   |

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| <b>SQL0205</b>                |   |
| <b>Message Text:</b>          | Column &1 not in table &2 in &3.  |
| <b>Cause Text:</b>            | A column with the name &1 does not exist in table or view &2 in schema &3.  |
| <b>Recovery Text:</b>         | <p>Do one of the following and try the request again:</p> <ul style="list-style-type: none"> <li>• Make certain that the column names, table names, and any qualifiers are specified correctly. A column specified in a join USING clause cannot be qualified in the statement.</li> <li>• If the column is not qualified, the column &amp;1 is no longer in table &amp;2. It was originally found in table &amp;2, but it no longer exists. If the column is now available in a different table and is referenced by this statement, a precompile may be necessary.</li> <li>• If more than one table is referenced in a SQL statement, the column name should be qualified.</li> <li>• If this is a CREATE TABLE statement and column &amp;1 is specified in a partitioning key or constraint for the table being created, add a column definition for column &amp;1 or remove it from the constraint or partitioning key.</li> <li>• For a recursive common table expression, the SET sequence column name and the USING column name cannot be referenced in the fullselect that defines the common table expression.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | -205  |
| <b>SQLSTATE or SQLSTATES:</b> | 42703   |

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| <b>SQL0206</b>        |   |
| <b>Message Text:</b>  | Column or global variable &1 not found.   |
| <b>Cause Text:</b>    | &1 was not found as a column of table &2 in &3 and was not found as a global variable in &2. If the table is *N, &1 is not a column of any table or view that can be referenced.  |
| <b>Recovery Text:</b> | <p>Do one of the following and try the request again:</p> <ul style="list-style-type: none"> <li>• Ensure that the column and table names are specified correctly in the statement.</li> <li>• If this is a SELECT statement, ensure that all the required tables were named in the FROM clause.</li> <li>• If the column was intended to be a correlated reference, qualify the column with the correct table designator.</li> <li>• If the column was intended to be a global variable, qualify the name with the schema where the global variable exists or ensure the schema is in the path.</li> </ul> |

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| <b>SQL0206</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | -206  |
| <b>SQLSTATE or SQLSTATES:</b> | 42703 |

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| <b>SQL0208</b>                |  |
| <b>Message Text:</b>          | ORDER BY column &1 or expression not in result table.  |
| <b>Cause Text:</b>            | Column &1 is specified in the ORDER BY clause and is not valid because it does not refer to a named column of the result table when a UNION, EXCEPT, or INTERSECT operator is specified. The result column is named if the corresponding columns in each SELECT list have the same name. |
| <b>Recovery Text:</b>         | Do one of the following and try the request again: <ul style="list-style-type: none"> <li>• Ensure &amp;1 is a named result column if UNION, EXCEPT, or INTERSECT is specified.</li> <li>• Specify a numeric column identifier in place of &amp;1 in the ORDER BY clause.</li> </ul>     |
| <b>SQLCODE or SQLCODEs:</b>   | -208   |
| <b>SQLSTATE or SQLSTATES:</b> | 42707  |

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| <b>SQL0212</b>                |  |
| <b>Message Text:</b>          | Duplicate table designator &1 not valid.   |
| <b>Cause Text:</b>            | One of the following has occurred: <ul style="list-style-type: none"> <li>• More than one table in a FROM clause of a subselect has a table designator with the name &amp;1. If a correlation name is specified, the correlation name is the table designator. If one is not specified, the table name or view name is the table designator. If SQL naming is specified, the table name consists of the implicit or explicit schema name followed by the actual table name. If system naming is specified, the table name itself is used without a qualifier as the table designator. The table designator must be unique on each level of a subselect.</li> <li>• Names specified in the REFERENCING clause of a CREATE TRIGGER statement are not unique. The names specified for the NEW and OLD correlation name and the NEW_TABLE and OLD_TABLE names must be unique and must not be the same as the table on which the trigger is being defined.</li> </ul> |
| <b>Recovery Text:</b>         | Make certain there is a unique table designator for every table in a FROM clause for the same level of a subselect. Since schema-name/table-name cannot be used to qualify a column, the table name must be unique or a correlation name must be specified. Specify unique names in the REFERENCING clause of the CREATE TRIGGER statement. Correct any errors and try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -212   |
| <b>SQLSTATE or SQLSTATES:</b> | 42712  |

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| <b>SQL0213</b>       |                                       |
| <b>Message Text:</b> | Parameter &1 not in routine &2 in &3. |

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| <b>SQL0213</b>                |  |
| <b>Cause Text:</b>            | A parameter with a name &1 does not exist in routine &2 in schema &3.  |
| <b>Recovery Text:</b>         | Make certain that the parameter name, routine name, and any qualifiers are specified correctly. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -213   |
| <b>SQLSTATE or SQLSTATES:</b> | 42703  |

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| <b>SQL0214</b>                |   |
| <b>Message Text:</b>          | ORDER BY expression is not valid.   |
| <b>Cause Text:</b>            | <p>The expression in the ORDER BY clause in position &amp;1 is not valid for reason code &amp;3.</p> <ul style="list-style-type: none"> <li>• 1 - The SELECT statement contains a UNION, EXCEPT, or INTERSECT.</li> <li>• 2 - DISTINCT is specified in the SELECT clause and the expression or column cannot be matched exactly with an expression or column in the select list.</li> <li>• 3 - The select list uses an aggregate function or there is a GROUP BY clause and the expression is not an aggregate function or does not match exactly with an expression in the select list.</li> <li>• 4 - An aggregate function in the ORDER BY clause requires grouping.</li> <li>• 5 - A nested table expression is not supported in an ORDER BY clause.</li> </ul>          |
| <b>Recovery Text:</b>         | <p>Make the change listed for reason &amp;3 and try the request again:</p> <ul style="list-style-type: none"> <li>• 1 - Remove the expression from the ORDER BY clause.</li> <li>• 2 - Remove DISTINCT from the select clause or change the ORDER BY expression or column to refer to a select list item by using a numeric column identifier or a column name.</li> <li>• 3 - Change the expression in the ORDER BY clause to an aggregate function or change to use a numeric column identifier or a column name.</li> <li>• 4 - Add a GROUP BY clause or remove the aggregate function from the ORDER BY clause.</li> <li>• 5 - Remove the nested table expression from the subselect in the ORDER BY clause. Consider using a common table expression instead.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | -214  |
| <b>SQLSTATE or SQLSTATES:</b> | 42822   |

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| <b>SQL0216</b>       |   |
| <b>Message Text:</b> | Number of values in predicate lists do not match. |

| <b>SQL0216</b>                |  |
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| <b>Cause Text:</b>            | <p>The number of values on the left side of the predicate does not match the number of values on the right side of the predicate.</p> <p>If one side of the predicate is a fullselect that returns more than one result column, the other side of the predicate must be a list of expressions containing the same number of values. The fullselect must explicitly list the result columns.</p> <p>If both sides of the predicate are expression lists, the lists must contain the same number of values.</p> <p>An expression list used in an IN or NOT IN predicate cannot contain an untyped parameter marker.</p> <p>The subquery contains a correlated reference that is not supported. This may occur when there is a UNION, EXCEPT, or INTERSECT in the subquery.</p> |
| <b>Recovery Text:</b>         | Change the number of values in the predicate list or in the select list of a row fullselect so both sides contain the same number of values. Change a SELECT * in the fullselect to list the actual columns. Use a casting function for untyped parameter markers in an IN expression list.  |
| <b>SQLCODE or SQLCODEs:</b>   | -216   |
| <b>SQLSTATE or SQLSTATES:</b> | 428C4  |

| <b>SQL0221</b>                |   |
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| <b>Message Text:</b>          | Number of rows &2 not valid.  |
| <b>Cause Text:</b>            | A blocked FETCH, a blocked INSERT, or a SET RESULT SETS statement is not valid. The number of rows specified is not between 0 and 32767 or is greater than the dimension of the host structure array. The number of rows specified is &2 and the dimension of the array is &3. If this is a FETCH statement, the cursor name is &1. |
| <b>Recovery Text:</b>         | Either ensure the number of rows is from 0 through 32767 and less than or equal to the dimension of the array, or increase the size of the array.   |
| <b>SQLCODE or SQLCODEs:</b>   | -221  |
| <b>SQLSTATE or SQLSTATES:</b> | 42873   |

| <b>SQL0225</b>              |   |
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| <b>Message Text:</b>        | FETCH not valid; cursor &1 not scrollable.  |
| <b>Cause Text:</b>          | A FETCH statement was specified with PRIOR, FIRST, LAST, BEFORE, AFTER, CURRENT, or RELATIVE for cursor &1, but cursor &1 is not scrollable. Only NEXT may be used for cursors that are not scrollable.   |
| <b>Recovery Text:</b>       | In order to specify PRIOR, FIRST, LAST, BEFORE, AFTER, CURRENT or RELATIVE on the FETCH statement, the cursor must be scrollable. To create a scrollable cursor, add the SCROLL keyword to the DECLARE CURSOR statement for cursor &1. SCROLL can also be specified in the attributes string for the prepared statement associated with the cursor. |
| <b>SQLCODE or SQLCODEs:</b> | -225  |



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| <b>SQL0225</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 42872 |

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| <b>SQL0226</b>                |   |
| <b>Message Text:</b>          | Current row deleted or moved for cursor &1.   |
| <b>Cause Text:</b>            | A FETCH CURRENT was specified for scrollable cursor &1. The current row was either deleted or updated. If the row was updated, one of the following could have occurred: <ul style="list-style-type: none"> <li>• A value of an ORDER BY column of the current row has changed.</li> <li>• A value of a column in the index has changed.</li> <li>• A column has been changed so it no longer meets the record selection criteria.</li> </ul> |
| <b>Recovery Text:</b>         | Specify NEXT, PRIOR, FIRST, LAST, BEFORE, AFTER, or RELATIVE on the FETCH statement to position the cursor and fetch another row.   |
| <b>SQLCODE or SQLCODEs:</b>   | -226  |
| <b>SQLSTATE or SQLSTATES:</b> | 24507   |

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| <b>SQL0227</b>                |  |
| <b>Message Text:</b>          | FETCH not valid, cursor &1 in unknown position.  |
| <b>Cause Text:</b>            | A previous blocked FETCH for cursor &1 resulted in an error (SQLCODE &2, SQLSTATE &3) in the middle of processing a block of rows retrieved from the database manager. One or more rows left in the block could not be returned to the program following the error, leaving the position of the cursor unknown. If the SQLSTATE is *N, the error is unknown. |
| <b>Recovery Text:</b>         | Close and reopen the cursor to set the position. For scrollable cursors, FIRST, LAST, BEFORE, or AFTER may also be used to position the cursor.  |
| <b>SQLCODE or SQLCODEs:</b>   | -227   |
| <b>SQLSTATE or SQLSTATES:</b> | 24513  |

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| <b>SQL0228</b>                |   |
| <b>Message Text:</b>          | FOR UPDATE clause not valid with SCROLL for cursor &1.  |
| <b>Cause Text:</b>            | The FOR UPDATE clause and SCROLL keyword are specified for cursor &1. The FOR UPDATE clause is not valid with the SCROLL keyword unless the DYNAMIC keyword is also specified. If SCROLL is specified and DYNAMIC is not specified, the cursor is read-only. If DYNAMIC SCROLL is specified, the cursor can be updated. |
| <b>Recovery Text:</b>         | To declare a scrollable cursor that is read-only, specify the SCROLL keyword but do not specify the FOR UPDATE clause. To declare a scrollable cursor that can be updated, specify DYNAMIC SCROLL. Precompile the program again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -228  |
| <b>SQLSTATE or SQLSTATES:</b> | 42620   |

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| <b>SQL0231</b>                |   |
| <b>Message Text:</b>          | Position of cursor &1 not valid for FETCH of current row.   |
| <b>Cause Text:</b>            | A FETCH CURRENT or a FETCH RELATIVE 0 was specified for scrollable cursor &1. The operation is not valid because the cursor is not positioned on a record. A FETCH of the current row is not allowed following a FETCH BEFORE, a FETCH AFTER, or a FETCH that resulted in an SQLCODE of +100. |
| <b>Recovery Text:</b>         | Ensure the cursor is positioned on a record before attempting to fetch the current row.   |
| <b>SQLCODE or SQLCODEs:</b>   | -231  |
| <b>SQLSTATE or SQLSTATES:</b> | 22006   |

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| <b>SQL0237</b>                |  |
| <b>Message Text:</b>          | Not enough SQLVAR entries were provided in the SQLDA.  |
| <b>Cause Text:</b>            | The SQLDA only provided &2 SQLVAR entries. Since at least one of the columns being described is a distinct type or a LOB, &3 SQLVAR entries should have been specified. None of the secondary SQLVAR entries have been set. Since at least one of the columns is a distinct type or a LOB, space should be provided for twice as many SQLVAR entries as the number of columns. Only the base SQLVAR entries have been set. |
| <b>Recovery Text:</b>         | If there is no need for the additional information about the distinct type(s) or LOB(s), then no action is required. If this information is needed, the value of the SQLN field in the SQLDA should be increased to the value indicated in the message, and the statement should be resubmitted.   |
| <b>SQLCODE or SQLCODEs:</b>   | +237   |
| <b>SQLSTATE or SQLSTATES:</b> | 01594  |

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| <b>SQL0239</b>                |  |
| <b>Message Text:</b>          | Not enough entries were provided in the SQLDA or descriptor area.  |
| <b>Cause Text:</b>            | The SQLDA or descriptor area only provided &1 entries. This is the number of SQLVAR entries for the SQLDA or the value of DB2_MAX_ITEMS for a descriptor area. At least &2 entries should have been specified. None of the entries have been set. For the SQLDA, if any of the columns is a distinct type or a LOB, then space should be provided for twice as many SQLVAR entries as the number of columns.   |
| <b>Recovery Text:</b>         | For a descriptor, allocate more entries. For a SQLDA, if the distinct type or LOB information is needed, the value of the SQLN field should be increased to the value indicated in the message, and the statement should be resubmitted. If there is no need for the additional information about the distinct type(s) or LOB(s), then it is possible to resubmit the statement only providing enough SQLVAR entries to accommodate the number of columns. |
| <b>SQLCODE or SQLCODEs:</b>   | +239   |
| <b>SQLSTATE or SQLSTATES:</b> | 01005  |

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| <b>SQL0242</b>                |   |
| <b>Message Text:</b>          | Duplicate attribute name or partition name &1.  |
| <b>Cause Text:</b>            | Attribute name &1 or partition name or partition number &1 was already specified. The value must be unique. |
| <b>Recovery Text:</b>         | Specify a unique name. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -242  |
| <b>SQLSTATE or SQLSTATES:</b> | 42713   |

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| <b>SQL0243</b>                |   |
| <b>Message Text:</b>          | SENSITIVE cursor &1 cannot be defined for the specified SELECT statement.   |
| <b>Cause Text:</b>            | The cursor &1 is defined as SENSITIVE but the query requires the creation of a temporary result table. If the SELECT statement has a data change table reference, it requires a temporary result table. A SENSITIVE cursor cannot be implemented. |
| <b>Recovery Text:</b>         | Redefine the cursor as ASENSITIVE or INSENSITIVE or change the query so that it no longer requires the creation of a temporary result table.  |
| <b>SQLCODE or SQLCODEs:</b>   | -243  |
| <b>SQLSTATE or SQLSTATES:</b> | 36001   |

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| <b>SQL0245</b>                |  |
| <b>Message Text:</b>          | Invocation of function &1 is ambiguous.  |
| <b>Cause Text:</b>            | The invocation of function &1 is ambiguous. Multiple candidate functions exist, but the parameters corresponding to argument &2 do not belong to the same data type precedence list. |
| <b>Recovery Text:</b>         | Change the arguments in the function invocation to avoid matching more than one function.  |
| <b>SQLCODE or SQLCODEs:</b>   | -245   |
| <b>SQLSTATE or SQLSTATES:</b> | 428F5  |

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| <b>SQL0250</b>       |   |
| <b>Message Text:</b> | Local relational database not defined in the directory. |

| <b>SQL0250</b>                |  |
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| <b>Cause Text:</b>            | <p>One of the following has occurred:</p> <ul style="list-style-type: none"> <li>• Three part names were used and the relational database name is not defined in the relational database directory.</li> <li>• A connect was attempted and the relational database name is not defined in the relational database directory.</li> <li>• The SQL statement uses the CURRENT SERVER special register and the local relational database name is not defined in the relational database directory.</li> <li>• The SQL statement refers to a view which uses the CURRENT SERVER special register and the local relational database name is not defined in the relational database directory.</li> </ul> |
| <b>Recovery Text:</b>         | Define the local relational database name using the Add Relational Database Directory Entry (ADDRDBDIRE) command.  |
| <b>SQLCODE or SQLCODEs:</b>   | -250   |
| <b>SQLSTATE or SQLSTATES:</b> | 42718  |

| <b>SQL0251</b>                |   |
|-------------------------------|---|
| <b>Message Text:</b>          | Character in relational database name &1 not valid.   |
| <b>Cause Text:</b>            | &1 contains either a #, @, ., or a \$, which are not valid character for a relational database name. Valid characters include A-Z, 0-9, and underscore. |
| <b>Recovery Text:</b>         | Correct the name. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -251  |
| <b>SQLSTATE or SQLSTATES:</b> | 2E000, 42602  |

| <b>SQL0255</b>       |                                   |
|----------------------|-----------------------------------|
| <b>Message Text:</b> | Function not supported for query. |

**SQL0255****Cause Text:**

The reason code is &1:

- Code 1 -- Scalar subselects and lateral correlation from a nested table expression are not allowed with distributed files.
- Code 2 -- Error occurred while using a temporary distributed file.
- Code 3 -- EXCEPT or INTERSECT not supported for this query.
- Code 4 -- A sequence reference is not supported with distributed files.
- Code 5 -- A recursive common table expression is not supported for this query.
- Code 6 -- An OLAP function is not supported for this query.
- Code 7 -- ORDER OF is not supported for this query.
- Code 8 -- Scalar fullselect is not supported for this query.
- Code 9 -- A distributed file is being processed in a multi-thread capable job or this is not the initial thread.
- Code 10 -- Grouping sets are not supported for this query.
- Code 11 -- Full outer join is not supported for this query.
- Code 12 -- VALUES fullselect is not supported for this query.
- Code 13 -- UTF-8 with non-ICU NLSS table is not supported for this query.
- Code 14 -- OmniFind function is not supported for this query.
- Code 15 -- Subselect ordering is not supported for this query.
- Code 16 -- XML function is not supported for this query.
- Code 17 -- Array variables are not supported for this query.
- Code 18 -- Global variables are not supported for this query.
- Code 19 -- Hierarchical query function is not supported for this query.
- Code 20 -- VERIFY\_GROUP\_FOR\_USER scalar function is not supported for this query.

| <b>SQL0255</b>                |  |
|-------------------------------|--|
| <b>Recovery Text:</b>         | <p>A list of corrective actions follow:</p> <ul style="list-style-type: none"> <li>• If code 1, change the query so it does not use scalar subselects or correlation from a nested table expression.</li> <li>• If code 2, see the previous messages for more information.</li> <li>• If code 3, remove EXCEPT or INTERSECT from the query.</li> <li>• If code 4, remove the sequence reference from the query.</li> <li>• If code 5, remove the recursive common table expression from the query.</li> <li>• If code 6, remove the OLAP function from the query.</li> <li>• If code 7, remove the ORDER OF from the query.</li> <li>• If code 8, respecify the query without a fullselect.</li> <li>• If code 9, do not use multiple threads to run the query.</li> <li>• If code 10, remove grouping sets from the query.</li> <li>• If code 11, remove the full outer join from the query.</li> <li>• If code 12, remove the VALUES fullselect from the query.</li> <li>• If code 13, use an ICU NLSS table or remove the reference to the UTF-8 column or variable.</li> <li>• If code 14, remove the OmniFind function from the query.</li> <li>• If code 15, remove the subselect ordering from the query.</li> <li>• If code 16, remove the XML function from the query.</li> <li>• If code 17, remove references to array variables from the query.</li> <li>• If code 18, remove references to global variables from the query.</li> <li>• If code 19, remove the hierarchical query from the query.</li> <li>• If code 20, remove the VERIFY_GROUP_FOR_USER scalar function from the query.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | -255   |
| <b>SQLSTATE or SQLSTATES:</b> | 42999  |

| <b>SQL0256</b>                |   |
|-------------------------------|---|
| <b>Message Text:</b>          | Constraint &1 in &2 not allowed on distributed file.  |
| <b>Cause Text:</b>            | <p>Constraint &amp;1 in &amp;2 not allowed for one of the following reasons:</p> <ul style="list-style-type: none"> <li>- The columns that make up the partitioning key must be a subset of the columns that make up the foreign key. The columns may appear in any order.</li> <li>- The node group of the dependent table in a foreign key constraint must match the node group of the parent table.</li> </ul> |
| <b>Recovery Text:</b>         | Ensure that every column that is in the partitioning key is also in the foreign key for the table. Also ensure that the dependent table and the parent table are built over the same nodegroup.   |
| <b>SQLCODE or SQLCODEs:</b>   | -256  |
| <b>SQLSTATE or SQLSTATES:</b> | 42998   |

| <b>SQL0270</b>                |  |
|-------------------------------|--|
| <b>Message Text:</b>          | Function not allowed for table &1 in &2.   |
| <b>Cause Text:</b>            | <p>Table &amp;1 in &amp;2 is a distributed table or a partitioned table. The function is not allowed for one of the following reasons:</p> <ul style="list-style-type: none"> <li>- The unique index or unique constraint is not allowed because all unique indexes or unique constraints of a distributed table or a partitioned table must contain all columns that make up the partitioning key. If this is a CREATE TABLE statement and the PARTITIONING KEY clause was not specified, then the default partitioning key is the first column of the primary key, or the first valid column of the table.</li> <li>- Data in one of the partitioning key columns was changed by an UPDATE statement which would have forced the row to a different node.</li> <li>- The table contains a LOB or XML column. LOB and XML columns are not allowed in a distributed table.</li> <li>- The node group of the materialized query table is different than the node group of one or more tables referenced by the materialized query table.</li> </ul> |
| <b>Recovery Text:</b>         | Ensure that all unique indexes or unique constraints contain all the columns of the partitioning key. Ensure that data in the partitioning key columns is not changed, or is changed to a value that would reside on the same node. Ensure the table does not contain any LOB or XML columns. Ensure that the materialized query table references tables within the same node group.   |
| <b>SQLCODE or SQLCODEs:</b>   | -270   |
| <b>SQLSTATE or SQLSTATEs:</b> | 42997  |

| <b>SQL0301</b>                |   |
|-------------------------------|---|
| <b>Message Text:</b>          | Input variable &2 or argument &1 not valid.   |
| <b>Cause Text:</b>            | The value in relative position &1 in the statement is a type that is not compatible with the requested operation. The value is variable &2, entry &1 in a descriptor area, or argument &2 in a CALL statement. A name *N indicates that a user's descriptor area was used or that a constant or special register was specified on the CALL statement. |
| <b>Recovery Text:</b>         | <p>Do one of the following and try the request again:</p> <ul style="list-style-type: none"> <li>• Use a variable that is the correct type.</li> <li>• Specify an argument in the CALL that is the correct type.</li> <li>• Change the type specified for parameter &amp;1 in the DECLARE PROCEDURE statement.</li> </ul>                             |
| <b>SQLCODE or SQLCODEs:</b>   | -301  |
| <b>SQLSTATE or SQLSTATEs:</b> | 07006, 42895  |

| <b>SQL0302</b>       |   |
|----------------------|---|
| <b>Message Text:</b> | Conversion error on variable or parameter &2. |

| <b>SQL0302</b>                |  |
|-------------------------------|--|
| <b>Cause Text:</b>            | <p>Variable or parameter &amp;2 or entry &amp;1 in a descriptor area contains a value that cannot be converted to the attributes required by the statement. Error type &amp;3 occurred. Error types and their meanings are:</p> <ul style="list-style-type: none"> <li>• 1 -- Overflow.</li> <li>• 2 -- Floating point overflow.</li> <li>• 3 -- Floating point underflow.</li> <li>• 4 -- Floating point conversion error.</li> <li>• 5 -- Not an exact result.</li> <li>• 6 -- Numeric data that is not valid.</li> <li>• 7 -- Double-byte character set (DBCS) or UTF-8 data that is not valid.</li> <li>• 8 -- C NUL-terminator is missing for character variables or double NUL-terminator is missing for graphic variables and the program was compiled with the *CNULRQD option.</li> <li>• 9 -- Truncation when mapping a variable or constant to a character or binary parameter on a CALL statement, or when using a character or graphic variable in a GET DESCRIPTOR or SET DESCRIPTOR statement.</li> <li>• 10 -- Incompatible conversion from the input SQLDATA value to the specified SQLTYPE in a REXX application.</li> <li>• 11 -- Overflow on translation of UTF-8 character data.</li> </ul> <p>If the variable name is *N and the statement is FETCH, a descriptor area was specified.<br/>If the parameter name is *N and the statement is CALL, a descriptor area, a constant, or a special register was specified.</p> |
| <b>Recovery Text:</b>         | Change the value of the variable or parameter or entry in the descriptor area so that it can be converted and is valid. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -302   |
| <b>SQLSTATE or SQLSTATES:</b> | 22001, 22003, 22023, 22024   |
| <b>SQL0303</b>                |  |
| <b>Message Text:</b>          | Variable &2 not compatible or value too long.  |



| <b>SQL0303</b>                |   |
|-------------------------------|---|
| <b>Cause Text:</b>            | <p>A value cannot be assigned to variable &amp;2 because the data types are not compatible or the value is too long.</p> <ul style="list-style-type: none"> <li>• A FETCH, SELECT, CALL, SET, VALUES INTO, GET DIAGNOSTICS, GET DESCRIPTOR, SET DESCRIPTOR or function invocation cannot be performed because the data type of variable &amp;2 is not compatible with the data type of the corresponding value.</li> <li>• For SQL routines, the SQL variable may not be long enough for the corresponding list item, or the SQL parameter or RETURNS data type may not be long enough for the output or RETURN value.</li> <li>• When selecting a date value, a character variable must be at least 6 bytes for a Julian date, at least 8 bytes for a date in the MDY, YMD, DMY formats, or at least 10 bytes for all other formats.</li> <li>• When selecting a time value, a character variable must be at least 8 bytes for a time in the USA format and at least 5 bytes for all other formats.</li> <li>• When selecting a timestamp value, a character variable must be at least 19 bytes.</li> <li>• If the variable is C NUL-terminated and the program was compiled with *CNULRQD option, then an additional byte is required for the NUL-terminator for date/time values.</li> <li>• For GET DIAGNOSTICS ALL, the variable must be varying length character or varying length graphic.</li> </ul> <p>The relative position of the variable in the INTO clause, the SQLDA, or the CALL statement is &amp;1. If the variable name is *N, a descriptor area was specified on a FETCH statement.</p> |
| <b>Recovery Text:</b>         | <p>Ensure that the data types are compatible for each of the corresponding list items. Ensure the variables are defined correctly for date, time, and timestamp values.</p>   |
| <b>SQLCODE or SQLCODEs:</b>   | -303  |
| <b>SQLSTATE or SQLSTATES:</b> | 22001, 42806  |

| <b>SQL0304</b>        |   |
|-----------------------|---|
| <b>Message Text:</b>  | Conversion error in assignment to variable &2.  |
| <b>Cause Text:</b>    | <p>During an attempt to return a value to variable &amp;2 on a FETCH, an embedded SELECT statement, a CALL statement, a SET statement, a SET DESCRIPTOR statement, or a VALUES INTO statement, error type &amp;3 occurred. A list of the error types follows:</p> <ul style="list-style-type: none"> <li>• Error type 1 is overflow.</li> <li>• Error type 2 is floating point overflow.</li> <li>• Error type 3 is floating point underflow.</li> <li>• Error type 4 is a floating point conversion error.</li> <li>• Error type 5 is not an exact result.</li> <li>• Error type 6 is numeric data that is not valid.</li> <li>• Error type 7 is double-byte character set (DBCS) data that is not valid.</li> </ul> <p>The relative position of the variable is &amp;1. If the variable name is *N, a descriptor area was specified on the FETCH or CALL statement.</p> |
| <b>Recovery Text:</b> | <p>Change the size and, if necessary, the type of the variable or entry in the descriptor area so that it can contain the result value or correct the data that is not valid. Try the request again.</p>  |

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| <b>SQL0304</b>                |  |
| <b>SQLCODE or SQLCODEs:</b>   | +304, -304                               |
| <b>SQLSTATE or SQLSTATES:</b> | 01515, 01547, 01565, 22003, 22023, 22504 |

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| <b>SQL0305</b>                |  |
| <b>Message Text:</b>          | Indicator variable required.   |
| <b>Cause Text:</b>            | A FETCH, embedded SELECT, CALL, GET DESCRIPTOR, or a SET or VALUES INTO statement has resulted in a null value, but an indicator variable was not specified for host variable &2. The relative position of the host variable in the INTO clause or parameter list is &1. If the host variable name is *N, a descriptor area was specified.<br><br>If this error occurs on a GET DESCRIPTOR statement, the null value is being returned but the INDICATOR item was not specified on the GET DESCRIPTOR statement. |
| <b>Recovery Text:</b>         | Specify an indicator variable, and precompile the program again.<br><br>If this is a GET DESCRIPTOR statement, specify both the DATA item and the INDICATOR item. Precompile the program again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -305   |
| <b>SQLSTATE or SQLSTATES:</b> | 22002, 22004   |

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| <b>SQL0306</b>                |   |
| <b>Message Text:</b>          | REXX input host variable &1 not defined.  |
| <b>Cause Text:</b>            | The REXX input host variable &1 appears in an SQL statement, but it is not defined because a value has not been assigned to the variable.   |
| <b>Recovery Text:</b>         | Verify that &1 is spelled correctly in the SQL statement and that a value is assigned to the host variable before the SQL statement is run. |
| <b>SQLCODE or SQLCODEs:</b>   | -306  |
| <b>SQLSTATE or SQLSTATES:</b> | 42863   |

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| <b>SQL0311</b>              |   |
| <b>Message Text:</b>        | Length in varying-length, LOB, or XML host variable not valid.  |
| <b>Cause Text:</b>          | Host variable &2 was specified. The value in the length portion of the variable length, LOB, or XML host variable is either negative or greater than the declared length. If the host variable is graphic the length should be the number of DBCS characters. The host variable number is &1. The specified length is &4. The variable is declared to have length &3. |
| <b>Recovery Text:</b>       | Change the length portion of the varying-length, LOB, or XML host variable to a valid positive number or zero. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b> | -311  |

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| <b>SQL0311</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 22501 |

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| <b>SQL0312</b>                |   |
| <b>Message Text:</b>          | Variable &1 not defined or not usable.  |
| <b>Cause Text:</b>            | <p>The variable &amp;1 appears in the SQL statement, but one of the following conditions exists:</p> <ul style="list-style-type: none"> <li>• No declaration for the variable exists or the declaration is not within the current scope.</li> <li>• The attributes are not correct for the use specified.</li> <li>• The host variable was specified in dynamic SQL. Host variables are not valid in dynamic SQL.</li> <li>• In REXX, host variable names cannot contain embedded blanks.</li> <li>• The variable name is used in the routine body of an SQL procedure or function, but the variable is not declared as an SQL variable or parameter. The scope of an SQL variable is the compound statement that contains the declaration.</li> <li>• The variable used in the SQL routine body is declared with CONSTANT and cannot be modified.</li> <li>• The variable is used in the routine body of an SQL trigger, but the variable is not declared as an SQL variable or the variable is an OLD transition variable and cannot be modified.</li> <li>• The variable is a transition variable in an AFTER trigger and is used in statement where the variable could be modified. Modifying transition variables in AFTER triggers is not allowed.</li> </ul> |
| <b>Recovery Text:</b>         | <p>Do one of the following and try the request again.</p> <ul style="list-style-type: none"> <li>• Verify that &amp;1 is spelled correctly in the SQL statement.</li> <li>• Verify that the program contains a declaration for that variable. In RPG, the variable must be declared globally or in the scope where it is used.</li> <li>• Verify that the attributes of the variable are compatible with its use in the statement.</li> <li>• Use parameter markers in dynamic SQL instead of host variables.</li> <li>• Remove embedded blanks from REXX host variable names.</li> <li>• Declare the variable as an SQL variable or parameter in the SQL procedure or function.</li> <li>• Declare the variable as an SQL variable or specify a NEW transition variable when the variable is modified in an SQL trigger.</li> <li>• Remove the transition variable from the statement. Copying the transition variable to a local variable and then using the local variable in the statement is also acceptable.</li> </ul>   |
| <b>SQLCODE or SQLCODEs:</b>   | -312  |
| <b>SQLSTATE or SQLSTATES:</b> | 42618   |

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| <b>SQL0313</b>       |                                     |
| <b>Message Text:</b> | Number of host variables not valid. |

| <b>SQL0313</b>                |   |
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| <b>Cause Text:</b>            | The number of host variables or entries in an SQLDA or descriptor area specified in either an EXECUTE or OPEN statement is not the same as the number of parameter markers specified in the prepared SQL statement &1. If the statement name is *N, the number of host variables or entries in a SQLDA or descriptor area was specified in an OPEN statement and is not the same as the number of host variables specified in the DECLARE CURSOR statement for cursor &2. |
| <b>Recovery Text:</b>         | Change the number of host variables specified in the USING clause or the number of entries in the SQLDA or descriptor area to equal the number of parameter markers in the prepared SQL statement or the number of host variables in the DECLARE CURSOR statement. Precompile the program again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -313  |
| <b>SQLSTATE or SQLSTATES:</b> | 07001, 07004  |

| <b>SQL0326</b>                |   |
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| <b>Message Text:</b>          | Too many variables specified.   |
| <b>Cause Text:</b>            | <p>&amp;1 variables were specified on the FETCH, embedded SELECT, SET, or VALUES INTO statement, but only &amp;2 columns were returned from the query. Extra global variables will not be changed. Extra host variables will be filled with the appropriate value for the specified type:</p> <ul style="list-style-type: none"> <li>• Character host variables will be filled with blanks.</li> <li>• Binary host variables will be filled with hex zeros.</li> <li>• Date host variables will be filled with the current date.</li> <li>• Time host variables will be filled with the current time.</li> <li>• Timestamp host variables will be filled with the current timestamp.</li> <li>• Graphic host variables will be filled with double-byte, UCS-2, or UTF-16 blanks.</li> <li>• Varying-length character, varying-length graphic, varying-length binary, CLOB, DBCLOB, BLOB, and XML host variables will be set to a length of 0.</li> <li>• C NUL-terminated character host variables will have a NUL-terminator set into the first character position.</li> <li>• C NUL-terminated graphic host variables will have a double NUL-terminator set into the first DBCS character position.</li> <li>• Numeric host variables will be set to a value of 0.</li> <li>• REXX host variables will be defaulted to variable length character with the length set to 0.</li> </ul> |
| <b>Recovery Text:</b>         | No recovery is necessary.   |
| <b>SQLCODE or SQLCODEs:</b>   | +326  |
| <b>SQLSTATE or SQLSTATES:</b> | 01557   |

| <b>SQL0327</b>       |  |
|----------------------|--|
| <b>Message Text:</b> | Partitioning key does not correspond to a defined partition. |

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| <b>SQL0327</b>                |   |
| <b>Cause Text:</b>            | An INSERT, UPDATE, CREATE TABLE, or ALTER TABLE statement was attempted for a partitioned table but the values supplied for the partitioning key did not qualify the row for any partition.   |
| <b>Recovery Text:</b>         | If the error occurred on an INSERT or UPDATE statement, change the values supplied for the row being inserted or updated so that they correspond to a partition of the table or alter the partition definition to allow this key value. If the error occurred on a CREATE TABLE or ALTER TABLE statement, alter the partition definitions so that all existing rows will fit in the table or delete the rows which do not fit. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -327  |
| <b>SQLSTATE or SQLSTATES:</b> | 22525   |

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| <b>SQL0328</b>                |   |
| <b>Message Text:</b>          | Column &1 not allowed in partitioning key.  |
| <b>Cause Text:</b>            | Column &1 is not allowed to be part of the partitioning key. If the column name is *N, then there are no valid columns for use as the default partitioning key for DB2 Multisystem partitioning. For RANGE partitioning, columns of type LOB, XML, ROWID, and DATALINK are not allowed in the partitioning key. For HASH partitioning, columns of type DATE, TIME, TIMESTAMP, FLOAT, LOB, XML, ROWID, and DATALINK are not allowed in the partitioning key. The column cannot be a user defined type based on any of these types. It cannot be defined as an identity column or a row change timestamp column, and cannot have a field procedure. |
| <b>Recovery Text:</b>         | Remove the column from the list of partitioning key columns, or change the data type of the column.   |
| <b>SQLCODE or SQLCODEs:</b>   | -328  |
| <b>SQLSTATE or SQLSTATES:</b> | 42996   |

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| <b>SQL0329</b>        |  |
| <b>Message Text:</b>  | The SET PATH name list is not valid.   |
| <b>Cause Text:</b>    | String constant or input host variable &1 contains a SET PATH name list that is not valid. A host variable name *N indicates that an incorrect string constant was specified on the SET PATH statement or for the SQLPATH on the SET OPTION statement. The name list must have the following attributes: <ul style="list-style-type: none"> <li>• The length must be greater than 0.</li> <li>• The length cannot be greater than 8843.</li> <li>• It must contain a list of valid schema names, separated by commas.</li> <li>• The list can contain a maximum of 268 schema names.</li> <li>• Each schema name must be capitalized unless it is a delimited name.</li> <li>• The list cannot contain the special values, *LIBL, CURRENT PATH, SYSTEM PATH, or USER.</li> </ul> |
| <b>Recovery Text:</b> | Use a string constant or host variable with the correct value.   |

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| <b>SQL0329</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | -329  |
| <b>SQLSTATE or SQLSTATES:</b> | 0E000 |

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| <b>SQL0330</b>                |   |
| <b>Message Text:</b>          | Character conversion cannot be performed.   |
| <b>Cause Text:</b>            | An attempt was made to convert column or host variable &2 to column or host variable &3. The conversion cannot be performed. If the source data is character and has a mixed Coded Character Set Identifier (CCSID), then double-byte characters were found. These mixed data conversions are only allowed if the source data does not contain any double-byte data. If the data is graphic, the CCSID values are not compatible or the string contains single-byte characters. The source CCSID is &4, and the target CCSID is &5. |
| <b>Recovery Text:</b>         | Ensure that all character or graphic comparison, concatenation, or assignment is between columns or host variables with compatible CCSID values. If character data and the source CCSID is mixed, the source data should not contain any double-byte characters. If graphic data, the string cannot contain single-byte characters. Use a casting function like VARCHAR to convert between character, DBCS graphic, and Unicode graphic data.   |
| <b>SQLCODE or SQLCODEs:</b>   | -330  |
| <b>SQLSTATE or SQLSTATES:</b> | 22021   |

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| <b>SQL0331</b>                |  |
| <b>Message Text:</b>          | Character conversion cannot be performed.  |
| <b>Cause Text:</b>            | An attempt was made to convert column or host variable &2 to column or host variable &3. The conversion cannot be performed. If the source data is character and has a mixed Coded Character Set Identifier (CCSID), then double-byte characters were found. Mixed CCSID character conversions are only allowed if the source data does not contain any double-byte data. If the data is graphic, the CCSID values are not compatible. The source CCSID is &4, and the target CCSID is &5. |
| <b>Recovery Text:</b>         | Ensure that all character or graphic assignments are between columns or host variables with compatible CCSID values. If character and the source CCSID is mixed, the source data should not contain any double-byte characters. Use a casting function like VARCHAR to convert between character, DBCS graphic, and UCS-2 and UTF-16 graphic data.   |
| <b>SQLCODE or SQLCODEs:</b>   | +331, -331   |
| <b>SQLSTATE or SQLSTATES:</b> | 01520, 22021   |

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| <b>SQL0332</b>       |   |
| <b>Message Text:</b> | Character conversion between CCSID &1 and CCSID &2 not valid. |

| <b>SQL0332</b>                |   |
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| <b>Cause Text:</b>            | <p>Character or graphic conversion has been attempted for data that is not compatible. There is no conversion defined between CCSID &amp;1 and CCSID &amp;2.</p> <p>If one CCSID is 65535, the other CCSID is a graphic CCSID. Conversion is not defined between 65535 and a graphic CCSID.</p> <p>If this is a CONNECT statement, conversion is not defined between the default application requester SBCS CCSID and the application server SBCS CCSID. If the second CCSID is 0, the application server did not return its default SBCS CCSID. An application server other than DB2 for IBM i may not support a CCSID of 65535.</p> |
| <b>Recovery Text:</b>         | <p>Ensure that all character or graphic comparisons, concatenation, or assignments are between columns or host variables with compatible CCSID values.</p> <p>If this is a CONNECT statement, change either the SBCS CCSID of the application requester or the application server, so conversion between the CCSID values is defined.</p>   |
| <b>SQLCODE or SQLCODEs:</b>   | -332  |
| <b>SQLSTATE or SQLSTATES:</b> | 57017   |

| <b>SQL0334</b>                |   |
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| <b>Message Text:</b>          | Character conversion resulted in truncation.  |
| <b>Cause Text:</b>            | <p>Character conversion of column or host variable &amp;2 has resulted in truncation. An attempt was made to convert mixed ASCII data to mixed EBCDIC data or to convert UCS-2 or UTF-16 graphic data to mixed EBCDIC data. The length of the data has increased due to the insertion of shift characters. The resulting string did not fit in the target, and truncation occurred.</p> |
| <b>Recovery Text:</b>         | <p>When converting from mixed ASCII to mixed EBCDIC or from UCS-2 or UTF-16 graphic to mixed EBCDIC, ensure that there is enough space in the target.</p>   |
| <b>SQLCODE or SQLCODEs:</b>   | -334  |
| <b>SQLSTATE or SQLSTATES:</b> | 22524   |

| <b>SQL0335</b>                |   |
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| <b>Message Text:</b>          | Character conversion resulted in substitution characters.   |
| <b>Cause Text:</b>            | <p>Character column or host variable &amp;2 has been converted to character column or host variable &amp;3. The conversion defines that several different character values in the source data will translate to the same value in the target data. It will no longer be possible to separate these values. The CCSID of the source data is &amp;4 and the CCSID of the target is &amp;5. Host variable values of *N or CCSID values of 0 indicate the values are unknown.</p> |
| <b>Recovery Text:</b>         | <p>Change the definition of the columns or host variables so that CCSID values that are used will allow all character values in the source to be converted to character values in the target.</p>   |
| <b>SQLCODE or SQLCODEs:</b>   | +335  |
| <b>SQLSTATE or SQLSTATES:</b> | 01517   |

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| <b>SQL0336</b>                |  |
| <b>Message Text:</b>          | Identity or sequence attribute is not valid.   |
| <b>Cause Text:</b>            | For an identity column or a sequence, the values specified for the START WITH, INCREMENT BY, MINVALUE, MAXVALUE, and RESTART WITH options must have a scale of zero. |
| <b>Recovery Text:</b>         | Change the value to one that is valid. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -336   |
| <b>SQLSTATE or SQLSTATES:</b> | 428FA  |

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| <b>SQL0338</b>                |  |
| <b>Message Text:</b>          | JOIN predicate or MERGE ON clause not valid.   |
| <b>Cause Text:</b>            | The JOIN predicate, or ON clause of a MERGE statement, is not valid because a column is specified that exists in a table that is outside the scope of the join predicate or ON clause. The scope is generally determined from left to right but is also based on the position of the join-condition. If parentheses are used, columns inside the parentheses cannot come from a table outside the parentheses. If an implicit join (using a comma) is specified prior to a joined table with an ON clause, columns in the ON clause cannot come from a table before the comma. |
| <b>Recovery Text:</b>         | Do one of the following and try the request again: <ul style="list-style-type: none"> <li>• Make certain that the column names, table names, and any qualifiers are specified correctly.</li> <li>• Specify parentheses around joined tables to specify a join order other than left to right. Ensure columns exist in tables that are in the same scope.</li> <li>• For an ON clause in a MERGE statement, ensure referenced columns are within the scope of the ON clause.</li> <li>• Specify a CROSS JOIN instead of an implicit join.</li> </ul>                           |
| <b>SQLCODE or SQLCODEs:</b>   | -338   |
| <b>SQLSTATE or SQLSTATES:</b> | 42972  |

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| <b>SQL0340</b>                |   |
| <b>Message Text:</b>          | Duplicate name &1 for common table expressions.                                 |
| <b>Cause Text:</b>            | Name &1 cannot be used to define more than one table expression.                |
| <b>Recovery Text:</b>         | Change the name for one of the common table expressions. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -340  |
| <b>SQLSTATE or SQLSTATES:</b> | 42726   |

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| <b>SQL0341</b>       |   |
| <b>Message Text:</b> | Cyclic references between common table expressions. |



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| <b>SQL0341</b>                |  |
| <b>Cause Text:</b>            | The common table expressions specified are not valid. The subselect for table &1 refers to table &2 and the subselect for table &2 refers to table &1. Cyclic references between common table expressions are not allowed. |
| <b>Recovery Text:</b>         | Change the common table expressions to refer to a table that exists or a common table expression that has already been defined. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -341   |
| <b>SQLSTATE or SQLSTATEs:</b> | 42835  |

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| <b>SQL0342</b>                |  |
| <b>Message Text:</b>          | Keyword not allowed in recursive common table expression &1.   |
| <b>Cause Text:</b>            | The common table expression &1 is recursive. The recursive common table expression contains one of the following errors: <ul style="list-style-type: none"> <li>• A fullselect within the common table expression cannot start with SELECT DISTINCT because the common table expression is recursive.</li> <li>• A fullselect within the common table expression specified UNION instead of UNION ALL as required for recursive common table expressions.</li> </ul> |
| <b>Recovery Text:</b>         | Remove the keyword DISTINCT from the fullselect. Change the UNION to UNION ALL, or remove the recursive reference within the common table expression. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -342   |
| <b>SQLSTATE or SQLSTATEs:</b> | 42925  |

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| <b>SQL0343</b>                |   |
| <b>Message Text:</b>          | Column list not valid for table.  |
| <b>Cause Text:</b>            | For a recursive common table expression: <ul style="list-style-type: none"> <li>• The column name list must be specified following the table name of the common table expression. &amp;1 is the common table expression name.</li> <li>• The sequence column name and the set cycle column name cannot be referenced in the column list of the recursive common table expression. &amp;1 is the sequence column name or the set cycle column name.</li> </ul> |
| <b>Recovery Text:</b>         | Correct the recursive common table expression. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -343  |
| <b>SQLSTATE or SQLSTATEs:</b> | 42908   |

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| <b>SQL0345</b>       |  |
| <b>Message Text:</b> | Recursive common table expression &1 is not valid. |

| <b>SQL0345</b>                |   |
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| <b>Cause Text:</b>            | <p>The recursive common table expression is not valid for one of the following reasons:</p> <ul style="list-style-type: none"> <li>• The initialization fullselect of the common table expression cannot refer to itself.</li> <li>• Grouping, aggregate functions, and ORDER BY are not allowed within the fullselects of the UNION that define the common table expression.</li> <li>• EXCEPT DISTINCT is not allowed if the common table is specified as the right operand of a join.</li> <li>• LEFT OUTER JOIN and FULL OUTER JOIN are not allowed if the common table is specified as the right operand of the join.</li> <li>• RIGHT OUTER JOIN and FULL OUTER JOIN are not allowed if the common table is specified as the left operand of the join.</li> <li>• The common table expression cannot be referenced more than once in a FROM clause and cannot be referenced in a subquery.</li> </ul> |
| <b>Recovery Text:</b>         | Correct the recursive common table expression. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -345  |
| <b>SQLSTATE or SQLSTATES:</b> | 42836   |

| <b>SQL0346</b>                |  |
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| <b>Message Text:</b>          | Recursion not allowed for common table expressions.  |
| <b>Cause Text:</b>            | The common table expression specified is not valid. The subselect for table &1 refers to itself. Recursive common table expressions are not allowed.   |
| <b>Recovery Text:</b>         | Change the common table expressions to refer to a table that exists or a common table expression that has already been defined. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -346   |
| <b>SQLSTATE or SQLSTATES:</b> | 42836  |

| <b>SQL0348</b>       |                                   |
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| <b>Message Text:</b> | &1 expression not used correctly. |

| <b>SQL0348</b>                |  |
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| <b>Cause Text:</b>            | <p>The &amp;1 sequence expression for &amp;2 in &amp;3 is not allowed. A NEXT VALUE or PREVIOUS VALUE sequence expression cannot be specified:</p> <ul style="list-style-type: none"> <li>• In a CREATE VIEW, CREATE TABLE, ALTER TABLE, or CREATE INDEX statement.</li> <li>• In a CREATE FUNCTION statement.</li> <li>• In a CHECK constraint.</li> <li>• In the XMLTABLE function.</li> </ul> <p>A PREVIOUS VALUE expression cannot be specified in a CREATE TRIGGER statement.</p> <p>A NEXT VALUE expression can only be specified:</p> <ul style="list-style-type: none"> <li>• In the SELECT clause of the outermost SELECT. It cannot be used if the outermost SELECT uses the DISTINCT keyword, contains a GROUP BY or ORDER BY clause, or is part of a fullselect. It cannot be used in a CASE expression or a START WITH or CONNECT BY clause.</li> <li>• In the SELECT clause of the outermost SELECT of a common table expression. It cannot be used if the outermost SELECT uses the DISTINCT keyword, contains a GROUP BY or ORDER BY clause, or is part of a fullselect.</li> <li>• As an expression in the SET clause of an UPDATE. It cannot be used in a subselect in the SET clause of an UPDATE.</li> <li>• As an INSERT value in either the VALUES clause or in the SELECT clause of the fullselect.</li> <li>• As a value in an SET or VALUES statement.</li> </ul> |
| <b>Recovery Text:</b>         | Remove the NEXT VALUE or PREVIOUS VALUE expression.  |
| <b>SQLCODE or SQLCODEs:</b>   | -348   |
| <b>SQLSTATE or SQLSTATES:</b> | 428F9  |

| <b>SQL0350</b>                |  |
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| <b>Message Text:</b>          | Column &1 not valid.   |
| <b>Cause Text:</b>            | <p>One of the following errors has occurred:</p> <ul style="list-style-type: none"> <li>• A LOB, DataLink, or XML column is not valid as a key field, the key of an index, or the foreign key of a referential constraint.</li> <li>• A LOB or XML column is not allowed in the WHERE clause of an index.</li> <li>• A DataLink column with the FILE LINK CONTROL option cannot be in a table in QTEMP, QSYS, QSYS2, or SYSIBM, or in a temporary table.</li> <li>• A column that is a LOB, ROWID, DataLink, or XML type or a distinct type based on a LOB, ROWID, Datalink, or XML type is not valid as a partitioning key column for RANGE partitioning. A partitioning key column cannot be defined AS IDENTITY.</li> </ul> |
| <b>Recovery Text:</b>         | Remove the LOB, DataLink, or XML column from the specification of the table, index, key, or constraint.  |
| <b>SQLCODE or SQLCODEs:</b>   | -350   |
| <b>SQLSTATE or SQLSTATES:</b> | 42962  |

| <b>SQL0351</b>                |  |
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| <b>Message Text:</b>          | The AR is not at the same level and DB2 cannot transform the data type to a compatible type.   |
| <b>Cause Text:</b>            | The data type of entry &1 is not supported on the Application Requester. The usual cause is that the Application Requester is at less than Level 6 for the SQL Access Manager, and the Application Server cannot transform the data type to a compatible type. It can also mean that an attempt was made to use SQLCI (SQL Client Integration) with an unsupported data type such as BLOB or DataLink. It can also mean an array variable has been passed in an SQLDA. |
| <b>Recovery Text:</b>         | Change the data type to one that is supported by the corresponding Application Requester or SQLCI.   |
| <b>SQLCODE or SQLCODEs:</b>   | -351   |
| <b>SQLSTATE or SQLSTATES:</b> | 56084  |

| <b>SQL0352</b>                |   |
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| <b>Message Text:</b>          | The AS is not at the same level and DB2 cannot transform the data type to a compatible type.  |
| <b>Cause Text:</b>            | The data type of entry &1 is not supported on the Application Server. The Application Server is at less than Level 6 for the SQL Access Manager, and the Application Requester cannot transform the data type to a compatible type. |
| <b>Recovery Text:</b>         | Change the data type to one that is supported by the corresponding Application Server.  |
| <b>SQLCODE or SQLCODEs:</b>   | -352  |
| <b>SQLSTATE or SQLSTATES:</b> | 56084   |

| <b>SQL0356</b>        |  |
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| <b>Message Text:</b>  | Index expression &1 not valid.   |
| <b>Cause Text:</b>    | <p>Index expression &amp;1 is not valid. If the expression number is 0, either the expression is referenced in the WHERE clause or INCLUDE clause, or the index key column number is not known. The expression is not valid for one of the following reasons:</p> <ul style="list-style-type: none"> <li>• The expression does not reference a column.</li> <li>• The expression refers to a special register or global variable.</li> <li>• The expression contains a subselect.</li> <li>• The expression contains ROW CHANGE TIMESTAMP or ROW CHANGE TOKEN.</li> <li>• The expression uses an aggregate function (such as AVG or COUNT), a function that is not deterministic, a user-defined function, or a system function that is not allowed.</li> <li>• The expression uses the NODENAME, DBPARTITIONNAME, DATAPARTITIONNAME, or DATAPARTITIONNUM scalar function.</li> <li>• The expression involves LOBs or XML.</li> <li>• The expression refers to a column that has a field procedure.</li> </ul> |
| <b>Recovery Text:</b> | Correct the error. Try the request again.  |

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| <b>SQL0356</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | -356  |
| <b>SQLSTATE or SQLSTATES:</b> | 429BX |

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| <b>SQL0357</b>                |  |
| <b>Message Text:</b>          | File server &1 used in DataLink not currently available.   |
| <b>Cause Text:</b>            | <p>Server &amp;1 in the URL of the DataLink value is not available for reason code &amp;2. The reason codes are as follows:</p> <ul style="list-style-type: none"> <li>• 1 The file server in a Datalink value is not available.</li> <li>• 2 The database server, instance, or database from which the operation was attempted is not registered with the file server.</li> <li>• 3 Restart recovery is pending or is in progress on a file server involved in the operation.</li> <li>• 4 The file server in a Datalink value is registered with the database but is an unknown server.</li> </ul> |
| <b>Recovery Text:</b>         | Verify that the server is running and can be accessed. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -357   |
| <b>SQLSTATE or SQLSTATES:</b> | 57050  |

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| <b>SQL0358</b>                |   |
| <b>Message Text:</b>          | Error &1 occurred using DataLink data type.   |
| <b>Cause Text:</b>            | <p>An error occurred while using a DataLink. Possible errors are:</p> <ul style="list-style-type: none"> <li>• Error type 21 is format of DataLink value not valid.</li> <li>• Error type 22 is the DataLink File Manager (DLFM) is not properly configured on the server.</li> <li>• Error type 23 is link type not valid.</li> <li>• Error type 24 is file does not exist.</li> <li>• Error type 25 is file already linked.</li> <li>• Error type 26 is file not available.</li> <li>• Error type 27 is length of comment or URL not valid.</li> <li>• Error type 28 is user not authorized to link the file.</li> <li>• Error type 29 is datalink cannot be unlinked.</li> </ul> |
| <b>Recovery Text:</b>         | Correct that error in the DataLink and try the request again. For error type 22, it may be that the host database or the prefix have not been added to the DLFM on the server. If that is the case, use the commands Add Host Database to DLFM (ADDHDBDLFM) or Add Prefix to DLFM (ADDPFXDLFM) to correct the error.  |
| <b>SQLCODE or SQLCODEs:</b>   | -358  |
| <b>SQLSTATE or SQLSTATES:</b> | 428D1   |

| <b>SQL0359</b>                |   |
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| <b>Message Text:</b>          | Value for identity column or sequence not available.  |
| <b>Cause Text:</b>            | The value for the identity column or sequence is not available for one of the following reasons: <ul style="list-style-type: none"> <li>• The INSERT or UPDATE statement cannot be run because all values for the identity column have already been assigned.</li> <li>• The NEXT VALUE expression cannot be evaluated because all values for the sequence have already been assigned.</li> </ul> |
| <b>Recovery Text:</b>         | For identity columns, alter the column to allow a larger range of values for the identity column or alter the column to allow for cycling of identity values. For sequences, alter the sequence to allow a larger range of values or to allow cycling of the sequence.  |
| <b>SQLCODE or SQLCODEs:</b>   | -359  |
| <b>SQLSTATE or SQLSTATEs:</b> | 23522   |

| <b>SQL0360</b>                |   |
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| <b>Message Text:</b>          | DataLink in table &1 in &2 may not be valid due to pending links.   |
| <b>Cause Text:</b>            | Table &1 in schema &2 has DataLinks in link pending mode. While the DataLink can be retrieved using FETCH or SELECT INTO, the DataLink may not be valid because the table has DataLinks in link pending mode. |
| <b>Recovery Text:</b>         | Verify that the value retrieved is a valid URL. The command WRKPFDL (Work with Physical File DataLinks) can be used to determine which tables have DataLinks in link pending mode.                            |
| <b>SQLCODE or SQLCODEs:</b>   | +360  |
| <b>SQLSTATE or SQLSTATEs:</b> | 01627   |

| <b>SQL0362</b>                |   |
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| <b>Message Text:</b>          | Flagging detected an error in the current SQL statement.  |
| <b>Cause Text:</b>            | The SQL statement contains syntax that is not standard at position &1.  |
| <b>Recovery Text:</b>         | See previous messages in the job log for a more complete description of the error. If conformance to the standard is needed, change the statement to conform and try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | +362  |
| <b>SQLSTATE or SQLSTATEs:</b> | 0168I   |

| <b>SQL0363</b>       |  |
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| <b>Message Text:</b> | Extended indicator variable value for item &1 not valid.   |
| <b>Cause Text:</b>   | The value of the extended indicator variable for item &1 was not within the range of acceptable values. The value must be positive or in the range of 0 to -7 inclusive. |

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| <b>SQL0363</b>                |   |
| <b>Recovery Text:</b>         | Change the value of the extended indicator variable to one which is allowed for the statement or context in which it was used. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -363  |
| <b>SQLSTATE or SQLSTATES:</b> | 22010   |

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| <b>SQL0364</b>                |  |
| <b>Message Text:</b>          | DECFLOAT exception &1 during arithmetic operation or assignment.   |
| <b>Cause Text:</b>            | The exception error &1 occurred while doing an addition, subtraction, multiplication, division, negation, or built-in function operation on a column whose data type is DECFLOAT. Overflow and underflow exceptions may also occur on assignment to a DECFLOAT column. The possible exception types are: <ul style="list-style-type: none"> <li>• 1 - underflow.</li> <li>• 2 - overflow.</li> <li>• 3 - inexact result.</li> <li>• 4 - operand not valid.</li> <li>• 5 - division by zero.</li> <li>• 6 - subnormal value.</li> </ul> |
| <b>Recovery Text:</b>         | Examine the expression for which the warning occurred to see if the cause of the problem can be determined. The problem may be data-dependent. Execution of the statement continues.   |
| <b>SQLCODE or SQLCODEs:</b>   | +364   |
| <b>SQLSTATE or SQLSTATES:</b> | 0168C, 0168D, 0168E, 0168F, 0168G  |

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| <b>SQL0365</b>                |  |
| <b>Message Text:</b>          | Use of extended indicator variable value for item &1 not valid.  |
| <b>Cause Text:</b>            | The value of DEFAULT or UNASSIGNED was used for an extended indicator variable for item &1 in a context in which it is not allowed. These values are only allowed in INSERT, MERGE, and UPDATE statements. |
| <b>Recovery Text:</b>         | Change the extended indicator variable to an allowable value for the context in which it was used. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -365   |
| <b>SQLSTATE or SQLSTATES:</b> | 22539  |

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| <b>SQL0372</b>       |   |
| <b>Message Text:</b> | Only one ROWID, IDENTITY, or ROW CHANGE TIMESTAMP column allowed.   |
| <b>Cause Text:</b>   | Column &1 cannot be created in table &2 in &3 because column &4 has already been defined. There can be at most one IDENTITY column, one ROWID column, and one ROW CHANGE TIMESTAMP column defined in a table. |

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| <b>SQL0372</b>                |   |
| <b>Recovery Text:</b>         | Remove one of the columns or change the attributes so that only a single column is defined as ROWID, as an IDENTITY column, or as a ROW CHANGE TIMESTAMP column. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -372  |
| <b>SQLSTATE or SQLSTATES:</b> | 428C1   |

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| <b>SQL0373</b>                |  |
| <b>Message Text:</b>          | DEFAULT cannot be specified for column &1.   |
| <b>Cause Text:</b>            | <p>One of the following has occurred:</p> <ul style="list-style-type: none"> <li>• The DEFAULT clause is specified for an IDENTITY column, ROWID column, ROW CHANGE TIMESTAMP, or an XML column on the CREATE TABLE or ALTER TABLE statement.</li> <li>• A SET statement is specified in an SQL trigger that assigns DEFAULT to an IDENTITY column, a ROWID column, an XML column, or a ROW CHANGE TIMESTAMP column that was defined as GENERATED BY DEFAULT.</li> </ul> |
| <b>Recovery Text:</b>         | Remove the DEFAULT clause from the definition of the column or change the SET statement so it does not assign a value of DEFAULT. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -373   |
| <b>SQLSTATE or SQLSTATES:</b> | 42623  |

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| <b>SQL0385</b>                |  |
| <b>Message Text:</b>          | SQL routine &1 in &2 created with assignment to SQLCODE or SQLSTATE.   |
| <b>Cause Text:</b>            | SQL routine &1 in schema &2 was created, but contains an assignment statement that specifies the SQLCODE or SQLSTATE variable as the target. Assignment statements that modify SQLCODE and SQLSTATE only change the value in the variable, the error or warning is not signaled. |
| <b>Recovery Text:</b>         | No recovery is necessary. If the intent was to signal an error or warning, specify the SIGNAL or RESIGNAL statement instead of the assignment.   |
| <b>SQLCODE or SQLCODEs:</b>   | +385   |
| <b>SQLSTATE or SQLSTATES:</b> | 01643  |

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| <b>SQL0387</b>              |   |
| <b>Message Text:</b>        | No additional result sets returned.   |
| <b>Cause Text:</b>          | Procedure &1 in &2 was defined to return a maximum number of &4 result sets. The procedure returned &3 result sets. |
| <b>Recovery Text:</b>       | None.   |
| <b>SQLCODE or SQLCODEs:</b> | +387  |



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| <b>SQL0387</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 02001 |

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| <b>SQL0390</b>                |   |
| <b>Message Text:</b>          | Use of function &1 in &2 not valid.   |
| <b>Cause Text:</b>            | <p>Use of function &amp;1 in schema &amp;2 is not valid. The specific name is &amp;3. One of the following has occurred:</p> <ul style="list-style-type: none"> <li>• A table function was specified in a clause other than the FROM clause.</li> <li>• A function was specified in the FROM clause but the function is not a table function.</li> <li>• A table function was specified as a source function in a CREATE FUNCTION statement.</li> <li>• UNNEST was specified but is only allowed in SQL procedures and functions.</li> <li>• WITH RETURN was specified for a cursor that has a function with an array result in the select-list.</li> </ul> |
| <b>Recovery Text:</b>         | Remove the function from the clause or change the function name, arguments, or path so that a different function is found. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -390  |
| <b>SQLSTATE or SQLSTATES:</b> | 42887   |

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| <b>SQL0391</b>                |  |
| <b>Message Text:</b>          | Table function cannot be argument of function &1.  |
| <b>Cause Text:</b>            | The table designator for a table function cannot be used as the argument of function &1 in schema &2.                    |
| <b>Recovery Text:</b>         | Use a table designator that does not represent a table function as the argument of this function. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -391   |
| <b>SQLSTATE or SQLSTATES:</b> | 42881  |

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| <b>SQL0392</b>                |  |
| <b>Message Text:</b>          | Assignment of LOB or XML to specified host variable not allowed.   |
| <b>Cause Text:</b>            | The target host variable for all fetches of this LOB or XML value for cursor &1 must be a locator, a LOB host variable, or an XML host variable.   |
| <b>Recovery Text:</b>         | Change the target of this fetch to either a LOB or XML host variable or a LOB or XML locator to be consistent with other fetches for this cursor. If it is necessary to use both host variables and locators as targets for this fetch, use the *NOOPTLOB compiler option. |
| <b>SQLCODE or SQLCODEs:</b>   | -392   |
| <b>SQLSTATE or SQLSTATES:</b> | 42855  |

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| <b>SQL0393</b>                |  |
| <b>Message Text:</b>          | Value specified for condition or diagnostic is not valid.  |
| <b>Cause Text:</b>            | The value specified for the DIAGNOSTICS SIZE on the SET TRANSACTION statement is out of range, or the condition number specified on the GET DIAGNOSTICS statement is greater than the number of conditions available for the previous SQL statement. |
| <b>Recovery Text:</b>         | Specify a correct value.   |
| <b>SQLCODE or SQLCODEs:</b>   | -393   |
| <b>SQLSTATE or SQLSTATES:</b> | 35000  |

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| <b>SQL0398</b>                |   |
| <b>Message Text:</b>          | AS LOCATOR can only be specified for a LOB or XML parameter.  |
| <b>Cause Text:</b>            | AS LOCATOR is only allowed for LOB or XML parameters and return values of a procedure or function. AS LOCATOR is not allowed for arrays. AS LOCATOR was specified for parameter or return value &1. |
| <b>Recovery Text:</b>         | Use AS LOCATOR only for a LOB or XML parameter or return value of a procedure or function.  |
| <b>SQLCODE or SQLCODEs:</b>   | -398  |
| <b>SQLSTATE or SQLSTATES:</b> | 428D2   |

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| <b>SQL0399</b>                |  |
| <b>Message Text:</b>          | Value for ROWID column &1 not valid.   |
| <b>Cause Text:</b>            | The INSERT or UPDATE statement cannot be run because the value specified for ROWID column &1 is not valid. |
| <b>Recovery Text:</b>         | Remove column &1 from the column list or specify a valid ROWID value or DEFAULT for column &1.             |
| <b>SQLCODE or SQLCODEs:</b>   | -399   |
| <b>SQLSTATE or SQLSTATES:</b> | 22511  |

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| <b>SQL0401</b>       |   |
| <b>Message Text:</b> | Comparison operator &1 operands not compatible. |

| <b>SQL0401</b>                |  |
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| <b>Cause Text:</b>            | <p>The operands of comparison operator &amp;1 are not compatible.</p> <ul style="list-style-type: none"> <li>• Numeric operands are compatible with any other numeric operands and with character and graphic operands.</li> <li>• Character operands are compatible with operands that are character, graphic, date, time, timestamp, or numeric.</li> <li>• Date, time, and timestamp operands are compatible with character and graphic operands or with another operand of the same type. Date and timestamp operands are also compatible.</li> <li>• Graphic operands are compatible with graphic, character, date, time, timestamp, or numeric operands.</li> <li>• Binary operands are compatible only with binary operands.</li> <li>• Operands that are user-defined types can only be compared to operands that are the same exact type.</li> <li>• DataLink operands cannot be compared.</li> <li>• XML operands cannot be compared.</li> </ul> |
| <b>Recovery Text:</b>         | <p>Check the data types of all operands to see if the data types are compatible. If all the operands of the SQL statement are correct and a view is being accessed, then check the data types of all the operands in the view definition. Correct the errors. Try the request again.</p>   |
| <b>SQLCODE or SQLCODEs:</b>   | -401   |
| <b>SQLSTATE or SQLSTATES:</b> | 42818  |

| <b>SQL0402</b>                |   |
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| <b>Message Text:</b>          | &1 use not valid.   |
| <b>Cause Text:</b>            | <p>An operand has been specified for the arithmetic function or operator &amp;1 that is not valid.</p> <ul style="list-style-type: none"> <li>• User-defined types cannot be specified as operands of operators or scalar functions. User-defined types can only be specified with operators and within user-defined functions created specifically for that type.</li> <li>• The operand of DIGITS can be any numeric or numeric compatible type except floating-point or decimal floating-point.</li> <li>• The operand of SMALLINT, FLOAT, REAL, DOUBLE or DOUBLE_PRECISION, and DECFLOAT cannot be date, time, or timestamp.</li> <li>• The other functions or operators require numeric or numeric compatible operands.</li> </ul> |
| <b>Recovery Text:</b>         | <p>Ensure all operands of function or operator &amp;1 are valid. Correct the operands. Try the request again.</p>   |
| <b>SQLCODE or SQLCODEs:</b>   | -402  |
| <b>SQLSTATE or SQLSTATES:</b> | 42819   |



| <b>SQL0406</b>                |  |
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| <b>Cause Text:</b>            | <p>During an attempt to assign a value to column &amp;2 with an INSERT, UPDATE, ALTER TABLE, or REFRESH TABLE statement, conversion error type &amp;3 occurred. If precompiling, the error occurred when converting a numeric constant to the same attributes as column &amp;2. A list of the error types follows:</p> <ul style="list-style-type: none"> <li>• Error type 1 is overflow.</li> <li>• Error type 2 is floating point overflow.</li> <li>• Error type 3 is floating point underflow.</li> <li>• Error type 4 is a floating point conversion error.</li> <li>• Error type 5 is not an exact result.</li> <li>• Error type 6 is numeric data that is not valid.</li> <li>• Error type 7 is DBCS data that is not valid.</li> </ul> |
| <b>Recovery Text:</b>         | Change the statement so that the result value fits in column &2 and is valid, or create the table or view again, specifying a new type or length for column &2 so that the result value can be assigned.   |
| <b>SQLCODE or SQLCODEs:</b>   | -406   |
| <b>SQLSTATE or SQLSTATES:</b> | 22003, 22023, 22504  |

| <b>SQL0407</b>       |   |
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| <b>Message Text:</b> | Null values not allowed in column or variable &5.   |
| <b>Cause Text:</b>   | <p>One of the following has occurred:</p> <ul style="list-style-type: none"> <li>• Column &amp;5 is a target column in an UPDATE, INSERT, or MERGE statement for table &amp;3 in &amp;4. Either a null value was specified to be inserted or updated into this column or a value for the column was not specified in an INSERT and the column does not allow null values. The null value was specified in the relative entry number &amp;6 in the VALUES list, select list, or SET clause.</li> <li>• Column &amp;5 is specified in an ALTER statement for table &amp;3 in &amp;4. The attribute of column &amp;5 can not be changed to NOT NULL because a null value exists in relative entry number &amp;6 of the column.</li> <li>• Variable &amp;5 is a target variable in an SQL procedure, function, or trigger. A null value was specified to be set into this variable using a SET or VALUES statement, but the variable does not allow null values. The null value was specified in relative entry number &amp;6 in the SET or VALUES INTO clause.</li> </ul> <p>The null value was specified as either NULL, a host variable with an associated indicator variable that contains a negative value, a column containing a null value, or an expression that evaluated to NULL. If it is a host variable or column then the name is &amp;7.</p> <p>The null value for a column may be disallowed by a CHECK constraint that was added implicitly to enforce the NOT NULL attribute of the column specified on the CREATE or ALTER of the column.</p> <p>The null value for a column may be disallowed by a CHECK constraint that was added implicitly to enforce the partitioning key attributes of the column specified for the base table on the CREATE TABLE or ALTER TABLE statement.</p> |

| <b>SQL0407</b>                |  |
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| <b>Recovery Text:</b>         | If this is an ALTER TABLE statement, change the existing null values in the column to a non-null value. Otherwise, change the value so the result is not null. If a host variable is specified, change the value in the related indicator variable to be greater than or equal to zero. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -407   |
| <b>SQLSTATE or SQLSTATES:</b> | 23502  |

| <b>SQL0408</b>                |   |
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| <b>Message Text:</b>          | Value for column, variable, or parameter &1 not compatible.   |
| <b>Cause Text:</b>            | <p>The data type of the source value is not compatible with the data type of the target column, variable, or parameter &amp;1. If the statement is INSERT or UPDATE, &amp;1 is a column in table &amp;2 in schema &amp;3.</p> <ul style="list-style-type: none"> <li>• Any numeric type value can be assigned to any numeric, character, or graphic type.</li> <li>• Any character or graphic value can be assigned to any character, graphic, or numeric type.</li> <li>• Any binary value can be assigned to any binary type.</li> <li>• A date, time, or timestamp value can be assigned to any character or graphic type.</li> <li>• Any character or graphic value can be assigned to a date, time, or timestamp type.</li> <li>• A date value can be assigned to a date or timestamp.</li> <li>• A time value can be assigned to a time.</li> <li>• A timestamp value can be assigned to a date, time, or timestamp.</li> <li>• A value being assigned to a user-defined type must be promotable to the source type.</li> <li>• The DLVALUE function must be specified when assigning to a DataLink.</li> <li>• An XML value can only be assigned to an XML type.</li> <li>• A result set locator value can be assigned to a result set locator.</li> </ul> |
| <b>Recovery Text:</b>         | Change the value assigned to &1 to one that is compatible. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -408  |
| <b>SQLSTATE or SQLSTATES:</b> | 42821   |

| <b>SQL0410</b>              |  |
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| <b>Message Text:</b>        | Floating point literal &1 not valid.   |
| <b>Cause Text:</b>          | The number of characters in the floating point constant &1 cannot exceed 42 excluding leading zeros. The number of digits in the first number cannot exceed 34 excluding leading zeros, and the number of digits in the second number cannot exceed 4. |
| <b>Recovery Text:</b>       | Correct the indicated literal &1. Make certain that the floating point literal is in the correct form shown by the following examples: +1.2E+3, 15E1, 2.E5, 2.2e-1, +5.E+2, -.1e1. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b> | -410   |

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| <b>SQL0410</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 42820 |

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| <b>SQL0412</b>                |   |
| <b>Message Text:</b>          | Subselect with more than one result column not valid.   |
| <b>Cause Text:</b>            | The subselect of a predicate must have only one result column specified when the other operand of the predicate is a single expression. The result of the subselect can be zero, one, or many rows to form a list, but it must have only one result column. |
| <b>Recovery Text:</b>         | Change the number of items returned by the subselect so only one result column is specified or change the other operand of the predicate to be a list of expressions.   |
| <b>SQLCODE or SQLCODEs:</b>   | -412  |
| <b>SQLSTATE or SQLSTATES:</b> | 42823   |

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| <b>SQL0414</b>                |   |
| <b>Message Text:</b>          | Operand not valid in LIKE predicate.  |
| <b>Cause Text:</b>            | Operand 1 of a LIKE predicate has a type of date, time, timestamp, or DataLink or is a user-defined type. Operands specified in LIKE predicates must be binary, character, graphic, or numeric. If the ESCAPE character is specified, operand 1 cannot be DBCS-only. If the operand is a column, the column name is &1. |
| <b>Recovery Text:</b>         | Change operand 1 of the LIKE predicate to be a binary, character, graphic, or numeric type. Use a different predicate for date, time, or timestamp comparisons. Do not specify an ESCAPE character if operand 1 is DBCS-only. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -414  |
| <b>SQLSTATE or SQLSTATES:</b> | 42824   |

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| <b>SQL0415</b>        |  |
| <b>Message Text:</b>  | Operands of set operation, array constructor, or VALUES not compatible.  |
| <b>Cause Text:</b>    | <p>Column &amp;2 is not compatible with the corresponding column in another subselect of the UNION, EXCEPT, or INTERSECT, in another row of a VALUES clause, or in another entry in an array constructor. The relative position of the value in the list is &amp;1. One of the following conditions might exist:</p> <ul style="list-style-type: none"> <li>• One column is character, graphic, or numeric and the other is not character, graphic, or numeric.</li> <li>• One of the columns is date, time, or timestamp and the other is not character or the same type. Date and timestamp are compatible.</li> <li>• One column is binary, and the other is not binary. If the column name is *N, the column is not a named column.</li> </ul> |
| <b>Recovery Text:</b> | Change the columns of the operands of the UNION, EXCEPT, INTERSECT, array constructor, or VALUES clause so that they are compatible. A casting function can be used to make the values compatible types. Try the request again.  |

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| <b>SQL0415</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | -415  |
| <b>SQLSTATE or SQLSTATES:</b> | 42825 |

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| <b>SQL0417</b>                |  |
| <b>Message Text:</b>          | Combination of parameter markers not valid.  |
| <b>Cause Text:</b>            | <p>The statement string specified as the object of a PREPARE statement contains a predicate or expression where parameter markers have been used as operands of the same operator. The following restrictions apply to the use of parameter markers:</p> <ul style="list-style-type: none"> <li>• Both the operands in a predicate cannot be parameter markers. For example, specifying predicates of the form:<br/> ?<br/>? = ?<br/>or<br/>? = ( SELECT ? FROM x )<br/>are not valid.</li> <li>• Both the operands in a expression cannot be parameter markers. For example, specifying an expression of the form:<br/> ? + ?<br/>is not valid.</li> <li>• At least one of the operands in the BETWEEN predicate cannot be a parameter marker. For example, specifying the predicate of the form:<br/> ? BETWEEN ? and ?<br/>is not valid.</li> <li>• At least, one of the operands of the IN predicate must not be a parameter marker. For example, specifying the predicate of the form:<br/> ? IN (?, ?, ?)<br/>is not valid.</li> </ul> |
| <b>Recovery Text:</b>         | Correct the statement so that all operands of the predicate or expression are not parameter markers. A CAST specification can be used in most cases to assign attributes to a parameter marker. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -417   |
| <b>SQLSTATE or SQLSTATES:</b> | 42609  |

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| <b>SQL0418</b>       |  |
| <b>Message Text:</b> | Use of parameter marker or NULL not valid. |



| <b>SQL0418</b>                |  |
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| <b>Cause Text:</b>            | <p>Parameter markers and NULL are not allowed:</p> <ul style="list-style-type: none"> <li>• As an operand of some scalar functions. If the scalar function is VALUE, COALESCE, IFNULL, NULLIF, MIN, MAX, LAND, LOR, XOR, BITAND, BITANDNOT, BITOR, BITXOR, or BITNOT then at least one of the arguments must be a value that is not a parameter marker or NULL.</li> </ul> <p>Parameter markers are also not allowed:</p> <ul style="list-style-type: none"> <li>• In the SELECT clause of the statement string to be prepared.</li> <li>• As a value in a VALUES INTO statement.</li> <li>• In an SQL statement in embedded SQL or in interactive SQL.</li> <li>• In an EXECUTE IMMEDIATE statement.</li> <li>• In a CREATE VIEW, CREATE TABLE, ALTER TABLE, CREATE INDEX, CREATE MASK, or CREATE PERMISSION statement.</li> <li>• In a default value clause for a parameter in a CREATE PROCEDURE or CREATE FUNCTION statement.</li> <li>• In a statement processed by the RUNSQLSTM or RUNSQL command.</li> <li>• In a blocked INSERT statement.</li> </ul> <p>The RAISE_ERROR scalar function cannot be used in expressions where a parameter marker is not allowed.</p> |
| <b>Recovery Text:</b>         | <p>Ensure parameter markers, NULL, and the RAISE_ERROR scalar function are only specified where they are allowed. A CAST specification can be used in many situations. See the PREPARE statement in the SQL Reference for details of where a parameter marker can be used. Correct any errors. Try the request again.</p>  |
| <b>SQLCODE or SQLCODEs:</b>   | -418   |
| <b>SQLSTATE or SQLSTATES:</b> | 42610  |

| <b>SQL0419</b>                |   |
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| <b>Message Text:</b>          | Negative scale not valid.   |
| <b>Cause Text:</b>            | <p>A decimal division operation has produced a negative scale. To view the algorithm used to determine the scale for decimal division, refer to the DB2 for i SQL Reference topic collection in the Database category in the IBM i Information Center, <a href="http://www.ibm.com/systems/i/infocenter/">http://www.ibm.com/systems/i/infocenter/</a>.</p>   |
| <b>Recovery Text:</b>         | <p>Change one of the operands to floating point by using the FLOAT or DECFLOAT scalar function. This will change the result of division to floating point. If a decimal result is desired, use the DECIMAL scalar function in the floating point result. If one of the operands is integer, small integer, or big integer, SQL has converted it to decimal prior to the division. The DECIMAL function can be used to explicitly convert the integer, small integer, or big integer to a precision that will not cause the division to produce a negative scale. Try the request again.</p> |
| <b>SQLCODE or SQLCODEs:</b>   | -419  |
| <b>SQLSTATE or SQLSTATES:</b> | 42911   |

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| <b>SQL0420</b>                |  |
| <b>Message Text:</b>          | Character in CAST argument not valid.  |
| <b>Cause Text:</b>            | A character in the argument for the CAST function was not correct.   |
| <b>Recovery Text:</b>         | Change the result data type to one that recognizes the characters in the CAST argument, or change the argument to contain a valid representation of a value for the result data type. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | +420, -420   |
| <b>SQLSTATE or SQLSTATES:</b> | 01565, 22018   |

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| <b>SQL0421</b>                |   |
| <b>Message Text:</b>          | Number of columns not consistent.   |
| <b>Cause Text:</b>            | The subselects of a UNION, INTERCEPT, or EXCEPT must have the same number of result columns. All rows specified for a multiple row insert or for a VALUES clause must have the same number of values. |
| <b>Recovery Text:</b>         | Correct the SQL statement so that the same number of columns are defined for each row. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -421  |
| <b>SQLSTATE or SQLSTATES:</b> | 42826   |

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| <b>SQL0423</b>                |  |
| <b>Message Text:</b>          | Locator &1 not valid.  |
| <b>Cause Text:</b>            | The value of locator &1 is not currently valid. A LOB or XML locator may have been freed by a previous FREE LOCATOR statement or a COMMIT or ROLLBACK. A result set locator may have been freed by a CLOSE statement or a COMMIT or ROLLBACK. An ALLOCATE CURSOR statement cannot be run for a result set locator value that has already had a cursor allocated.   |
| <b>Recovery Text:</b>         | Ensure that the locator value refers to an active locator that has not been freed because of a FREE LOCATOR, CLOSE, COMMIT, or ROLLBACK statement. A LOB or XML value can be assigned to a locator variable using a SELECT INTO statement, a VALUES INTO or SET statement, a GET DESCRIPTOR statement, or a FETCH statement. A value can be assigned to a result set locator variable using an ASSOCIATE LOCATORS statement or a DESCRIBE PROCEDURE statement. |
| <b>SQLCODE or SQLCODEs:</b>   | -423   |
| <b>SQLSTATE or SQLSTATES:</b> | 0F001  |

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| <b>SQL0426</b>       |  |
| <b>Message Text:</b> | Dynamic COMMIT is not valid for the application environment.   |
| <b>Cause Text:</b>   | An application using DRDA two-phase commit protocols has attempted to issue a dynamic COMMIT, or has called a stored procedure which performed a COMMIT ON RETURN. |

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| <b>SQL0426</b>                |   |
| <b>Recovery Text:</b>         | Remove the dynamic COMMIT statement, or change the stored procedure definition to not use COMMIT ON RETURN. |
| <b>SQLCODE or SQLCODEs:</b>   | -426  |
| <b>SQLSTATE or SQLSTATES:</b> | 2D528   |

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| <b>SQL0427</b>                |   |
| <b>Message Text:</b>          | Dynamic ROLLBACK is not valid for the application environment.                                  |
| <b>Cause Text:</b>            | An application using DRDA two-phase commit protocols has attempted to issue a dynamic ROLLBACK. |
| <b>Recovery Text:</b>         | Remove the dynamic ROLLBACK statement.  |
| <b>SQLCODE or SQLCODEs:</b>   | -427  |
| <b>SQLSTATE or SQLSTATES:</b> | 2D529   |

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| <b>SQL0428</b>       |   |
| <b>Message Text:</b> | SQL statement cannot be run.  |
| <b>Cause Text:</b>   | <p>A SET TRANSACTION, DISCONNECT, or SET SESSION AUTHORIZATION statement cannot be run in the current application state. The reason code is &amp;1. Reason codes and their meanings are:</p> <ul style="list-style-type: none"> <li>• 1 -- A connection is not at a commit boundary.</li> <li>• 2 -- The current server is a local relational database and there is an active connection to a remote relational database.</li> <li>• 3 -- The SYSTEM_USER is one of the system-supplied user profiles such as QSYS, QDFTOWN, or QSPL.</li> <li>• 4 -- A stored procedure, user-defined function, or trigger is running.</li> <li>• 5 -- Resources are being held because a COMMIT HOLD statement has been run.</li> <li>• 6 -- Resources are being held because a HOLD LOCATOR statement has been run.</li> <li>• 7 -- The maximum number of ProfileHandles have been generated.</li> </ul> |

| <b>SQL0428</b>                |   |
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| <b>Recovery Text:</b>         | <p>Do one of the following actions prior to running the SQL statement. Try the request again.</p> <ul style="list-style-type: none"> <li>• 1 -- If the connection is not at a commit boundary, issue a COMMIT or ROLLBACK SQL statement.</li> <li>• 2 -- If connections to remote relational databases are active, disconnect the remote connections.</li> <li>• 3 -- If the SYSTEM_USER is one of the system-supplied user profiles, sign-on with a different user profile.</li> <li>• 4 -- Run the SET SESSION AUTHORIZATION statement either before or after the stored procedure, user-defined function, or trigger is run.</li> <li>• 5 -- If resources are being held because a COMMIT HOLD has been run, issue a COMMIT or ROLLBACK SQL statement.</li> <li>• 6 -- If resources are being held because a HOLD LOCATOR has been run, issue a ROLLBACK or FREE LOCATOR SQL statement.</li> <li>• 7 -- If the maximum number of ProfileHandles have been generated, release some of the ProfileHandles that are no longer needed using the Release ProfileHandle (QSYRLSPH) program.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | -428  |
| <b>SQLSTATE or SQLSTATES:</b> | 25001, 25501  |

| <b>SQL0429</b>                |   |
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| <b>Message Text:</b>          | The maximum number of concurrent LOB and XML locators has been reached.   |
| <b>Cause Text:</b>            | The LOB or XML locator could not be generated because there are already 16000000 valid locators for this process. |
| <b>Recovery Text:</b>         | Use the FREE LOCATOR statement to free LOB or XML locators.   |
| <b>SQLCODE or SQLCODEs:</b>   | -429  |
| <b>SQLSTATE or SQLSTATES:</b> | 54028   |

| <b>SQL0432</b>                |   |
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| <b>Message Text:</b>          | A parameter marker cannot have the user-defined type name &1.   |
| <b>Cause Text:</b>            | A parameter marker in the statement has been determined as having the user-defined type &1 based on the context in which it is used. A parameter marker cannot have a user-defined type as its data type unless it is part of an assignment (VALUES clause of INSERT or SET clause of UPDATE) or it is being explicitly cast to a user-defined type using the CAST specification. |
| <b>Recovery Text:</b>         | Use an explicit cast to the user-defined distinct type for the parameter marker or cast the columns that are user-defined types to their corresponding source data type.  |
| <b>SQLCODE or SQLCODEs:</b>   | -432  |
| <b>SQLSTATE or SQLSTATES:</b> | 42841   |

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| <b>SQL0433</b>                |   |
| <b>Message Text:</b>          | Significant data truncated during CAST or XMLSERIALIZE.   |
| <b>Cause Text:</b>            | The length of the resulting character or graphic string is not large enough to hold the character representation of the value. This could happen for the CAST, XMLCAST, and XMLSERIALIZE functions. |
| <b>Recovery Text:</b>         | Change the result data type to a character or graphic string long enough to hold the result. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -433  |
| <b>SQLSTATE or SQLSTATES:</b> | 22001   |

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| <b>SQL0435</b>                |   |
| <b>Message Text:</b>          | SQLSTATE value &1 not valid.  |
| <b>Cause Text:</b>            | SQLSTATE value &1 specified in a handler or condition, in a SIGNAL or RESIGNAL statement, or in a RAISE_ERROR function is not valid. SQLSTATE values must have a length of 5 and must contain uppercase characters A-Z or numbers 0-9. The first two characters of the SQLSTATE value cannot be '00'. The SQLSTATE value in a RAISE_ERROR function cannot begin with '00', '01', or '02'. If the SQLSTATE value shown is '*N', an empty string or null value was passed for the SQLSTATE. |
| <b>Recovery Text:</b>         | Change the SQLSTATE to one that is valid. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -435  |
| <b>SQLSTATE or SQLSTATES:</b> | 428B3   |

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| <b>SQL0438</b>                |   |
| <b>Message Text:</b>          | Message &1 returned from SIGNAL, RESIGNAL, or RAISE_ERROR.  |
| <b>Cause Text:</b>            | An application has executed a SIGNAL or RESIGNAL statement, the RAISE_ERROR function has been invoked, or an error was signalled within a MERGE statement. If the application is an SQL procedure, function, trigger, or a compound (dynamic) statement, the SQLSTATE was not handled in the SQL routine. The message returned is &1. |
| <b>Recovery Text:</b>         | See the documentation for the application that issued the SIGNAL or RESIGNAL statement or invoked the RAISE_ERROR function.   |
| <b>SQLCODE or SQLCODEs:</b>   | +438, -438  |
| <b>SQLSTATE or SQLSTATES:</b> | 01xxx, XXXXX  |

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| <b>SQL0440</b>        |  |
| <b>Message Text:</b>  | Routine &1 in &2 not found with specified parameters.  |
| <b>Cause Text:</b>    | A function or procedure with the specified name and compatible arguments was not found.  |
| <b>Recovery Text:</b> | Specify the correct number and type of parameters on the CALL statement, CREATE OR REPLACE statement, or function invocation. Try the request again. |

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| <b>SQL0440</b>                |              |
| <b>SQLCODE or SQLCODEs:</b>   | +440, -440   |
| <b>SQLSTATE or SQLSTATES:</b> | 0168L, 42884 |

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| <b>SQL0441</b>                |  |
| <b>Message Text:</b>          | Clause or keyword &1 not valid where specified.  |
| <b>Cause Text:</b>            | <p>One of the following errors has occurred:</p> <ul style="list-style-type: none"> <li>AS LOCATOR is specified for a parameter in a procedure or as a parameter or in the RETURNS clause of a function and the parameter is defined as BLOB, CLOB, or DBCLOB and a length, a CCSID value, or a FOR BIT DATA, FOR MIXED DATA, or FOR SBCS DATA clause was specified.</li> <li>ALL or DISTINCT is specified in a function that is not an aggregate function.</li> </ul> |
| <b>Recovery Text:</b>         | Remove the clause that is not correct. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -441   |
| <b>SQLSTATE or SQLSTATES:</b> | 42601  |

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| <b>SQL0442</b>                |  |
| <b>Message Text:</b>          | Too many parameters for procedure &1 in &2 on CALL statement.  |
| <b>Cause Text:</b>            | Only 1024 parameters are allowed on the CALL statement. If the procedure is a REXX procedure, only 32766 bytes of data can be passed on the CALL statement.                                    |
| <b>Recovery Text:</b>         | Reduce the number of parameters specified to the maximum of 1024. If calling a REXX procedure, limit the total number of bytes of parameter data to be less than 32766. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -442   |
| <b>SQLSTATE or SQLSTATES:</b> | 54023  |

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| <b>SQL0443</b>              |   |
| <b>Message Text:</b>        | Trigger program or external routine detected an error.  |
| <b>Cause Text:</b>          | Either a trigger program, external procedure, or external function detected and returned an error to SQL. If the error occurred in a trigger program, the trigger was on table &4 in schema &5. If the error occurred in an external procedure or function, the external name is &4 in schema &5. The associated text is &6. If the error occurred in a trigger program, the associated text is the type of trigger program. If the error occurred in an external function, the associated text is the text of the error message returned from the external function. |
| <b>Recovery Text:</b>       | Refer to the joblog for more information regarding the detected error. Correct the error and try the request again.   |
| <b>SQLCODE or SQLCODEs:</b> | -443  |

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| <b>SQL0443</b>                |              |
| <b>SQLSTATE or SQLSTATES:</b> | 38501, 38xxx |

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| <b>SQL0444</b>                |  |
| <b>Message Text:</b>          | External program &4 in &5 not found.   |
| <b>Cause Text:</b>            | An attempt was made to CALL procedure or invoke function &1 in &2. External program or service program &4 in schema &5 was not found.  |
| <b>Recovery Text:</b>         | The external program or service program associated with the procedure or function cannot be found. Ensure that an object exists with the name specified on the DECLARE PROCEDURE, CREATE PROCEDURE, CREATE FUNCTION, ALTER PROCEDURE, or ALTER FUNCTION statement. If no name was specified, ensure that an object with a name which matches the procedure or function name specified exists. If a program name was specified, a program object must exist. If an entry point name was specified, then a service program object must exist. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -444   |
| <b>SQLSTATE or SQLSTATES:</b> | 42724  |

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| <b>SQL0445</b>                |   |
| <b>Message Text:</b>          | A value was truncated.  |
| <b>Cause Text:</b>            | If the value was truncated when calling a procedure, the value of parameter &4 in procedure &1 in &2 was too long. Parameter &4, which is declared as OUT or INOUT, contains a value that is longer than the maximum length string that can be stored in host variable &8. Parameter &4 is being returned from procedure &1 in &2 to host variable &8. The length of the parameter is &6 and the length of the host variable is &7. Otherwise, the truncation occurred during another SQL operation.<br><br>Trailing blanks are not included in the length of the string for character values. Trailing hex zeros are not included in the length of the string for binary values. |
| <b>Recovery Text:</b>         | Increase the length of the host variable from &7 to &6, or ensure that the truncation is expected and has not caused any unexpected consequences.   |
| <b>SQLCODE or SQLCODEs:</b>   | +445  |
| <b>SQLSTATE or SQLSTATES:</b> | 01004   |

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| <b>SQL0446</b>       |  |
| <b>Message Text:</b> | Conversion error in assignment of argument &2. |

| <b>SQL0446</b>                |  |
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| <b>Cause Text:</b>            | <p>During an attempt to assign input argument number &amp;1 on a CALL statement to the corresponding parameter for the call, error type &amp;3 occurred. A list of the error types follows:</p> <ul style="list-style-type: none"> <li>• 1 - Overflow.</li> <li>• 2 - Floating point overflow.</li> <li>• 3 - Floating point underflow.</li> <li>• 4 - Floating point conversion error.</li> <li>• 5 - Not an exact result.</li> <li>• 6 - Numeric data is not valid.</li> <li>• 7 - Double-byte character set (DBCS) data is not valid.</li> </ul> <p>The parameter name is &amp;2.</p> |
| <b>Recovery Text:</b>         | Change the attribute declaration for parameter &1 in the CREATE, ALTER, or DECLARE PROCEDURE statement to match the attributes of argument &1 in the CALL statement or correct the data that is not valid. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -446   |
| <b>SQLSTATE or SQLSTATES:</b> | 22003  |

| <b>SQL0448</b>                |  |
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| <b>Message Text:</b>          | Too many parameters or result sets for routine &1 in &2.   |
| <b>Cause Text:</b>            | <p>One of the following limits has been exceeded:</p> <ul style="list-style-type: none"> <li>• 1024 parameters in a DECLARE PROCEDURE, CREATE PROCEDURE, or ALTER PROCEDURE statement. The actual number may be less and depends on the language.</li> <li>• 1023 parameters if GENERAL WITH NULLS is specified.</li> <li>• 195 parameters if PARAMETER STYLE SQL is specified with PROGRAM TYPE SUB.</li> <li>• 1024 parameters for an SQL procedure.</li> <li>• 90 parameters in a CREATE FUNCTION statement.</li> <li>• 124 parameters and return values in a CREATE FUNCTION(Table) statement.</li> <li>• 255 for languages other than C and C++.</li> <li>• 32767 result sets.</li> </ul> |
| <b>Recovery Text:</b>         | Reduce the number of parameters defined to the maximum or change the value for the number of result sets to be less than or equal to 32767. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -448   |
| <b>SQLSTATE or SQLSTATES:</b> | 54023  |

| <b>SQL0449</b>       |   |
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| <b>Message Text:</b> | External program name for routine &1 in &2 not valid. |



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| <b>SQL0449</b>                |  |
| <b>Cause Text:</b>            | <p>The external program name specified on a DECLARE PROCEDURE, CREATE PROCEDURE, CREATE FUNCTION, ALTER PROCEDURE, or ALTER FUNCTION statement is not valid for the routine or the language specified.</p> <ul style="list-style-type: none"> <li>• The external program name for a procedure or function must be of the form 'library-name/program-name' or 'library-name/program-name(entry-point-name)'.</li> <li>• The external program name for a JAVA procedure or function must be 'class-name!method-name' or 'class-name.method-name'.</li> <li>• The external program name for a REXX procedure must be 'library-name/source-file-name(member-name)'.</li> </ul> |
| <b>Recovery Text:</b>         | Specify the correct form of the external program name. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -449   |
| <b>SQLSTATE or SQLSTATES:</b> | 42878  |

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| <b>SQL0451</b>        |  |
| <b>Message Text:</b>  | Attributes of parameter &1 not valid for procedure or function &3 in &4.   |
| <b>Cause Text:</b>    | <p>The data type, length, or value of parameter &amp;1 is not valid for the language specified for procedure or function &amp;3 in &amp;4. The parameter name is &amp;2. A list of conditions for the parameters follows:</p> <ul style="list-style-type: none"> <li>• For C: NUMERIC is not a valid data type.</li> <li>• For C++: NUMERIC and DECFLOAT are not valid data types.</li> <li>• For PL/I: NUMERIC, BIGINT, DECFLOAT, GRAPHIC, VARGRAPHIC, CLOB, BLOB, DBCLOB, and XML are not valid data types.</li> <li>• For COBOL: precision for DECIMAL or NUMERIC cannot be greater than 18. FLOAT, DECFLOAT, GRAPHIC, BIGINT, VARGRAPHIC, CLOB, BLOB, DBCLOB, and XML are not valid data types.</li> <li>• For ILE COBOL: precision for DECIMAL or NUMERIC cannot be greater than 18. DECFLOAT is not valid.</li> <li>• For REXX: SMALLINT, BIGINT, NUMERIC, DECFLOAT, Unicode graphic, CLOB, BLOB, DBCLOB, and XML are not valid data types. FLOAT is not valid if the precision is from 1 to 24. Precision for DECIMAL cannot be greater than 63.</li> <li>• For ILE RPG: DECFLOAT is not a valid data type.</li> <li>• For RPG: FLOAT, DECFLOAT, BIGINT, VARCHAR, VARBINARY, GRAPHIC, VARGRAPHIC, CLOB, BLOB, DBCLOB, ROWID, and XML are not valid data types.</li> <li>• For CL: BIGINT, NUMERIC, VARCHAR, VARBINARY, FLOAT, DECFLOAT, GRAPHIC, VARGRAPHIC, CLOB, BLOB, DBCLOB, and XML are not valid data types. GENERAL WITH NULLS cannot be specified for CL.</li> <li>• DataLinks are not valid data types for parameters unless the routine is an SQL procedure or function.</li> <li>• LOBs with AS LOCATOR are not valid data types for parameters of an SQL procedure or function.</li> <li>• XML AS must be specified for the XML data type for external routines.</li> </ul> |
| <b>Recovery Text:</b> | Correct the data type or precision specified for the parameter on the DECLARE PROCEDURE, CREATE PROCEDURE, ALTER PROCEDURE, CREATE FUNCTION, or ALTER FUNCTION statement. Try the request again.   |

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| <b>SQL0451</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | -451  |
| <b>SQLSTATE or SQLSTATES:</b> | 42815 |

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| <b>SQL0452</b>                |   |
| <b>Message Text:</b>          | Unable to access a file that is referred to by a file reference variable.   |
| <b>Cause Text:</b>            | <p>The file referred to by the file reference variable (host variable &amp;1) could not be accessed because of reason code &amp;2. The reason codes and their meanings are:</p> <ul style="list-style-type: none"> <li>• 1 - The file name or path has a format that is not valid.</li> <li>• 2 - The length of the file name is greater than the maximum allowed length.</li> <li>• 3 - The file option is not valid.</li> <li>• 4 - The file or directory cannot be found.</li> <li>• 5 - A file already exists with the same name as that specified for a file that has the NEW option.</li> </ul>                                 |
| <b>Recovery Text:</b>         | <p>Do one of the following: If the reason code is 1, correct the format of the filename or path and then try the request again.</p> <ul style="list-style-type: none"> <li>• If the reason code is 2, correct the file name and then try the request again.</li> <li>• If the reason code is 3, correct the file option and then try the request again.</li> <li>• If the reason code is 4, specify SQL_FILE_CREATE for the file option, or verify the directory exists, and then try the request again.</li> <li>• If the reason code is 5, specify SQL_FILE_OVERWRITE or SQL_FILE_APPEND and then try the request again.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | -452  |
| <b>SQLSTATE or SQLSTATES:</b> | 428A1   |

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| <b>SQL0453</b>                |  |
| <b>Message Text:</b>          | Return type for function &1 in &2 not compatible with CAST TO type.  |
| <b>Cause Text:</b>            | The data types specified in the RETURNS clause for function &1 in &2 are not valid. The CAST TO and CAST FROM data types are not compatible. |
| <b>Recovery Text:</b>         | Correct the data type specified in the RETURNS clause for the function. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -453   |
| <b>SQLSTATE or SQLSTATES:</b> | 42880  |

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| <b>SQL0454</b>       |                                  |
| <b>Message Text:</b> | Routine &1 in &2 already exists. |

| <b>SQL0454</b>                |  |
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| <b>Cause Text:</b>            | One of the following has occurred: <ul style="list-style-type: none"> <li>• Procedure &amp;1 with the same number of parameters already exists in schema &amp;2. Procedures in a schema cannot have the same name and number of parameters.</li> <li>• Function &amp;1 with the same signature already exists in schema &amp;2. All functions in the same schema must have a unique signature. The database uses the name of the function and the number and data types of the arguments to determine the signature for the function.</li> </ul> |
| <b>Recovery Text:</b>         | Change the routine name or the parameters or drop the existing routine. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -454   |
| <b>SQLSTATE or SQLSTATES:</b> | 42723  |

| <b>SQL0455</b>                |   |
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| <b>Message Text:</b>          | Schema &2 for specific name not same as routine schema &3.  |
| <b>Cause Text:</b>            | The specific name schema &2 specified on a CREATE PROCEDURE, DECLARE PROCEDURE, or CREATE FUNCTION statement is not the same as schema &3 for procedure or function &1. |
| <b>Recovery Text:</b>         | Specify the same schema for the specific name as for the procedure or function name.  |
| <b>SQLCODE or SQLCODEs:</b>   | -455  |
| <b>SQLSTATE or SQLSTATES:</b> | 42882   |

| <b>SQL0456</b>                |  |
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| <b>Message Text:</b>          | Specific name &3 in &2 already exists.   |
| <b>Cause Text:</b>            | An attempt was made to create a function or procedure &1 in &2 with specific name &3, but specific name &3 already exists in the schema. All routines (functions and procedures) in the same schema must have unique specific names. |
| <b>Recovery Text:</b>         | Specify a SPECIFIC NAME that does not exist or do not specify a SPECIFIC NAME and a unique name will be generated for you. Otherwise, delete the existing routine. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -456   |
| <b>SQLSTATE or SQLSTATES:</b> | 42710  |

| <b>SQL0457</b>       |   |
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| <b>Message Text:</b> | Name &1 in &2 not allowed for function.   |
| <b>Cause Text:</b>   | Function &1 in &2 cannot be created or altered or cannot be used as the source function name. Either the function name is a reserved word or the schema is specified as QSYS, QSYS2, SYSIBM, SYSPROC, or QTEMP. Functions cannot be created or altered in QSYS, QSYS2, SYSIBM, SYSPROC, or QTEMP. |

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| <b>SQL0457</b>                |   |
| <b>Recovery Text:</b>         | Change the name of the function to one that is not reserved or specify a different schema. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -457  |
| <b>SQLSTATE or SQLSTATES:</b> | 42939   |

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| <b>SQL0458</b>                |   |
| <b>Message Text:</b>          | Function &1 in &2 not found with matching signature.  |
| <b>Cause Text:</b>            | Function &1 is specified in schema &2. The name of the function and the number and data types of the parameters make up the function signature. A function with a matching signature was not found. |
| <b>Recovery Text:</b>         | Ensure that the function name specified exists and that the number and data types of the parameters match those in the function definition. Try the request again.                                  |
| <b>SQLCODE or SQLCODEs:</b>   | -458  |
| <b>SQLSTATE or SQLSTATES:</b> | 42883   |

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| <b>SQL0460</b>                |   |
| <b>Message Text:</b>          | Truncation of data may have occurred for ALTER TABLE of &1 in &2.   |
| <b>Cause Text:</b>            | Table &1 in &2 has been altered. The length of column &3 has been reduced and data may have been truncated. |
| <b>Recovery Text:</b>         | No recovery is necessary.   |
| <b>SQLCODE or SQLCODEs:</b>   | +460  |
| <b>SQLSTATE or SQLSTATES:</b> | 01593   |

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| <b>SQL0461</b>                |  |
| <b>Message Text:</b>          | CAST from &1 to &2 not supported.  |
| <b>Cause Text:</b>            | CAST is not supported from data type &1 to data type &2. If the CAST is from date, time, or timestamp to character, the length of the character result is too small.             |
| <b>Recovery Text:</b>         | Change the result data type or length to one that is supported for the CAST function or change the expression to have a data type that can be cast to &2. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -461   |
| <b>SQLSTATE or SQLSTATES:</b> | 42846  |

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| <b>SQL0462</b>       |  |
| <b>Message Text:</b> | Procedure or user-defined function &1 in &2 returned a warning SQLSTATE. |

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| <b>SQL0462</b>                |  |
| <b>Cause Text:</b>            | An SQLSTATE of the form 01xxx was returned by the procedure or user-defined function &1 in &2 (with specific name &3), along with message text &4. |
| <b>Recovery Text:</b>         | The user must understand the meaning of the warning. See your database administrator, or the author of the user-defined function or procedure.     |
| <b>SQLCODE or SQLCODEs:</b>   | +462   |
| <b>SQLSTATE or SQLSTATEs:</b> | 01Hxx  |

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| <b>SQL0463</b>                |   |
| <b>Message Text:</b>          | SQLSTATE &4 returned from routine &1 in &2 not valid.   |
| <b>Cause Text:</b>            | SQLSTATE &4 cannot be returned from an external routine if PARAMETER STYLE SQL or DB2SQL is specified. Routine &1 in &2 is either an external procedure that was called or an external function that was invoked. The specific name is &3. The diagnostic text is &5. |
| <b>Recovery Text:</b>         | Change the external routine to only return a SQLSTATE that is valid for the PARAMETER STYLE SQL or DB2SQL. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -463  |
| <b>SQLSTATE or SQLSTATEs:</b> | 39001   |

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| <b>SQL0464</b>                |  |
| <b>Message Text:</b>          | Procedure &1 returned &3 result sets, which exceeds the defined limit of &4.   |
| <b>Cause Text:</b>            | <p>The stored procedure &amp;1 in &amp;2 was successful. However, the stored procedure exceeded the defined limit on the number of result sets that can be returned. Only &amp;4 result sets are returned to the SQL program that issued the SQL CALL statement.</p> <p>The possible causes are:</p> <ul style="list-style-type: none"> <li>• The number of result sets is greater than the maximum specified when the procedure was created.</li> <li>• The stored procedure is unable to return &amp;3 result sets due to DRDA limitations imposed by the client.</li> </ul> |
| <b>Recovery Text:</b>         | The SQL statement is successful. SQLSTATE '0100E' is returned.   |
| <b>SQLCODE or SQLCODEs:</b>   | +464   |
| <b>SQLSTATE or SQLSTATEs:</b> | 0100E  |

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| <b>SQL0466</b>        |   |
| <b>Message Text:</b>  | &3 result sets are available from procedure &1 in &2.                   |
| <b>Cause Text:</b>    | Procedure &1 in &2 was called and has returned one or more result sets. |
| <b>Recovery Text:</b> | None.   |

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| <b>SQL0466</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | +466  |
| <b>SQLSTATE or SQLSTATES:</b> | 0100C |

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| <b>SQL0467</b>                |  |
| <b>Message Text:</b>          | Another result set exists for procedure &1 in &2.  |
| <b>Cause Text:</b>            | A result set was closed for &1 in &2. Another result set exists for the stored procedure. A maximum of &3 result sets are possible for this procedure. |
| <b>Recovery Text:</b>         | None.  |
| <b>SQLCODE or SQLCODEs:</b>   | +467   |
| <b>SQLSTATE or SQLSTATES:</b> | 0100D  |

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| <b>SQL0469</b>                |   |
| <b>Message Text:</b>          | IN, OUT, or INOUT not valid for parameter &4 in procedure &1 in &2.   |
| <b>Cause Text:</b>            | The IN, INOUT, or OUT attribute specified for parameter &4 when the procedure was defined is not valid. The parameter name is &5. One of the following errors occurred: <ul style="list-style-type: none"> <li>• A default cannot be specified for an OUT parameter.</li> <li>• The attribute is not consistent with the parameter on the CALL statement. If the parameter was declared INOUT or OUT, the parameter on the CALL statement must be specified as a host variable or a global variable.</li> <li>• The attribute was specified as INOUT or OUT and REXX was specified as the language. The attribute must be IN if REXX is specified.</li> </ul> |
| <b>Recovery Text:</b>         | Either change the attribute of the parameter on the DECLARE PROCEDURE, CREATE PROCEDURE, or ALTER PROCEDURE statement or change the parameter. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -469  |
| <b>SQLSTATE or SQLSTATES:</b> | 42886   |

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| <b>SQL0470</b>        |   |
| <b>Message Text:</b>  | Null values not allowed for parameter &4 in procedure &1 in &2.   |
| <b>Cause Text:</b>    | Null values are not allowed on the CALL statement for procedure &1 because the procedure was declared with GENERAL specified. The null value was specified as either the NULL keyword, a host variable with an associated indicator variable that contains a negative value, or a global variable with the null value. The parameter number is &4 and the parameter name is &5. |
| <b>Recovery Text:</b> | Specify PARAMETER STYLE SQL, DB2SQL, or GENERAL WITH NULLS on the CREATE PROCEDURE, ALTER PROCEDURE, or DECLARE PROCEDURE statement or pass a value other than the null value on the CALL statement. Try the request again.   |

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| <b>SQL0470</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | -470  |
| <b>SQLSTATE or SQLSTATES:</b> | 39004 |

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| <b>SQL0473</b>                |  |
| <b>Message Text:</b>          | Name &1 cannot be used for user-defined type.  |
| <b>Cause Text:</b>            | Name &1 specified for a user-defined type is the same as a system predefined type or is a function name that is reserved. Function names that cannot be used include CAST, DATAPARTITIONNAME, DATAPARTITIONNUM, DBPARTITIONNAME, DBPARTITIONNUM, EXTRACT, NODENAME, NODENUMBER, PARTITION, POSITION, RID, RRN, STRIP, SUBSTRING, and TRIM. |
| <b>Recovery Text:</b>         | Change the name for the user-defined type. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -473   |
| <b>SQLSTATE or SQLSTATES:</b> | 42918  |

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| <b>SQL0475</b>                |  |
| <b>Message Text:</b>          | RETURNS data type for function &3 in &4 not valid.   |
| <b>Cause Text:</b>            | The data type specified for the RETURNS clause or the CAST FROM clause for function &3 in schema &4 is not appropriate for the data type returned from the sourced function or the value specified on the RETURN statement in the SQL function body. The data type specified in the RETURNS clause is &1 and the data type returned from the sourced function or SQL function is &2. |
| <b>Recovery Text:</b>         | Correct the data types specified or specify another sourced function. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -475   |
| <b>SQLSTATE or SQLSTATES:</b> | 42866  |

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| <b>SQL0476</b>              |   |
| <b>Message Text:</b>        | Routine &1 in &2 not unique.  |
| <b>Cause Text:</b>          | Function or procedure &1 in &2 was specified, not by signature or specific name, and more than one specific instance of the routine was found. Or the procedure was used in a DESCRIBE PROCEDURE or ASSOCIATE LOCATOR statement without a schema name specified while connected to a remote system, and more than one procedure has been called with that name. |
| <b>Recovery Text:</b>       | Request the routine either by its specific name, or by its signature (function or procedure name with parameter types). If this is for a DESCRIBE PROCEDURE or ASSOCIATE LOCATOR statement, specify the schema name for the procedure. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b> | -476  |

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| <b>SQL0476</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 42725 |

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| <b>SQL0478</b>                |   |
| <b>Message Text:</b>          | Object &1 of type &3 cannot be dropped or altered.  |
| <b>Cause Text:</b>            | <p>The base object &amp;1 in schema &amp;2 cannot be dropped or altered because another object depends on it. The dependent object &amp;4 in &amp;5 is of type &amp;6.</p> <ul style="list-style-type: none"> <li>• If base object type is *N, the object being dropped or altered is a function, procedure, trigger, mask, or permission. For other objects it may be that the dependency is indirect. That is, the named object is dependent on another object which is dependent on the object being dropped or altered.</li> <li>• If the base object is a function, the dependent object is sourced on the base object, or is a view, a materialized query table, or an SQL procedure, function, global variable, or trigger that references the function.</li> <li>• If the base object is a procedure, the dependent object is referenced in an SQL procedure, function, or trigger.</li> <li>• If the base object is a table and if there are other tables with triggers or foreign key constraints dependent on the base table, then the RESTRICT clause of the DROP statement will prevent the base table from being dropped.</li> <li>• If the base object is *LIB and if there are tables, views, functions, procedures, distinct types, aliases, global variables, or triggers in the schema, then the RESTRICT clause of the DROP statement will prevent the schema from being dropped. A trigger can be defined in one schema on a table that exists in a different schema.</li> <li>• If the base object is *SQLUDT and if there are tables, views, indexes, functions, procedures, sequences, global variables, or triggers dependent on the distinct type, then the RESTRICT clause of the DROP statement will prevent the base distinct type from being dropped.</li> <li>• If the base object is *DTAARA and if there are SQL routines, global variables, or triggers dependent on the sequence, then the RESTRICT clause of the DROP statement will prevent the base sequence from being dropped.</li> <li>• If the base object is *SRVPGM and if there are views, SQL routines, global variables, or triggers dependent on the global variable, then the RESTRICT clause of the DROP statement will prevent the base global variable from being dropped.</li> </ul> |
| <b>Recovery Text:</b>         | Drop the dependent objects first. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -478  |
| <b>SQLSTATE or SQLSTATES:</b> | 42893   |

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| <b>SQL0480</b>        |   |
| <b>Message Text:</b>  | Procedure &1 not previously called.   |
| <b>Cause Text:</b>    | Procedure &1 in schema &2 referenced in a DESCRIBE PROCEDURE or ASSOCIATE LOCATOR statement has not yet been called within the application process. |
| <b>Recovery Text:</b> | Call the procedure before running the DESCRIBE PROCEDURE or ASSOCIATE LOCATOR statement.  |



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| <b>SQL0480</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | -480  |
| <b>SQLSTATE or SQLSTATES:</b> | 51030 |

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| <b>SQL0482</b>                |   |
| <b>Message Text:</b>          | Procedure &1 returned no locators.  |
| <b>Cause Text:</b>            | Procedure &1 in schema &2 referenced in an ASSOCIATE LOCATOR statement returned no result set locators to this invocation. This error will also occur for an ASSOCIATE LOCATOR statement when connected remotely and the procedure has not been called or does not exist. |
| <b>Recovery Text:</b>         | Determine if result set locators are returned from the identified procedure by using the DESCRIBE PROCEDURE statement.  |
| <b>SQLCODE or SQLCODEs:</b>   | +482  |
| <b>SQLSTATE or SQLSTATES:</b> | 02503   |

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| <b>SQL0483</b>                |   |
| <b>Message Text:</b>          | Parameters for function &1 in &2 not same as sourced function.  |
| <b>Cause Text:</b>            | The number of parameters specified for function &1 in &2 is not the same as the number of parameters specified for the sourced function.  |
| <b>Recovery Text:</b>         | Specify the correct number of parameters for the function or specify another sourced function. If not qualified, ensure the correct sourced function exists in the current path. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -483  |
| <b>SQLSTATE or SQLSTATES:</b> | 42885   |

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| <b>SQL0484</b>                |   |
| <b>Message Text:</b>          | Routine &1 in &2 already exists.  |
| <b>Cause Text:</b>            | An attempt was made to create routine &1 in &2, but &1 already exists. All procedures and functions in the same schema must have unique specific names.                                   |
| <b>Recovery Text:</b>         | Specify a SPECIFIC name that does not exist or do not specify a SPECIFIC name and a unique name will be generated for you. Otherwise, delete the existing routine. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -484  |
| <b>SQLSTATE or SQLSTATES:</b> | 42733   |

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| <b>SQL0487</b>       |                             |
| <b>Message Text:</b> | SQL statements not allowed. |

| <b>SQL0487</b>                |   |
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| <b>Cause Text:</b>            | <p>One of the following errors has occurred:</p> <ul style="list-style-type: none"> <li>• A procedure was called or a function was invoked that was created with NO SQL specified as the data access attribute. A routine created with NO SQL, or any subsequent routines, cannot contain SQL statements and cannot invoke a routine that has the CONTAINS SQL DATA, READS SQL DATA, or MODIFIES SQL DATA attribute.</li> <li>• NO SQL cannot be specified when creating an SQL procedure or function.</li> <li>• A trigger containing SQL statements was activated.</li> <li>• The client SQL special registers cannot be changed within a procedure, function, or trigger.</li> <li>• A field procedure containing SQL statements was called.</li> </ul> <p>If the error occurred in a procedure or function, the routine name is &amp;1 and the specific name is &amp;2.</p> |
| <b>Recovery Text:</b>         | <p>Ensure routines created as NO SQL only invoke routines that do not contain SQL statements. Do not specify NO SQL for an SQL procedure or function. Do not change the client SQL special registers within a procedure, function, or trigger. Do not use SQL statements in a field procedure program.</p>  |
| <b>SQLCODE or SQLCODEs:</b>   | -487  |
| <b>SQLSTATE or SQLSTATES:</b> | 38001   |

| <b>SQL0490</b>                |  |
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| <b>Message Text:</b>          | Numeric value &1 not valid.  |
| <b>Cause Text:</b>            | &1 was specified, but it is not in the valid range of values for its use. The valid range of values are &2 through &3. |
| <b>Recovery Text:</b>         | Change the value and try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -490   |
| <b>SQLSTATE or SQLSTATES:</b> | 428B7  |

| <b>SQL0491</b>       |   |
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| <b>Message Text:</b> | Clause not correct for procedure or function. |

| <b>SQL0491</b>                |  |
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| <b>Cause Text:</b>            | <p>A clause for CREATE PROCEDURE or CREATE FUNCTION or ALTER PROCEDURE or ALTER FUNCTION is missing or not allowed. The reason code is &amp;1. Reason codes and their meanings are:</p> <ul style="list-style-type: none"> <li>• 1 -- For functions, the RETURNS clause is required.</li> <li>• 3 -- For functions, the DBINFO, FINAL CALL, and SCRATCHPAD clauses cannot be specified if the parameter style is JAVA or GENERAL. For procedures, DBINFO cannot be specified unless the parameter style is SQL.</li> <li>• 4 -- For functions, GENERAL can only be specified if the EXTERNAL NAME specifies a service program.</li> <li>• 5 -- For functions and procedures, parameter style JAVA or DB2GENERAL can only be specified for LANGUAGE JAVA.</li> <li>• 6 -- A table function cannot have parameter style JAVA, GENERAL, or GENERAL WITH NULLS.</li> <li>• 7 -- For functions and procedures, PROGRAM TYPE MAIN is not allowed for JAVA or REXX. PROGRAM TYPE SUB is only allowed for service programs.</li> <li>• 9 -- The CARDINALITY clause is only allowed for table functions.</li> <li>• 10 -- For external functions and procedures, LANGUAGE SQL is not allowed and there must not be a routine body.</li> <li>• 11 -- For external functions and procedures, CONCURRENT ACCESS RESOLUTION cannot be specified.</li> </ul> |
| <b>Recovery Text:</b>         | Add the missing clause or remove the clause that is not allowed. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -491   |
| <b>SQLSTATE or SQLSTATES:</b> | 42601  |

| <b>SQL0492</b>                |  |
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| <b>Message Text:</b>          | Data type for function &1 in &2 not valid for source type.   |
| <b>Cause Text:</b>            | The data type specified for parameter &3 for function &1 in library &2 is not valid for the corresponding type of the SOURCE function. |
| <b>Recovery Text:</b>         | Correct the data type specified for parameter &3 or specify another sourced function. Try the request again.                           |
| <b>SQLCODE or SQLCODEs:</b>   | -492   |
| <b>SQLSTATE or SQLSTATES:</b> | 42879  |

| <b>SQL0494</b>        |   |
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| <b>Message Text:</b>  | Fewer locators than number of result sets.  |
| <b>Cause Text:</b>    | On an ASSOCIATE LOCATOR statement for procedure &1 in schema &2, fewer result set locator variables were provided than the number of available result sets. &3 result set locator variables were provided and &4 result sets are available. |
| <b>Recovery Text:</b> | No recovery is necessary.   |

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| <b>SQL0494</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | +494  |
| <b>SQLSTATE or SQLSTATES:</b> | 01614 |

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| <b>SQL0499</b>                |  |
| <b>Message Text:</b>          | Cursor &1 already assigned to result set.  |
| <b>Cause Text:</b>            | <p>An attempt was made to assign a cursor to a result set using the ALLOCATE CURSOR statement and one of the following applies:</p> <ul style="list-style-type: none"> <li>• The result set locator specified in the ALLOCATE CURSOR statement is already assigned to cursor &amp;2.</li> <li>• Cursor &amp;1 specified in the ALLOCATE CURSOR statement is already assigned to a result set.</li> </ul> |
| <b>Recovery Text:</b>         | Only do one ALLOCATE CURSOR for each result set.   |
| <b>SQLCODE or SQLCODEs:</b>   | -499   |
| <b>SQLSTATE or SQLSTATES:</b> | 24516  |

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| <b>SQL0501</b>        |   |
| <b>Message Text:</b>  | Cursor &1 not open.   |
| <b>Cause Text:</b>    | <p>The cursor &amp;1 was specified in a FETCH or CLOSE statement, but the cursor is not open. Cursor &amp;1 has one of the following conditions:</p> <ul style="list-style-type: none"> <li>• Cursor &amp;1 was never opened.</li> <li>• The cursor &amp;1 was opened in another program or another call of this program and the program was created with CLOSQLCSR(*ENDPGM).</li> <li>• The cursor &amp;1 was opened in another module or another call of this module and the module was created with CLOSQLCSR(*ENDMOD).</li> <li>• The cursor &amp;1 was opened in another call of this program and programs which have run SQL statements have ended and the program was created with CLOSQLCSR(*ENDSQL).</li> <li>• The cursor &amp;1 was opened in another call of this module and the activation group ended between calls. The module was created with CLOSQLCSR(*ENDACTGRP).</li> <li>• The cursor was closed by a CLOSE, COMMIT, or ROLLBACK statement.</li> <li>• The cursor &amp;1 was opened under a transaction which is different than the current transaction.</li> </ul> |
| <b>Recovery Text:</b> | <p>Do one of the following and precompile again:</p> <ul style="list-style-type: none"> <li>• Make certain that cursor &amp;1 is opened in the same program or module call prior to using the cursor in an FETCH or CLOSE statement.</li> <li>• Specify either CLOSQLCSR(*ENDSQL), CLOSQLCSR(*ENDJOB), or CLOSQLCSR(*ENDACTGRP) when precompiling the application.</li> <li>• If the cursor was closed by a COMMIT or ROLLBACK, specify HOLD on the COMMIT or ROLLBACK statement to preserve any open cursors, prepared statements, and locks on tables.</li> </ul>   |

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| <b>SQL0501</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | -501  |
| <b>SQLSTATE or SQLSTATES:</b> | 24501 |

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| <b>SQL0502</b>                |   |
| <b>Message Text:</b>          | Cursor &1 already open or allocated.  |
| <b>Cause Text:</b>            | The cursor specified in an OPEN statement or ALLOCATE CURSOR statement is already open or allocated for this call of the program.                           |
| <b>Recovery Text:</b>         | Close cursor &1 and then try the OPEN statement or ALLOCATE CURSOR statement again or change the name of the cursor, and then precompile the program again. |
| <b>SQLCODE or SQLCODEs:</b>   | -502  |
| <b>SQLSTATE or SQLSTATES:</b> | 24502   |

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| <b>SQL0503</b>                |  |
| <b>Message Text:</b>          | Column &3 cannot be updated.   |
| <b>Cause Text:</b>            | An UPDATE statement attempted to update column &3 in table or view &1 in &2. The column cannot be updated because it was not specified in the FOR UPDATE OF clause in the associated DECLARE CURSOR statement. |
| <b>Recovery Text:</b>         | Add column &3 to the FOR UPDATE OF clause in the related DECLARE CURSOR statement. Precompile the program again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -503   |
| <b>SQLSTATE or SQLSTATES:</b> | 42912  |

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| <b>SQL0504</b>                |  |
| <b>Message Text:</b>          | Cursor &1 not declared.  |
| <b>Cause Text:</b>            | Cursor &1 is not declared in the program before it is referred to. A cursor must be declared before being referred to in other statements. All cursors used in the SET RESULT SETS statement must be declared WITH RETURN if any cursors in the program are declared WITH RETURN or WITHOUT RETURN.  |
| <b>Recovery Text:</b>         | Verify that the application program is complete and has no spelling errors in the cursor declarations. Make certain the declaration for a cursor is in an application program before it is referred to by other statements. If any cursors are declared WITH RETURN or WITHOUT RETURN, make sure all cursors used by the SET RESULT SETS statement are declared WITH RETURN. Precompile the program again. |
| <b>SQLCODE or SQLCODEs:</b>   | -504   |
| <b>SQLSTATE or SQLSTATES:</b> | 34000  |

| <b>SQL0507</b>                |  |
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| <b>Message Text:</b>          | Cursor &1 not open.  |
| <b>Cause Text:</b>            | <p>Cursor &amp;1 was specified in an UPDATE or DELETE statement, but the cursor is not open. Cursor &amp;1 has one of the following conditions:</p> <ul style="list-style-type: none"> <li>• Cursor &amp;1 was never opened.</li> <li>• The cursor &amp;1 was opened in another program or another call of this program and the program was created with CLOSQLCSR(*ENDPGM).</li> <li>• The cursor &amp;1 was opened in another module or another call of this module and the module was created with CLOSQLCSR(*ENDMOD).</li> <li>• The cursor &amp;1 was opened in another call of this program and programs which have run SQL statements have ended and the program was created with CLOSQLCSR(*ENDSQL).</li> <li>• The cursor &amp;1 was opened in another call of this module and the activation group was ended between calls. The program was created with CLOSQLCSR(*ENDACTGRP).</li> <li>• The cursor was closed by a CLOSE, COMMIT, or ROLLBACK statement.</li> </ul> |
| <b>Recovery Text:</b>         | <p>Do one of the following and precompile again:</p> <ul style="list-style-type: none"> <li>• Make certain that cursor &amp;1 is opened in the same program or module call prior to using the cursor in an UPDATE or DELETE statement.</li> <li>• Specify either CLOSQLCSR(*ENDSQL), CLOSQLCSR(*ENDJOB), or CLOSQLCSR(*ENDACTGRP) when precompiling the application.</li> <li>• If the cursor was closed by a COMMIT or ROLLBACK, specify HOLD on the COMMIT or ROLLBACK statement to preserve any open cursors, prepared statements, and locks on tables.</li> </ul>  |
| <b>SQLCODE or SQLCODEs:</b>   | -507   |
| <b>SQLSTATE or SQLSTATEs:</b> | 24501  |

| <b>SQL0508</b>                |  |
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| <b>Message Text:</b>          | Cursor &1 not positioned on locked row.  |
| <b>Cause Text:</b>            | An UPDATE or DELETE statement with a WHERE CURRENT OF &1 was attempted, but the cursor is not positioned on a row or is positioned on a row, but the row is not locked because a COMMIT HOLD or ROLLBACK HOLD statement released the lock on the row. A FETCH statement must be issued to position the cursor on a row and lock the row. |
| <b>Recovery Text:</b>         | Issue a FETCH statement to position the cursor on a row and lock the row; then, try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -508   |
| <b>SQLSTATE or SQLSTATEs:</b> | 24504  |

| <b>SQL0509</b>       |  |
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| <b>Message Text:</b> | Table &2 in &3 not same as table in cursor &1. |

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| <b>SQL0509</b>                |  |
| <b>Cause Text:</b>            | An UPDATE or DELETE statement with a WHERE CURRENT OF &1 specified the table &2 in &3, but cursor &1 refers to a different table. The table specified in the UPDATE or DELETE statement and the table referred to by cursor &1 must be the same. |
| <b>Recovery Text:</b>         | Change the specified table name to match the table specified in the cursor &1 and precompile the program again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -509   |
| <b>SQLSTATE or SQLSTATEs:</b> | 42827  |

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| <b>SQL0510</b>       |   |
| <b>Message Text:</b> | Cursor &1 for table or view &2 read-only.   |
| <b>Cause Text:</b>   | <p>An UPDATE or DELETE statement with a WHERE CURRENT OF clause was specified, but the cursor is read only. Either the cursor &amp;1 is read-only or the view or logical file &amp;2 in schema &amp;3 is read-only.</p> <p>A view or logical file is read-only if one or more of the following conditions are true:</p> <ul style="list-style-type: none"> <li>-- The view contains a DISTINCT keyword, GROUP BY clause, HAVING clause, an aggregate function, or UNION, EXCEPT, or INTERSECT in the outer-most subselect.</li> <li>-- The view or logical file contains a join.</li> <li>-- The view contains a subquery that refers to the same table as the table of the outer-most subselect.</li> <li>-- All the columns of the view are expressions, scalar functions, or constants.</li> <li>-- All the columns of the logical file are input only.</li> </ul> <p>A cursor is read only if one or more of the following conditions is true:</p> <ul style="list-style-type: none"> <li>-- The DECLARE CURSOR statement specified an ORDER BY clause but did not specify a FOR UPDATE OF clause.</li> <li>-- The DECLARE CURSOR statement specified a FOR READ ONLY clause.</li> <li>-- The DECLARE CURSOR statement specified the SCROLL keyword without DYNAMIC.</li> <li>-- The cursor referred to a read-only view or logical file in the select list.</li> <li>-- The fullselect specified in the DECLARE CURSOR statement contains any of the above restrictions that would make a view read only.</li> <li>-- A second INSTEAD OF trigger is required for the update or delete on a dependent view.</li> <li>-- The DECLARE CURSOR statement specified a SELECT with a data change table reference.</li> </ul> |

| <b>SQL0510</b>                |   |
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| <b>Recovery Text:</b>         | <p>Do one of the following and precompile the program again:</p> <ul style="list-style-type: none"> <li>-- If the DECLARE CURSOR statement specified an ORDER BY clause but not a FOR UPDATE OF clause, add a FOR UPDATE OF clause.</li> <li>-- If the DECLARE CURSOR statement specified a FOR READ ONLY clause, remove the FOR READ ONLY clause.</li> <li>-- If the DECLARE CURSOR statement specified the SCROLL keyword, specify DYNAMIC SCROLL.</li> <li>-- If the referred to view or logical file is read only, remove the UPDATE or DELETE statement.</li> <li>-- If the DECLARE CURSOR statement contains any conditions that make the cursor read only, remove the UPDATE or DELETE statement.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | -510  |
| <b>SQLSTATE or SQLSTATES:</b> | 42828   |

| <b>SQL0511</b>                |   |
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| <b>Message Text:</b>          | FOR UPDATE clause not valid.  |
| <b>Cause Text:</b>            | <p>The FOR UPDATE clause cannot be used for cursor &amp;1 because the result table is read only. The result table is read only if:</p> <ul style="list-style-type: none"> <li>• The select-statement includes the DISTINCT keyword, an aggregate function, a GROUP BY clause, a HAVING clause, or a UNION, EXCEPT, or INTERSECT operator.</li> <li>• The select-statement contains a VALUES clause.</li> <li>• The FROM clause identifies more than one table, more than one view, or a read-only view.</li> <li>• The FROM clause contains a data change table reference.</li> </ul> |
| <b>Recovery Text:</b>         | Cursor &1 cannot be updated. Remove the FOR UPDATE clause.  |
| <b>SQLCODE or SQLCODEs:</b>   | -511  |
| <b>SQLSTATE or SQLSTATES:</b> | 42829   |

| <b>SQL0512</b>        |  |
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| <b>Message Text:</b>  | Statement references objects in multiple databases.  |
| <b>Cause Text:</b>    | <p>The statement refers to objects that reside on multiple databases. The objects could be either explicitly qualified object names or alias names that are defined to reference a different database. This SQL statement can only refer to a single database.</p> <p>A CREATE TABLE AS that selects from a remote database cannot reference a table that has a FIELDPROC defined. It cannot define a materialized query table. If the remote database is not on an IBM i server, the INCLUDING clauses are not allowed.</p> |
| <b>Recovery Text:</b> | Ensure all objects used in the statement reside at the same database. Try the request again.   |



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| <b>SQL0512</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | -512  |
| <b>SQLSTATE or SQLSTATES:</b> | 56023 |

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| <b>SQL0513</b>                |   |
| <b>Message Text:</b>          | Alias &1 in &2 cannot reference another alias.  |
| <b>Cause Text:</b>            | Alias &1 in &2 can only reference a table or a view. It cannot reference another alias. |
| <b>Recovery Text:</b>         | Change the referenced name and try the request again.                                   |
| <b>SQLCODE or SQLCODEs:</b>   | -513  |
| <b>SQLSTATE or SQLSTATES:</b> | 42924   |

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| <b>SQL0514</b>                |   |
| <b>Message Text:</b>          | Prepared statement &2 not found.  |
| <b>Cause Text:</b>            | <p>An attempt was made to open cursor &amp;1 which referred to prepared statement &amp;2. Statement &amp;2 has one of the following conditions:</p> <ul style="list-style-type: none"> <li>• The statement has never been prepared.</li> <li>• The statement was prepared in another program or another call of this program and the program was created with CLOSQLCSR(*ENDPGM).</li> <li>• The statement was prepared in another module or another call of this module and the module was created with CLOSQLCSR(*ENDMOD).</li> <li>• The statement was prepared in another call of this program and programs which have run SQL statements have ended and the program was created with CLOSQLCSR(*ENDSQL).</li> <li>• The statement was prepared in another call of this module and the activation group ended between calls. The module was created with CLOSQLCSR(*ENDACTGRP).</li> <li>• A COMMIT or ROLLBACK statement has destroyed all the prepared statements.</li> </ul> |
| <b>Recovery Text:</b>         | <p>Do one of the following and precompile again:</p> <ul style="list-style-type: none"> <li>• Prepare the statement &amp;2 (PREPARE statement) before attempting to open cursor &amp;1.</li> <li>• Make certain that &amp;2 has been prepared in the same program or module call prior to attempting to open cursor &amp;1 or specify either CLOSQLCSR(*ENDSQL) CLOSQLCSR(*ENDJOB), or CLOSQLCSR(*ENDACTGRP) when precompiling the application.</li> <li>• If the statement was deleted by a COMMIT or ROLLBACK, specify HOLD on the COMMIT or ROLLBACK statement to preserve any open cursors, prepared statements, and locks on tables.</li> </ul>  |
| <b>SQLCODE or SQLCODEs:</b>   | -514  |
| <b>SQLSTATE or SQLSTATES:</b> | 26501   |

| <b>SQL0516</b>                |   |
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| <b>Message Text:</b>          | Prepared statement &2 not found.  |
| <b>Cause Text:</b>            | <p>&amp;2 is not a valid prepared statement. The statement has one of the following conditions:</p> <ul style="list-style-type: none"> <li>• The statement has never been prepared.</li> <li>• The statement was prepared in another program or another call of this program and the program was created with CLOSQLCSR(*ENDPGM).</li> <li>• The statement was prepared in another module or another call of this module and the module was created with CLOSQLCSR(*ENDMOD).</li> <li>• The statement was prepared in another call of this program and programs which have run SQL statements have ended and the program was created with CLOSQLCSR(*ENDSQL).</li> <li>• The statement was prepared in another call of this module and the activation group ended between calls. The module was created with CLOSQLCSR(*ENDACTGRP).</li> <li>• A COMMIT or ROLLBACK statement has destroyed all the prepared statements.</li> </ul> |
| <b>Recovery Text:</b>         | <p>Do one of the following and precompile again:</p> <ul style="list-style-type: none"> <li>• Make certain that &amp;1 has been prepared in the same program or module call prior to using the DESCRIBE statement or specify either CLOSQLCSR(*ENDSQL), CLOSQLCSR(*ENDJOB), or CLOSQLCSR(*ENDACTGRP) when precompiling the application.</li> <li>• If the statement was deleted by a COMMIT or ROLLBACK, specify HOLD on the COMMIT or ROLLBACK statement to preserve any open cursors, prepared statements, and locks on tables.</li> </ul>  |
| <b>SQLCODE or SQLCODEs:</b>   | -516  |
| <b>SQLSTATE or SQLSTATES:</b> | 26501   |

| <b>SQL0517</b>                |   |
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| <b>Message Text:</b>          | Prepared statement &2 not select-statement.   |
| <b>Cause Text:</b>            | An attempt was made to open cursor &1, which refers to statement &2. Statement &2 is a valid prepared statement, but it is not a select-statement. OPEN can only refer to prepared select-statements. |
| <b>Recovery Text:</b>         | Change the OPEN statement to refer to a prepared select-statement, or prepare statement &2 using a valid select-statement and then try the open.  |
| <b>SQLCODE or SQLCODEs:</b>   | -517  |
| <b>SQLSTATE or SQLSTATES:</b> | 07005   |

| <b>SQL0518</b>       |                                  |
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| <b>Message Text:</b> | Prepared statement &1 not found. |

| <b>SQL0518</b>                |   |
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| <b>Cause Text:</b>            | <p>An EXECUTE statement referred to the statement &amp;1. &amp;1 is not a valid prepared statement. The statement has one of the following conditions:</p> <ul style="list-style-type: none"> <li>• The statement has never been prepared.</li> <li>• The statement identifies a prepared SELECT or DECLARE PROCEDURE statement.</li> <li>• The statement was in error at prepare or bind time.</li> <li>• The statement was prepared in another program or another call of this program and the program was created with CLOSQLCSR(*ENDPGM).</li> <li>• The statement was prepared in another module or another call of this module and the module was created with CLOSQLCSR(*ENDMOD).</li> <li>• The statement was prepared in another call of this program and programs which have run SQL statements have ended and the program was created with CLOSQLCSR(*ENDSQL).</li> <li>• The statement was prepared in another call of this module and the activation group ended between calls. The module was created with CLOSQLCSR(*ENDACTGRP).</li> <li>• The prepared statement was destroyed by a COMMIT or ROLLBACK statement. This only occurs when connected to a database other than DB2 for IBM i.</li> </ul> |
| <b>Recovery Text:</b>         | <p>Do one of the following:</p> <ul style="list-style-type: none"> <li>• If &amp;1 identifies a prepared SELECT or DECLARE PROCEDURE statement, a different prepared statement must be named in the EXECUTE statement.</li> <li>• If the statement had errors, correct the errors and either prepare the statement again or precompile the program again.</li> <li>• Make certain that &amp;1 has been prepared in the same program or module call prior to using the EXECUTE statement or specify either CLOSQLCSR(*ENDSQL), CLOSQLCSR(*ENDJOB), or CLOSQLCSR(*ENDACTGRP) when precompiling the application.</li> <li>• If the statement was deleted by a COMMIT or ROLLBACK, either specify PREPARE WITH HOLD or bind the program with the correct option to preserve prepared statements.</li> </ul>   |
| <b>SQLCODE or SQLCODEs:</b>   | -518  |
| <b>SQLSTATE or SQLSTATES:</b> | 07003   |

| <b>SQL0519</b>                |   |
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| <b>Message Text:</b>          | Prepared statement &2 in use.   |
| <b>Cause Text:</b>            | The application program has attempted to prepare statement &2. This statement is the SELECT statement for cursor &1 that is currently open.                                   |
| <b>Recovery Text:</b>         | Change the statement name in the PREPARE statement or correct the logic of the application program so that it closes cursor &1 before attempting the PREPARE statement again. |
| <b>SQLCODE or SQLCODEs:</b>   | -519  |
| <b>SQLSTATE or SQLSTATES:</b> | 24506   |

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| <b>SQL0520</b>                |   |
| <b>Message Text:</b>          | Cannot UPDATE or DELETE on cursor &1.   |
| <b>Cause Text:</b>            | Cursor &1 is blocking records. An UPDATE or DELETE WHERE CURRENT OF cursor &1 was attempted but cannot be run because blocking was being used for the cursor. |
| <b>Recovery Text:</b>         | Do not block records for cursor &1 if UPDATE or DELETE statements will be used against it.  |
| <b>SQLCODE or SQLCODEs:</b>   | -520  |
| <b>SQLSTATE or SQLSTATES:</b> | 42828   |

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| <b>SQL0525</b>                |   |
| <b>Message Text:</b>          | Statement not valid on application server.  |
| <b>Cause Text:</b>            | An attempt was made to run statement number &4 of package &2 in schema &3. Either the statement is in error, or the statement is not supported by the application server. The section number corresponding to the statement is &1.  |
| <b>Recovery Text:</b>         | Correct the statement which is in error and verify that it is a valid SQL statement on the application server. If the statement is a multiple-row FETCH, specify a single-row FETCH. If the statement is a multiple-row INSERT, either specify a VALUES clause with one or more rows to insert, or specify a subselect. If the statement is SET TRANSACTION, remove it from the application or prevent it from being issued when the Distributed Relational Database Architecture (DRDA) connection is used. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -525  |
| <b>SQLSTATE or SQLSTATES:</b> | 51015   |

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| <b>SQL0526</b>                |  |
| <b>Message Text:</b>          | Statement not valid for &1 TEMPORARY TABLE &2 in &3.   |
| <b>Cause Text:</b>            | A &1 TEMPORARY TABLE &2 cannot be specified on ALTER TABLE, COMMENT ON, CREATE TRIGGER, CREATE MASK, CREATE PERMISSION, GRANT, LABEL ON, LOCK TABLE, RENAME, or REVOKE statements. A constraint cannot be specified for a &1 TEMPORARY TABLE and a &1 TEMPORARY TABLE cannot be partitioned. |
| <b>Recovery Text:</b>         | Specify a valid table on the statement or remove the constraint or partitioning clause. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -526   |
| <b>SQLSTATE or SQLSTATES:</b> | 42995  |

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| <b>SQL0527</b>       |  |
| <b>Message Text:</b> | ALWCPYDTA(*NO) specified but temporary result required for &1. |

| <b>SQL0527</b>                |  |
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| <b>Cause Text:</b>            | The Allow Copy Data (ALWCOPYDTA) parameter was specified on the precompiler command or the STRSQL command with a value of *NO. This value indicates that the queries should always use data directly retrieved from the database, so that the data always reflects the current values. Certain types of SQL queries can not be resolved without making a copy of the data. Examples would be queries using the keywords DISTINCT or UNION. The query being run is a query which requires a copy of the data. |
| <b>Recovery Text:</b>         | Specify a different value for the ALWCOPYDTA parameter or change the SQL statement so that it can be evaluated without using a temporary result.   |
| <b>SQLCODE or SQLCODEs:</b>   | -527   |
| <b>SQLSTATE or SQLSTATES:</b> | 42874  |

| <b>SQL0530</b>                |   |
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| <b>Message Text:</b>          | Operation not allowed by referential constraint &1 in &2.   |
| <b>Cause Text:</b>            | If this is an INSERT, UPDATE, or MERGE statement, the value is not valid for the foreign key because it does not have a matching value in the parent key. If this is a DELETE or MERGE statement affected by a SET DEFAULT delete rule, the default value is not valid for the same reason. If this is an ALTER TABLE statement, the result of the operation would violate the constraint &1. Constraint &1 in &2 for table &3 in &4 requires that any non-null value of the foreign key have a matching value in the parent key. |
| <b>Recovery Text:</b>         | To conform to the constraint rule, you must either: <ul style="list-style-type: none"> <li>• change the INSERT, UPDATE, or MERGE value to match a value in the parent key,</li> <li>• insert a row in the parent file that matches the foreign key values being inserted or updated.</li> <li>• insert a row in the parent file that matches the foreign key default values of the dependent rows. Otherwise, you must drop the referential constraint.</li> </ul>  |
| <b>SQLCODE or SQLCODEs:</b>   | -530  |
| <b>SQLSTATE or SQLSTATES:</b> | 23503   |

| <b>SQL0531</b>                |  |
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| <b>Message Text:</b>          | Update prevented by referential constraint &1 in &2.   |
| <b>Cause Text:</b>            | Constraint &1 in &2 identifies the table being updated as the parent table in a relationship with dependent table &3 in &4, with an update rule of RESTRICT or NO ACTION. The update of a parent key is prevented when there are rows in the dependent table with matching values. |
| <b>Recovery Text:</b>         | In order to perform this update, you must either drop the constraint, or delete the rows in the dependent table that are dependent on this row.  |
| <b>SQLCODE or SQLCODEs:</b>   | -531   |
| <b>SQLSTATE or SQLSTATES:</b> | 23001, 23504   |

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| <b>SQL0532</b>                |   |
| <b>Message Text:</b>          | Delete prevented by referential constraint &1 in &2.  |
| <b>Cause Text:</b>            | Constraint &1 in &2 identifies the table being modified as the parent table in a relationship with dependent table &3 in &4, with a delete rule of RESTRICT or NO ACTION. The deletion of a row is prevented when there are rows in the dependent table with matching values. |
| <b>Recovery Text:</b>         | In order to delete the row, you must either drop the constraint, or delete the rows in the dependent table that are dependent on this row.  |
| <b>SQLCODE or SQLCODEs:</b>   | -532  |
| <b>SQLSTATE or SQLSTATES:</b> | 23001, 23504  |

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| <b>SQL0536</b>                |   |
| <b>Message Text:</b>          | Delete not allowed because table &1 in &2 in subquery can be affected.  |
| <b>Cause Text:</b>            | The delete operation can not be performed because table &1 in &2, which is referenced in a subquery, may be affected by the operation. &1 in &2 is a dependent table in a referential constraint that has a delete rule of CASCADE, SET NULL, or SET DEFAULT. |
| <b>Recovery Text:</b>         | Change the statement so that the subquery does not refer to a dependent table, or drop the constraint that defines the relationship between the two tables.   |
| <b>SQLCODE or SQLCODEs:</b>   | -536  |
| <b>SQLSTATE or SQLSTATES:</b> | 42914   |

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| <b>SQL0537</b>                |  |
| <b>Message Text:</b>          | Duplicate column name &1 in definition of key.   |
| <b>Cause Text:</b>            | Column &1 is specified more than once in the list of columns for a primary, unique, foreign, or partitioning key or in the list of columns for the key expression of a CREATE INDEX statement. Columns may only be specified once in the definition of a key. Index columns named using the AS clause must have different names than the columns in the table. |
| <b>Recovery Text:</b>         | Remove the duplicate column from the list of columns for the key or rename the column. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -537   |
| <b>SQLSTATE or SQLSTATES:</b> | 42709  |

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| <b>SQL0538</b>       |   |
| <b>Message Text:</b> | The FOREIGN key in constraint &1 in &2 not same as the parent key.  |
| <b>Cause Text:</b>   | The FOREIGN key in constraint &1 in &2 is not the same as the parent key of table &3 in &4. The FOREIGN key must have the same number of columns as the parent key and the data type, attributes, and field procedure of the FOREIGN key must be identical to the data type, attributes, and field procedure of the corresponding column of the parent key. |

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| <b>SQL0538</b>                |   |
| <b>Recovery Text:</b>         | Correct the statement so that the description of the FOREIGN key conforms to that of the parent key of the specified table. |
| <b>SQLCODE or SQLCODEs:</b>   | -538  |
| <b>SQLSTATE or SQLSTATES:</b> | 42830   |

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| <b>SQL0539</b>                |  |
| <b>Message Text:</b>          | Table &1 in &2 does not have a primary or unique key.  |
| <b>Cause Text:</b>            | Table &1 in &2 was specified either as the parent table in a referential constraint, or as the table from which to drop the primary or unique key in an ALTER TABLE statement. When no referencing column list is specified in a referential constraint, an attempt is made to use the primary key of the parent table. Table &1 has no primary key defined. |
| <b>Recovery Text:</b>         | Correct the statement so that a referencing column list is specified in the FOREIGN KEY clause that matches the FOREIGN KEY column list, or define a primary key for the table being used as a parent. If this is an attempt to drop a primary or unique key, no recovery is necessary.  |
| <b>SQLCODE or SQLCODEs:</b>   | -539   |
| <b>SQLSTATE or SQLSTATES:</b> | 42888  |

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| <b>SQL0541</b>                |  |
| <b>Message Text:</b>          | Duplicate UNIQUE constraint exists for table &1 in &2.   |
| <b>Cause Text:</b>            | An attempt was made to add UNIQUE constraint &3 in &4. Table &1 in &2 already has a UNIQUE constraint that is a duplicate of the constraint being added. A UNIQUE constraint is a duplicate if the columns in the constraint are the same as the columns in another UNIQUE constraint, even if the columns are not in the same order. Constraint &1 cannot be added. |
| <b>Recovery Text:</b>         | The constraint is already in effect. To change the name of the UNIQUE constraint, drop the duplicate constraint and try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -541   |
| <b>SQLSTATE or SQLSTATES:</b> | 42891  |

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| <b>SQL0542</b>              |   |
| <b>Message Text:</b>        | Null values not allowed for column &1 of a PRIMARY key.   |
| <b>Cause Text:</b>          | Column &1 is defined to be a column of a PRIMARY KEY. A column of a PRIMARY KEY cannot allow null values. |
| <b>Recovery Text:</b>       | Create the column so null values are not allowed.   |
| <b>SQLCODE or SQLCODEs:</b> | -542  |

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| <b>SQL0542</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 42831 |

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| <b>SQL0543</b>                |  |
| <b>Message Text:</b>          | Constraint &1 conflicts with SET NULL or SET DEFAULT rule.   |
| <b>Cause Text:</b>            | Constraint &1 is a CHECK constraint that conflicts with an existing referential constraint that has either a SET NULL or a SET DEFAULT rule. |
| <b>Recovery Text:</b>         | Change the CHECK constraint so it does not conflict with the referential constraint rule, or drop the referential constraint.                |
| <b>SQLCODE or SQLCODEs:</b>   | -543   |
| <b>SQLSTATE or SQLSTATES:</b> | 23511  |

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| <b>SQL0544</b>                |   |
| <b>Message Text:</b>          | CHECK constraint &1 cannot be added.  |
| <b>Cause Text:</b>            | Existing data in the table violates the CHECK constraint rule in constraint &1. The constraint cannot be added. |
| <b>Recovery Text:</b>         | Change the data in the table so that it follows the constraint specified in &1. Try the request again.          |
| <b>SQLCODE or SQLCODEs:</b>   | -544  |
| <b>SQLSTATE or SQLSTATES:</b> | 23512   |

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| <b>SQL0545</b>                |   |
| <b>Message Text:</b>          | INSERT, UPDATE, or MERGE not allowed by CHECK constraint.   |
| <b>Cause Text:</b>            | The value being inserted or updated does not meet the criteria of CHECK constraint &1. The operation is not allowed.      |
| <b>Recovery Text:</b>         | Change the values being inserted or updated so that the CHECK constraint is met. Otherwise, drop the CHECK constraint &1. |
| <b>SQLCODE or SQLCODEs:</b>   | -545  |
| <b>SQLSTATE or SQLSTATES:</b> | 23513   |

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| <b>SQL0546</b>       |   |
| <b>Message Text:</b> | CHECK condition of constraint &1 not valid. |



| <b>SQL0546</b>                |  |
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| <b>Cause Text:</b>            | <p>The CHECK condition of constraint &amp;1 is not valid for one of the following reasons:</p> <ul style="list-style-type: none"> <li>• A column level CHECK condition refers to some other column in the table.</li> <li>• The CHECK condition refers to a column that is not in this table.</li> <li>• The CHECK condition refers to a special register.</li> <li>• The CHECK condition uses an aggregate function (such as AVG or COUNT), a user-defined function, or an OLAP specification.</li> <li>• The CHECK condition contains a subselect.</li> <li>• The CHECK condition uses a built-in scalar function that is not allowed.</li> <li>• The CHECK condition uses an expression involving LOBs.</li> <li>• The CHECK condition uses an incompatible data type.</li> <li>• The CHECK condition contains ROW CHANGE TIMESTAMP or ROW CHANGE TOKEN.</li> <li>• The CHECK condition contains a sequence reference.</li> <li>• The CHECK condition refers to a global variable.</li> <li>• The CHECK condition refers to an XML column.</li> <li>• The column specified on the ON INSERT VIOLATION and ON UPDATE VIOLATION clauses must be specified in the CHECK condition.</li> <li>• The same column name must be specified for the ON INSERT VIOLATION and the ON UPDATE VIOLATION clauses.</li> </ul> |
| <b>Recovery Text:</b>         | Correct the error. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -546   |
| <b>SQLSTATE or SQLSTATES:</b> | 42621  |

| <b>SQL0551</b>                |  |
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| <b>Message Text:</b>          | Not authorized to object &1 in &2 type *&3.  |
| <b>Cause Text:</b>            | An operation was attempted on object &1 in &2 type *&3. This operation cannot be performed without the required authority.   |
| <b>Recovery Text:</b>         | Obtain the required authority from either the security officer, the object owner, or a user that is authorized to the QIBM_DB_SECADM function. If you are not authorized to a logical file, obtain the authority to the based-on files of the logical file. Try the operation again. |
| <b>SQLCODE or SQLCODEs:</b>   | +551, -551   |
| <b>SQLSTATE or SQLSTATES:</b> | 01548, 42501   |

| <b>SQL0552</b>       |                       |
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| <b>Message Text:</b> | Not authorized to &1. |

| <b>SQL0552</b>                |  |
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| <b>Cause Text:</b>            | <p>The operation cannot be performed without the required authority.</p> <ul style="list-style-type: none"> <li>• CREATE TABLE requires *USE authority to the CRTPF command.</li> <li>• CREATE VIEW or CREATE INDEX requires *USE authority to the CRTLF command.</li> <li>• CREATE ALIAS requires *USE authority to the CRTDDMF command.</li> <li>• CREATE SCHEMA requires *USE authority to the CRTLIB command.</li> <li>• ALTER TABLE requires *USE authority to the ADDPFCST command in order to add constraints, and *USE authority to the RMVPCST command in order to drop constraints.</li> <li>• ALTER TRIGGER requires *USE authority to the CHGPFTRG command.</li> <li>• CREATE PROCEDURE or CREATE FUNCTION requires *OBJOPR and *ADD authority to the catalog table SYSROUTINES in QSYS2.</li> <li>• DROP PROCEDURE or DROP FUNCTION requires *OBJOPR and *DLT authority to the catalog table SYSPARMS in QSYS2.</li> <li>• CREATE TYPE requires *OBJOPR and *ADD authority to the catalog table SYSTYPES in QSYS2.</li> <li>• DROP TYPE requires *OBJOPR and *DLT authority to the catalog table SYSTYPES in QSYS2.</li> <li>• CREATE TRIGGER requires *USE authority to the ADDPFTRG command.</li> <li>• DROP TRIGGER requires *USE authority to the RMVPFTRG command.</li> <li>• CREATE SEQUENCE requires *USE authority to the CRTDTAARA command.</li> <li>• DROP SEQUENCE requires *USE authority to the DLTDTAARA command.</li> <li>• ALTER SEQUENCE requires *USE authority to the RTVDTAARA and CRTDTAARA commands.</li> <li>• The COMMENT ON statements for procedures, functions, types, triggers and sequences require *OBJOPR, *READ, and *UPD authority to the catalog table associated with the object.</li> <li>• SET SESSION AUTHORIZATION requires that the authorization ID associated with the statement has *ALLOBJ special authority.</li> <li>• SET CURRENT DEGREE and the QSYS2/RESET_ENVIRONMENTAL_LIMITS procedure require that the authorization ID associated with the statement has *JOBCTL special authority or be authorized to the QIBM_DB_SQLADM function.</li> <li>• CREATE, ALTER, DROP, LABEL ON and COMMENT ON of a MASK or PERMISSION requires that the authorization ID associated with the statement be authorized to the QIBM_DB_SECADM function. The same authorization is required to RENAME, DROP or delete an object that is referenced by a mask or permission and to CREATE, DROP, or ALTER a secure TRIGGER or FUNCTION.</li> </ul> |
| <b>Recovery Text:</b>         | <p>Obtain authority from the security officer and try the operation again.</p> <p>Authorization to the QIBM_DB_SQLADM and QIBM_DB_SECADM functions can be handled by Application Administration in System i Navigator. The Change Function Usage (CHGFCNUSG) command can also be used to allow or deny use of the function. For example: CHGFCNUSG FCNID(QIBM_DB_SQLADM) USER(xxxxx) USAGE(*ALLOWED).</p>  |
| <b>SQLCODE or SQLCODEs:</b>   | +552, -552   |
| <b>SQLSTATE or SQLSTATES:</b> | 01542, 28000, 42502  |

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| <b>SQL0553</b>                |   |
| <b>Message Text:</b>          | Schema name &1 not allowed.                             |
| <b>Cause Text:</b>            | Schema name &1 not allowed since it is a reserved word. |
| <b>Recovery Text:</b>         | Change the schema name to a non-reserved word.          |
| <b>SQLCODE or SQLCODEs:</b>   | -553  |
| <b>SQLSTATE or SQLSTATES:</b> | 42939   |

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| <b>SQL0557</b>                |  |
| <b>Message Text:</b>          | Privilege not valid for &1 in &2.  |
| <b>Cause Text:</b>            | <p>The specified privilege is not valid for one of the following reasons:</p> <ul style="list-style-type: none"> <li>• An INDEX privilege is valid for tables and physical files but not for views. An index cannot be created on a view.</li> <li>• The specified privilege is not valid because table or view &amp;1 in &amp;2 does not have that capability. For example: DELETE, INSERT, and UPDATE privileges are not valid for a read-only view.</li> <li>• WRITE privilege is not valid because &amp;1 in &amp;2 is a read-only global variable.</li> </ul> |
| <b>Recovery Text:</b>         | Specify a table or view that has the correct capability or remove the privilege that is not valid from the SQL statement.  |
| <b>SQLCODE or SQLCODEs:</b>   | -557   |
| <b>SQLSTATE or SQLSTATES:</b> | 42852  |

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| <b>SQL0567</b>                |   |
| <b>Message Text:</b>          | Authorization name &1 is not allowed.   |
| <b>Cause Text:</b>            | The authorization name cannot be a system-supplied user profile such as QSYS, QDFTOWN, or QSPL. |
| <b>Recovery Text:</b>         | Change the name and try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -567  |
| <b>SQLSTATE or SQLSTATES:</b> | 28000, 42501  |

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| <b>SQL0569</b>       |   |
| <b>Message Text:</b> | Not all requested privileges revoked from object &1 in &2 type *&3.   |
| <b>Cause Text:</b>   | <p>A REVOKE operation was attempted on object &amp;1 in &amp;2 type *&amp;3, but the privilege was not revoked. Either you do not have the specified privilege to object &amp;1, you do not have *OBJMGT authority to object &amp;1, you are not authorized to the QIBM_DB_SECADM function, or you tried to revoke the privilege from someone who does not currently have that privilege.</p> <p>All valid requested privileges were revoked.</p> |

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| <b>SQL0569</b>                |  |
| <b>Recovery Text:</b>         | If revoking a privilege from someone who does not currently have that privilege, then no action is required.<br><br>If you do not have the privilege, change the REVOKE statement to specify valid privileges. |
| <b>SQLCODE or SQLCODEs:</b>   | +569, -569   |
| <b>SQLSTATE or SQLSTATES:</b> | 01006, 56092   |

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| <b>SQL0570</b>                |  |
| <b>Message Text:</b>          | Not all requested privileges to object &1 in &2 type *&3 granted.  |
| <b>Cause Text:</b>            | A GRANT operation was attempted on object &1 in &2 type *&3 but the privilege was not granted for one of the following reasons.<br><br>-- You do not have all of the privileges to be granted.<br><br>-- You are attempting to perform a GRANT statement using WITH GRANT OPTION but are not the object owner.<br><br>-- You do not have *OBJMGT authority to the object.<br><br>-- You do not have *ALLOBJ special authority.<br><br>-- You are not authorized to the QIBM_DB_SECADM function.<br><br>-- You are attempting to perform a GRANT of WRITE privileges for a read-only global variable.<br><br>All valid requested privileges were granted. |
| <b>Recovery Text:</b>         | Obtain the required authority from either the security officer or the object owner. Try the operation again.   |
| <b>SQLCODE or SQLCODEs:</b>   | +570   |
| <b>SQLSTATE or SQLSTATES:</b> | 01007  |

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| <b>SQL0573</b>        |  |
| <b>Message Text:</b>  | Table &1 in &2 does not have a matching parent key.  |
| <b>Cause Text:</b>    | A referencing column list was specified in the FOREIGN KEY clause for constraint &3 in &4. The parent table &1 in &2 does not have a matching PRIMARY or UNIQUE key. If the file is partitioned, the access path of the parent file must be non-partitioned. The constraint cannot be added.   |
| <b>Recovery Text:</b> | Do one of the following and try the request again: <ul style="list-style-type: none"> <li>• Specify a table in the FOREIGN KEY clause that has a PRIMARY or UNIQUE key that matches the referencing column list.</li> <li>• Change the referencing column list to match the definition of the PRIMARY or UNIQUE key defined on the parent table.</li> <li>• If the parent file is partitioned, add a non-partitioned access path.</li> </ul> |

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| <b>SQL0573</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | -573  |
| <b>SQLSTATE or SQLSTATES:</b> | 42890 |

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| <b>SQL0574</b>                |  |
| <b>Message Text:</b>          | Column, sequence, or variable attribute is not valid.  |
| <b>Cause Text:</b>            | <p>Either the DEFAULT value or identity attribute value for column &amp;3 in &amp;1 in &amp;2 is not valid, a sequence attribute value for sequence &amp;1 in &amp;2 is not valid, a constant value for an SQL variable is not valid, or an assigned value for cycle column &amp;3 is not valid.</p> <p>For a DEFAULT value, the incorrect value may either be specified in this statement or it may already be defined for the column and is not compatible with the new attributes specified on the ALTER TABLE statement.</p> <p>The values must conform to the following rules:</p> <ul style="list-style-type: none"> <li>• The DEFAULT value must be compatible with the data type of the column. A floating-point constant can only be a default value for a floating-point or DECFLOAT column. A DECFLOAT constant can only be a default value for a DECFLOAT column.</li> <li>• The DEFAULT value must not be too long for the column.</li> <li>• If the column is defined as a date, time, or timestamp the DEFAULT value must be a valid string representation of that type.</li> <li>• If the DEFAULT value is defined as the value of the USER special register, the column must be defined as a CHAR or VARCHAR and the length attribute must be greater than or equal to 18.</li> <li>• The CCSID of the DEFAULT value must be compatible with the CCSID of the column.</li> <li>• The DEFAULT value for a column that is a user-defined type must either be promotable to the source type or must be cast to the user-defined type using the cast function for the type.</li> <li>• A DEFAULT value cannot be specified for a DataLink or an XML column or SQL variable.</li> </ul> <p>For an identity column or a sequence, the values specified for the START WITH, INCREMENT BY, MINVALUE, MAXVALUE, and RESTART WITH options must have a scale of zero.</p> <p>For an SQL variable, CONSTANT cannot be specified for DataLink or XML data types.</p> <p>For a recursive common table expression cycle column name, the assignment value must be a character string with a length of one.</p> |
| <b>Recovery Text:</b>         | Change the value to one that is valid for the column, sequence, or variable. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -574   |
| <b>SQLSTATE or SQLSTATES:</b> | 42894  |

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| <b>SQL0577</b>       |                                   |
| <b>Message Text:</b> | Modifying SQL data not permitted. |

| <b>SQL0577</b>                |  |
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| <b>Cause Text:</b>            | <p>One of the following errors has occurred:</p> <ul style="list-style-type: none"> <li>• A procedure was called or a function was invoked that was created with READS SQL DATA or CONTAINS SQL DATA specified as the data access attribute. A procedure or function created with READS SQL DATA or CONTAINS SQL DATA, or any procedure or function that is called by the procedure or function, cannot change data and cannot call a procedure or function that has the MODIFIES SQL DATA attribute.</li> <li>• READS SQL DATA and CONTAINS SQL DATA cannot be specified on the CREATE PROCEDURE, ALTER PROCEDURE, CREATE FUNCTION, or ALTER FUNCTION statements for an SQL procedure or function if the routine body contains statements that change data.</li> <li>• A global variable default value used a function that changes data.</li> </ul> <p>Statements that change data include INSERT, UPDATE, DELETE, MERGE, REFRESH TABLE, GRANT, REVOKE, LABEL, COMMENT, and any CREATE, DROP, or ALTER statements. If the error occurred in a procedure or function, the routine name is &amp;1 and the specific name is &amp;2.</p> |
| <b>Recovery Text:</b>         | Ensure procedures or functions created with READS SQL DATA or CONTAINS SQL DATA do not call procedures or functions that change SQL data. Specify MODIFIES SQL DATA when creating functions that change SQL data. The default value for a CREATE VARIABLE statement cannot modify SQL data.  |
| <b>SQLCODE or SQLCODEs:</b>   | -577   |
| <b>SQLSTATE or SQLSTATES:</b> | 2F002, 38002, 42985  |

| <b>SQL0578</b>                |  |
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| <b>Message Text:</b>          | RETURN statement not executed for SQL function &1 in &2.   |
| <b>Cause Text:</b>            | During the execution of SQL function &1 in &2, the end of the routine body was reached without executing a RETURN statement. |
| <b>Recovery Text:</b>         | Add a RETURN statement to the end of the function routine body. Try the request again.                                       |
| <b>SQLCODE or SQLCODEs:</b>   | -578   |
| <b>SQLSTATE or SQLSTATES:</b> | 2F005  |

| <b>SQL0579</b>       |                                 |
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| <b>Message Text:</b> | Reading SQL data not permitted. |

| <b>SQL0579</b>                |   |
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| <b>Cause Text:</b>            | <p>One of the following errors has occurred:</p> <ul style="list-style-type: none"> <li>• A procedure was called or a function was invoked that was created with CONTAINS SQL DATA as the data access attribute. A procedure or function created with CONTAINS SQL DATA or any procedure or function that is called by the procedure or function, cannot read data and cannot call a procedure or function that has the READS SQL DATA attribute.</li> <li>• CONTAINS SQL DATA cannot be specified on the CREATE PROCEDURE, ALTER PROCEDURE, CREATE FUNCTION, or ALTER FUNCTION statements for an SQL procedure or function if the routine body contains statements that read data.</li> <li>• A trigger containing SQL statements was activated.</li> </ul> <p>If the error occurred in a procedure or function, the routine name is &amp;1 and the specific name is &amp;2.</p> |
| <b>Recovery Text:</b>         | Ensure procedures and functions created with CONTAINS SQL DATA do not call procedures or functions that read SQL data.  |
| <b>SQLCODE or SQLCODEs:</b>   | -579  |
| <b>SQLSTATE or SQLSTATES:</b> | 2F004, 38004, 42985   |

| <b>SQL0580</b>                |   |
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| <b>Message Text:</b>          | At least one result in CASE expression must be not NULL.  |
| <b>Cause Text:</b>            | The NULL value, a parameter marker, or the RAISE_ERROR scalar function is specified for all results in a CASE expression. At least one result in a CASE expression must be a value other than NULL, a parameter marker, or the RAISE_ERROR scalar function. |
| <b>Recovery Text:</b>         | Change the CASE expression to have at least one result expression following a THEN or ELSE keyword to be some value other than NULL, a parameter marker, or the RAISE_ERROR scalar function. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -580  |
| <b>SQLSTATE or SQLSTATES:</b> | 42625   |

| <b>SQL0581</b>                |   |
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| <b>Message Text:</b>          | The results in a CASE expression are not compatible.  |
| <b>Cause Text:</b>            | The expressions specified as the result values of a CASE expression are not compatible.         |
| <b>Recovery Text:</b>         | Change the results in the CASE expression to values that are compatible. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -581  |
| <b>SQLSTATE or SQLSTATES:</b> | 42804   |

| <b>SQL0583</b>       |                                     |
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| <b>Message Text:</b> | Use of function &1 in &2 not valid. |

| SQL0583                       |   |
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| <b>Cause Text:</b>            | Function &1 in &2 cannot be invoked where specified because it is defined to be not deterministic or contains an external action. Functions that are not deterministic cannot be specified in a GROUP BY clause or in a JOIN clause, or in the default clause for a global variable. Functions that are not deterministic or contain an external action cannot be specified in a PARTITION BY clause or an ORDER BY clause for an OLAP function. The RAISE_ERROR function cannot be specified in a GROUP BY or HAVING clause. |
| <b>Recovery Text:</b>         | Remove the function. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | +583, -583  |
| <b>SQLSTATE or SQLSTATES:</b> | 01685, 42845  |

| SQL0584                       |  |
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| <b>Message Text:</b>          | NULL or parameter marker in VALUES not allowed.  |
| <b>Cause Text:</b>            | Each column in a VALUES clause must have a data type. All rows for a column cannot contain NULL, a parameter marker, or the RAISE_ERROR scalar function. |
| <b>Recovery Text:</b>         | Ensure every column has at least one value with a defined type. A CAST specification can be used to assign a type. Try the request again.                |
| <b>SQLCODE or SQLCODEs:</b>   | -584   |
| <b>SQLSTATE or SQLSTATES:</b> | 42608  |

| SQL0585                       |  |
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| <b>Message Text:</b>          | Schema &1 used incorrectly in the specified path.  |
| <b>Cause Text:</b>            | An incorrect path was specified on the SET PATH or the SET OPTION SQLPATH statement. One of the following errors has occurred: <ul style="list-style-type: none"> <li>• &amp;1 is specified more than once in the path.</li> <li>• *LIBL is not the only value specified in the path.</li> <li>• If the schema name is *N, one of USER, CURRENT PATH, or SYSTEM PATH is specified more than one time in the path.</li> </ul> |
| <b>Recovery Text:</b>         | Specify a valid path. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -585   |
| <b>SQLSTATE or SQLSTATES:</b> | 42732  |

| SQL0590               |  |
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| <b>Message Text:</b>  | Name &1 specified in procedure or function &2 not unique.  |
| <b>Cause Text:</b>    | &1 is specified as a parameter, SQL variable, condition, or label in SQL procedure or function &2. The name is not unique. |
| <b>Recovery Text:</b> | Change the name so that it is unique.  |



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| <b>SQL0590</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | -590  |
| <b>SQLSTATE or SQLSTATES:</b> | 42734 |

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| <b>SQL0593</b>                |  |
| <b>Message Text:</b>          | Row change timestamp column &1 must be NOT NULL.   |
| <b>Cause Text:</b>            | NOT NULL must be specified for column &1. ROW CHANGE TIMESTAMP columns do not support null values. |
| <b>Recovery Text:</b>         | Change the statement to specify NOT NULL for column &1. Try the request again.                     |
| <b>SQLCODE or SQLCODEs:</b>   | -593   |
| <b>SQLSTATE or SQLSTATES:</b> | 42831  |

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| <b>SQL0595</b>                |   |
| <b>Message Text:</b>          | Commit level *&1 escalated to *&2 lock.   |
| <b>Cause Text:</b>            | <p>*&amp;1 was specified for the commit level, but *&amp;1 was not used. The base tables were locked *&amp;2 to satisfy the request for commitment level of *&amp;1. If a ROLLBACK HOLD statement is requested, the cursor will remain in the same position.</p> <p>*&amp;1 was not used for one of the following reasons:</p> <ul style="list-style-type: none"> <li>• A GROUP BY clause, HAVING clause, or an aggregate function was specified in the statement.</li> <li>• A DISTINCT keyword was specified in the statement.</li> <li>• A UNION keyword was specified in the statement.</li> <li>• A join was specified in the statement, but not all of the tables are journaled to the same journal.</li> <li>• The repeatable read commit level is implemented by DB2 for IBM i by locking the table.</li> </ul> |
| <b>Recovery Text:</b>         | If escalation of commit level is not desired, change the statement or the requested commit level. If a lock level of share-no-update (*SHRNU) was granted, but is not acceptable, specify *CHG or *NONE for the commit level.   |
| <b>SQLCODE or SQLCODEs:</b>   | +595  |
| <b>SQLSTATE or SQLSTATES:</b> | 01526   |

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| <b>SQL0596</b>        |  |
| <b>Message Text:</b>  | Error occurred during DISCONNECT of relational database &1.  |
| <b>Cause Text:</b>    | An error occurred during DISCONNECT of relational database &1. However, this did not prevent the successful disconnect of relational database &1. Refer to the previous messages for a description of the error. |
| <b>Recovery Text:</b> | None required.   |

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| <b>SQL0596</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | +596  |
| <b>SQLSTATE or SQLSTATES:</b> | 01002 |

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| <b>SQL0601</b>                |   |
| <b>Message Text:</b>          | &1 in &2 type *&3 already exists.   |
| <b>Cause Text:</b>            | <p>An attempt was made to create &amp;1 in &amp;2 or to rename a table, view, alias, or index to &amp;1, but &amp;1 already exists. All tables, views, aliases, indexes, SQL packages, sequences, global variables, constraints, triggers, user-defined types, and XSR objects in the same schema must have unique names.</p> <ul style="list-style-type: none"> <li>• If &amp;1 is a temporary table, it cannot be replaced unless the WITH REPLACE clause is specified.</li> <li>• If the schema name is *N, this is a CREATE SCHEMA statement. If this is a CREATE TABLE or ALTER TABLE statement and the type is *N, &amp;1 is a constraint.</li> </ul> |
| <b>Recovery Text:</b>         | Change &1 to a name that does not exist, or delete, move, or rename the existing object. If this is a temporary table, use the WITH REPLACE clause. If creating an SQL package, specify REPLACE(*YES) on CRTSQLPKG. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -601  |
| <b>SQLSTATE or SQLSTATES:</b> | 42710   |

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| <b>SQL0602</b>                |  |
| <b>Message Text:</b>          | More than 120 columns specified for CREATE INDEX.  |
| <b>Cause Text:</b>            | Only 120 columns are allowed in the CREATE INDEX statement.  |
| <b>Recovery Text:</b>         | Reduce the number of column names in the column list to the maximum of 120 names. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -602   |
| <b>SQLSTATE or SQLSTATES:</b> | 54008  |

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| <b>SQL0603</b>       |   |
| <b>Message Text:</b> | Unique index cannot be created because of duplicate keys.   |
| <b>Cause Text:</b>   | An attempt was made to create unique index &1 in &2 or add unique constraint &1 in &2. The operation cannot be performed because the rows in table &3 in &4 contain one or more duplicate values in the columns used to create the index. |

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| <b>SQL0603</b>                |  |
| <b>Recovery Text:</b>         | <p>Do one of the following and try the request again:</p> <ul style="list-style-type: none"> <li>• Remove the UNIQUE attribute from the CREATE INDEX statement.</li> <li>• Remove the UNIQUE constraint from the ALTER TABLE statement.</li> <li>• Change the data in the related table so that all key values are unique.</li> <li>• Specify UNIQUE WHERE NOT NULL on the CREATE INDEX statement if the duplicate keys contain nulls. The uniqueness restriction would not apply when the key value contains nulls.</li> </ul> <p>For information on what rows contain the duplicate key values, see the previously listed messages in the job log.</p> |
| <b>SQLCODE or SQLCODEs:</b>   | -603   |
| <b>SQLSTATE or SQLSTATEs:</b> | 23515  |

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| <b>SQL0604</b>       |                       |
| <b>Message Text:</b> | Attributes not valid. |

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| <b>SQL0604</b>              |  |
| <b>Cause Text:</b>          | <p>One of the following contains a data type, length, precision, scale, or an ALLOCATE attribute that is not valid.</p> <ul style="list-style-type: none"> <li>• A column in the CREATE TABLE, ALTER TABLE, or DECLARE GLOBAL TEMPORARY TABLE statement, or an INCLUDE column in an INSERT statement.</li> <li>• A parameter or an SQL variable in the DECLARE PROCEDURE, CREATE PROCEDURE, ALTER PROCEDURE, CREATE FUNCTION, ALTER FUNCTION, or CREATE TRIGGER statement.</li> <li>• The CAST scalar function.</li> <li>• A CREATE TYPE source data type.</li> <li>• A CREATE VARIABLE data type.</li> </ul> <p>The definition is not valid for one of the following reasons:</p> <ul style="list-style-type: none"> <li>• If a DECIMAL or NUMERIC data type is specified, precision must be from 1 through 63 and the scale must be between 0 and the precision.</li> <li>• If DECFLOAT is specified, the precision must be omitted or must be 16 or 34.</li> <li>• If CHARACTER or BINARY is specified, the length must be from 1 through 32766 for a parameter or for a column that does not allow null values or from 1 through 32765 for a column that allows null values.</li> <li>• If VARCHAR or VARBINARY is specified, the length must be from 1 through 32740 for a parameter or for a column that does not allow null values or from 1 through 32739 for a column that allows null values.</li> <li>• If the FOR MIXED DATA clause or a mixed CCSID is specified, the length cannot be less than 4.</li> <li>• If GRAPHIC or NCHAR is specified, the length must be from 1 through 16383 for a parameter or for a column that does not allow null values and from 1 through 16382 for a column that allows null values. The length specified is the number of DBCS characters.</li> <li>• If VARGRAPHIC or NVARCHAR is specified, the length must be from 1 through 16370 for a parameter or for a column that does not allow null values or from 1 through 16369 for a column that allows null values. The length specified is the number of DBCS characters.</li> <li>• If BLOB or CLOB is specified, the length must be from 1 through 2G (2048 M or 2,097,152 K or 2,147,483,647 bytes). If DBCLOB or NCLOB is specified, the length must be from 1 through 1073741823.</li> <li>• If TIMESTAMP is specified, the precision must be from 0 to 12.</li> <li>• If DATALINK is specified, the length must be from 1 through 32717.</li> <li>• If VARCHAR, VARGRAPHIC, NVARCHAR, VARBINARY, CLOB, BLOB, DBCLOB, NCLOB, or DATALINK is specified, the ALLOCATE attribute must be less than or equal to both the length attribute specified and 32766.</li> <li>• DATALINK and array types cannot be specified as the type of a global variable.</li> <li>• When defining an array type, the length of a CLOB or BLOB cannot exceed 1048576 and the length of a DBCLOB cannot exceed 524288.</li> <li>• ARRAY[0] cannot be specified on CREATE TYPE.</li> </ul> |
| <b>Recovery Text:</b>       | Correct the length, precision, scale, or ALLOCATE attribute. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b> | -604   |

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| <b>SQL0604</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 42611 |

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| <b>SQL0607</b>                |   |
| <b>Message Text:</b>          | Operation not allowed on system table &1 in &2.   |
| <b>Cause Text:</b>            | The table or view &1 in &2 is a catalog or system table. Catalogs, system tables and system triggers cannot be changed or locked by the user. |
| <b>Recovery Text:</b>         | Change the SQL statement to refer to a table that is not a system table. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -607  |
| <b>SQLSTATE or SQLSTATES:</b> | 42832   |

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| <b>SQL0612</b>                |  |
| <b>Message Text:</b>          | &1 is a duplicate column name.   |
| <b>Cause Text:</b>            | <p>One of the following errors has occurred:</p> <ul style="list-style-type: none"> <li>• Column &amp;1 is specified more than once on a CREATE TABLE or CREATE VIEW statement. Column names and system column names must be unique in a table or view.</li> <li>• Column &amp;1 is specified in the ADD clause of an ALTER TABLE statement. Column &amp;1 already exists in the table.</li> <li>• Column &amp;1 is specified more than once in the ALTER, DROP, or ADD clauses of an ALTER TABLE statement.</li> <li>• Column &amp;1 is specified more than once in the column list of a common table expression or in the correlation clause for a table or derived table.</li> <li>• Column &amp;1 is specified more than once in the column list of an UPDATE trigger.</li> <li>• Column &amp;1 is specified more than once in the RETURNS TABLE clause of a CREATE FUNCTION statement. The return column names for a user defined table function must be unique.</li> <li>• Column &amp;1 is specified more than once in the CYCLE column list of the recursive common table expression.</li> <li>• Column &amp;1 is specified more than once in the COLUMNS clause for XMLTABLE.</li> <li>• AS name &amp;1 specified more than once for XMLTABLE.</li> </ul> |
| <b>Recovery Text:</b>         | <p>Do one of the following and try the request again:</p> <ul style="list-style-type: none"> <li>• Specify unique names for each of the columns.</li> <li>• Remove the column from all but one clause of a single ALTER TABLE statement. Multiple statements can be specified, if required.</li> </ul>   |
| <b>SQLCODE or SQLCODEs:</b>   | -612   |
| <b>SQLSTATE or SQLSTATES:</b> | 42711  |

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| <b>SQL0613</b>                |  |
| <b>Message Text:</b>          | Key is too long or contains too many columns.  |
| <b>Cause Text:</b>            | <p>One of the following has occurred:</p> <ul style="list-style-type: none"> <li>• The PRIMARY or UNIQUE key cannot be created for constraint &amp;1 in &amp;2.</li> <li>• The partitioning key for the table is too long.</li> </ul> <p>Either more than 120 columns were specified in a key or the sum of the lengths of the columns specified in the key exceeds the maximum of 32768 bytes. If the list contains null capable columns then an additional byte is required for the length of each null capable column. If the list contains variable length columns, then the 2-byte length of the columns is included in the total length. The key length may be too long if an ICU (UNICODE) table is being used. The internal expansion of the key can be up to six times the user specified key length due to translation. See previous messages for details.</p> |
| <b>Recovery Text:</b>         | Remove some of the columns from the key or change the length attributes of the columns so that the total length of the key does not exceed the maximum. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -613   |
| <b>SQLSTATE or SQLSTATES:</b> | 54008  |

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| <b>SQL0614</b>                |  |
| <b>Message Text:</b>          | Length of columns for CREATE INDEX too long.   |
| <b>Cause Text:</b>            | <p>The sum of the lengths of the columns specified in a CREATE INDEX exceeds the maximum of 32768 bytes. If the list contains null capable columns then an additional byte is required for each null capable column. If the index contains variable length columns, then the 2-byte length of the columns is included in the total length. The key length may be too long if an ICU (UNICODE) table is being used. The internal expansion of the key can be up to six times the user specified key length due to translation. See previous messages for details.</p> |
| <b>Recovery Text:</b>         | Reduce the length by deleting some of the columns from the CREATE INDEX column list. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -614   |
| <b>SQLSTATE or SQLSTATES:</b> | 54008  |

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| <b>SQL0615</b>              |   |
| <b>Message Text:</b>        | Object &1 in &2 type *&3 not dropped. It is in use.   |
| <b>Cause Text:</b>          | Object &1 in &2 type *&3 was not dropped because it is already being used by the same application process. If the object is a table, it may be in use by an open cursor. If the object is an SQL package, the package may currently be running. |
| <b>Recovery Text:</b>       | If the object is a table, the cursor must be closed. If the object is an SQL package, the SQL package cannot drop itself. Try the drop request again.   |
| <b>SQLCODE or SQLCODEs:</b> | -615  |

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| <b>SQL0615</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 55006 |

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| <b>SQL0616</b>                |  |
| <b>Message Text:</b>          | &1 in &2 type &3 cannot be dropped with RESTRICT.  |
| <b>Cause Text:</b>            | An attempt was made to drop &1 in &2 with the RESTRICT option. &1 cannot be dropped because a view, a constraint, a trigger, a materialized query table, or an index is dependent on it. |
| <b>Recovery Text:</b>         | Specify CASCADE on the ALTER TABLE statement to drop &1 and the views, constraints, triggers, materialized query tables, and indexes that are dependent on it. Try the request again.    |
| <b>SQLCODE or SQLCODEs:</b>   | -616   |
| <b>SQLSTATE or SQLSTATES:</b> | 42893  |

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| <b>SQL0624</b>                |  |
| <b>Message Text:</b>          | Table &1 in &2 already has a primary key.  |
| <b>Cause Text:</b>            | An attempt was made to add a primary or unique key to table &1 in &2. Either a primary key is already defined for this table, or the table has an access path which does not match the key being added. A table can only have one primary key. The constraint cannot be added. |
| <b>Recovery Text:</b>         | Drop the primary key currently defined on the table or add the constraint as a UNIQUE constraint. If the table's access path does not match, make sure that the number of columns in the constraint match the number of columns in the access path. Try the request again.     |
| <b>SQLCODE or SQLCODEs:</b>   | -624   |
| <b>SQLSTATE or SQLSTATES:</b> | 42889  |

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| <b>SQL0628</b>       |                                       |
| <b>Message Text:</b> | Clauses not valid in same definition. |

| <b>SQL0628</b>                |   |
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| <b>Cause Text:</b>            | <p>Clauses specified to define the attributes of a column, a sourced function, a procedure, a trigger, or an index are not valid. One of the following has occurred:</p> <ul style="list-style-type: none"> <li>• More than one of the clauses FOR BIT DATA, FOR SBCS DATA, FOR MIXED DATA, or CCSID was specified for a column definition.</li> <li>• READ PERMISSION FS and WRITE PERMISSION BLOCKED were specified for a DataLink column.</li> <li>• READ PERMISSION DB and WRITE PERMISSION FS were specified for a DataLink column.</li> <li>• WRITE PERMISSION FS and the ON UNLINK clause were specified for a DataLink column.</li> <li>• INCLUDING or EXCLUDING COLUMN DEFAULTS and USING TYPE DEFAULTS were specified for a table.</li> <li>• A clause was specified that is not valid when creating a sourced function.</li> <li>• A RETURNS clause was specified for ALTER FUNCTION, but the alter did not specify REPLACE.</li> <li>• AUTONOMOUS is specified for a procedure and COMMIT ON RETURN or DYNAMIC RESULT SETS with a non-zero value is also specified.</li> <li>• FOR EACH STATEMENT is specified for a BEFORE or INSTEAD OF trigger or is specified with MODE DB2ROW.</li> <li>• MODE DB2SQL is specified for a BEFORE trigger and the trigger contains a reference to the trigger table.</li> <li>• A WHEN clause or an UPDATE column list is specified for an INSTEAD OF trigger.</li> <li>• A correlation name with OLD ROW or NEW ROW and a SET OPTION for date or time option were specified.</li> <li>• For CREATE INDEX, the RCDFMT clause cannot be specified if the INCLUDE clause is specified. The INCLUDE clause requires the ENCODED VECTOR clause.</li> <li>• The option specified on SET OPTION DBGVIEW is not consistent with the value specified for the DEBUG MODE.</li> <li>• The SET OPTION CONACC cannot be specified with routine option CONCURRENT ACCESS RESOLUTION.</li> </ul> |
| <b>Recovery Text:</b>         | Change or remove a clause so that the definition is valid. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -628  |
| <b>SQLSTATE or SQLSTATEs:</b> | 42613   |

| <b>SQL0629</b>              |  |
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| <b>Message Text:</b>        | SET NULL not allowed for referential constraint &1 in &2.  |
| <b>Cause Text:</b>          | SET NULL was specified in the REFERENCES clause for referential constraint &1. None of the columns in the foreign key allows null values.  |
| <b>Recovery Text:</b>       | Create the table so that at least one of the columns in the foreign key allows null values or specify a different default action on the ON DELETE clause. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b> | -629   |



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| <b>SQL0629</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 42834 |

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| <b>SQL0631</b>                |   |
| <b>Message Text:</b>          | Foreign key for referential constraint &1 in &2 too long.   |
| <b>Cause Text:</b>            | The FOREIGN key cannot be created for constraint &1 in &2. Either more than 120 columns were specified in a FOREIGN KEY clause or the sum of the lengths of the columns specified in the key exceeds the maximum of 32768 bytes. If the list contains null capable columns then an additional byte is required for the length of each null capable column. If the list contains variable length columns, then the 2-byte length of the columns is included in the total length. |
| <b>Recovery Text:</b>         | Remove some of the columns from the FOREIGN KEY clause. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -631  |
| <b>SQLSTATE or SQLSTATES:</b> | 54008   |

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| <b>SQL0636</b>                |  |
| <b>Message Text:</b>          | Ranges specified for partition &1 not valid.   |
| <b>Cause Text:</b>            | The ranges specified for the partitioning keys are not valid for one of the following reasons: <ul style="list-style-type: none"> <li>• Partitions are not specified in the correct order.</li> <li>• ENDING value for a partition is less than the STARTING value.</li> <li>• Values specified in the EVERY clause are not valid for the range.</li> <li>• MINVALUE or MAXVALUE was specified for a start or end value and the statement contained an EVERY clause.</li> <li>• Partition keys overlap.</li> <li>• MINVALUE or MAXVALUE was specified for a start or end value of a partition key boundary and a subsequent key value for that range is not the same value.</li> </ul> |
| <b>Recovery Text:</b>         | Specify valid ranges for the STARTING, ENDING, or EVERY clause. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -636   |
| <b>SQLSTATE or SQLSTATES:</b> | 56016  |

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| <b>SQL0637</b>       |   |
| <b>Message Text:</b> | Keyword or clause starting with &1 not valid. |

| <b>SQL0637</b>                |   |
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| <b>Cause Text:</b>            | <p>Keyword or clause &amp;1 is not valid for one of the following reasons:</p> <ul style="list-style-type: none"> <li>• DEFAULT, HIDDEN, ROW CHANGE TIMESTAMP, FIELDPROC, UNIQUE, PRIMARY, each DataLink option, and each identity option can only be specified once in a column definition on a CREATE TABLE statement.</li> <li>• UNIQUE and PRIMARY cannot both be specified for the same column definition.</li> <li>• PRIMARY can only be specified once on a CREATE TABLE statement.</li> <li>• Each of the IDENTITY COLUMN ATTRIBUTES, COLUMN DEFAULTS, USING TYPE DEFAULTS, HIDDEN COLUMN ATTRIBUTES, and ROW CHANGE TIMESTAMP COLUMN ATTRIBUTES options can only be specified once.</li> <li>• For ALTER TABLE ALTER COLUMN, each SET or DROP option can only be specified once for a column.</li> <li>• For ALTER TABLE, ROW ACCESS CONTROL and COLUMN ACCESS CONTROL can each be specified only one time.</li> <li>• A check constraint can have only one ON INSERT VIOLATION and one ON UPDATE VIOLATION clause.</li> <li>• Each option for an XML function can be specified only one time.</li> <li>• Each of the FOR READ ONLY, FOR UPDATE, OPTIMIZE, isolation level, and SKIP LOCKED DATA clauses can only be specified once.</li> <li>• For CREATE TRIGGER, each of the INSERT, UPDATE, or DELETE events can be specified only one time.</li> <li>• Only one FOR ORDINALITY column can be defined in an XMLTABLE function.</li> <li>• Only one xquery-context-item-expression can be specified in the PASSING clause of XMLTABLE.</li> <li>• The attribute string for the PREPARE statement can only specify an option once and cannot contain conflicting options.</li> </ul> |
| <b>Recovery Text:</b>         | Remove all but one specification for each keyword or clause. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -637  |
| <b>SQLSTATE or SQLSTATES:</b> | 42614   |

| <b>SQL0642</b>                |  |
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| <b>Message Text:</b>          | Maximum number of constraints exceeded for &1 in &2.   |
| <b>Cause Text:</b>            | A constraint cannot be added to table &1 in &2 because the table is already associated with 5000 constraints. This limit includes all constraints defined on the table and all referential constraints where the table is defined as a parent. |
| <b>Recovery Text:</b>         | Drop one of the other 5000 constraints, if possible, and try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -642   |
| <b>SQLSTATE or SQLSTATES:</b> | 54021  |

| <b>SQL0644</b>       |                                |
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| <b>Message Text:</b> | ATTRIBUTES value &1 not valid. |

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| <b>SQL0644</b>                |  |
| <b>Cause Text:</b>            | The ATTRIBUTES string specified for the PREPARE statement contains &1, which is not correct. The type of SQL statement being prepared is &2. |
| <b>Recovery Text:</b>         | Remove or correct the invalid attribute and try again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -644   |
| <b>SQLSTATE or SQLSTATES:</b> | 42615  |

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| <b>SQL0645</b>                |  |
| <b>Message Text:</b>          | WHERE NOT NULL clause ignored for index &1 in &2.  |
| <b>Cause Text:</b>            | UNIQUE WHERE NOT NULL was specified when creating index &1 in &2. However, none of the columns in the index allow null values. The index is created as a unique index. |
| <b>Recovery Text:</b>         | Remove the WHERE NOT NULL clause from the CREATE INDEX statement.  |
| <b>SQLCODE or SQLCODEs:</b>   | +645   |
| <b>SQLSTATE or SQLSTATES:</b> | 01528  |

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| <b>SQL0658</b>                |   |
| <b>Message Text:</b>          | Function &1 in &2 cannot be dropped.  |
| <b>Cause Text:</b>            | Function &1 in schema &2 cannot be dropped because it was implicitly generated by the CREATE DISTINCT TYPE statement. |
| <b>Recovery Text:</b>         | To drop the function, you must drop the distinct type with which this function is associated.                         |
| <b>SQLCODE or SQLCODEs:</b>   | -658  |
| <b>SQLSTATE or SQLSTATES:</b> | 42917   |

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| <b>SQL0662</b>                |   |
| <b>Message Text:</b>          | Partitioned index cannot be created for &1 in &2.   |
| <b>Cause Text:</b>            | PARTITIONED or NOT PARTITIONED was specified on a CREATE INDEX statement, but table &1 in schema &2 is not a partitioned table. |
| <b>Recovery Text:</b>         | Remove the PARTITIONED clause from the statement. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -662  |
| <b>SQLSTATE or SQLSTATES:</b> | 53037   |

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| <b>SQL0663</b>       |   |
| <b>Message Text:</b> | Number of partitioning values is not correct. |

| <b>SQL0663</b>                |   |
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| <b>Cause Text:</b>            | Wrong number of values were specified in the STARTING or ENDING clause for partition &1. The number of values specified must match the number of key columns for the partitioning key.<br><br>Only one column can be specified in the partitioning key if the EVERY clause is used. |
| <b>Recovery Text:</b>         | Change the number of key limit values specified so that it matches the number of partitioning key columns or change the number of columns in the partitioning key. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -663  |
| <b>SQLSTATE or SQLSTATES:</b> | 53038   |

| <b>SQL0665</b>                |   |
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| <b>Message Text:</b>          | The partition name or number &1 is not valid.   |
| <b>Cause Text:</b>            | Partition name or partition number &1 was specified in a DROP PARTITION clause but does not refer to a partition in the table. The partition name or number specified must identify an existing partition from the table. |
| <b>Recovery Text:</b>         | Specify the partition name or number for an existing partition. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -665  |
| <b>SQLSTATE or SQLSTATES:</b> | 53039   |

| <b>SQL0666</b>       |   |
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| <b>Message Text:</b> | SQL query exceeds specified time limit or storage limit.  |
| <b>Cause Text:</b>   | A database query was about to be started whose estimated run time of &1 exceeds the specified limit of &2 or whose estimated temporary storage usage of &3 exceeds the specified limit of &4. The query time limit and temporary storage limit are specified on the CHGQRYA CL command. |

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| <b>SQL0666</b>                |  |
| <b>Recovery Text:</b>         | <p>The following changes to the query could reduce the estimated elapsed time or estimated amount of temporary storage usage.</p> <ul style="list-style-type: none"> <li>• Change the query so that fewer records are returned by adding more restrictive record selection specifications.</li> <li>• Change the record selection of the query so that an existing access path can be used to process the records more quickly.</li> <li>• Create an access path with keys that match the record selection of the query using the SQL CREATE INDEX statement.</li> <li>• Change the ordering specification so neither a temporary access path needs to be built nor a sort needs to be performed.</li> <li>• Change the grouping field specification to match the left-most key fields of an existing access path. This allows an existing access path to be used.</li> <li>• Specify the OPTIMIZE FOR NN ROWS clause where NN represents the actual number of records which are to be retrieved before the query is ended. This clause will cause the query optimizer to assume that the query will not be run to completion and consequently reduce the estimates.</li> <li>• Change the output type of your query to produce the results on the display.</li> <li>• Specify a new value for the query time limit with the QRYTIMLMT parameter of the CHGQRYA CL command.</li> <li>• Specify a new value for the query temporary storage limit with the QRYSTGLMT parameter of the CHGQRYA CL command.</li> <li>• Examine the query debug messages contained in the job log for performance information and suggestions. These messages will precede this message in the job log and will provide additional information and suggestions.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | -666   |
| <b>SQLSTATE or SQLSTATES:</b> | 57005  |

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| <b>SQL0667</b>                |   |
| <b>Message Text:</b>          | FOREIGN key value does not match a value in the parent key of constraint &1 in &2.  |
| <b>Cause Text:</b>            | Every value in the FOREIGN key of the dependent table must have a matching value in the parent key of the parent table. For constraint &1 in &2, there is an existing value in FOREIGN key of table &3 in &4 that does not have a matching value in the parent table. The constraint cannot be added. |
| <b>Recovery Text:</b>         | Update the rows in either the dependent table or parent table so that all values of the FOREIGN key have matching values in the parent key, or modify the definition of the keys in the referential constraint. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -667  |
| <b>SQLSTATE or SQLSTATES:</b> | 23520   |

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| <b>SQL0675</b>       |   |
| <b>Message Text:</b> | Specified delete rule not allowed with trigger on table &1 in &2. |

| <b>SQL0675</b>                |   |
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| <b>Cause Text:</b>            | The delete rule specified in referential constraint &3 in &4 on table &1 in &2 is not allowed for the specified trigger. Constraint rule DELETE CASCADE is not allowed with a delete trigger. Constraint rules DELETE SET NULL and DELETE SET DEFAULT are not allowed with an update trigger. |
| <b>Recovery Text:</b>         | Either use the RMVPFTRG command to remove the trigger, use the RMVPCST command to remove the constraint, define the constraint with a valid delete rule, or define the trigger with a different event.  |
| <b>SQLCODE or SQLCODEs:</b>   | -675  |
| <b>SQLSTATE or SQLSTATEs:</b> | 42892   |

| <b>SQL0678</b>                |   |
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| <b>Message Text:</b>          | Data type of literal &1 not compatible with column &3.  |
| <b>Cause Text:</b>            | The literal specified is not compatible. If literal &1 is specified for the STARTING, ENDING, or EVERY clause, it is not compatible with column &3. The data type of column &3 is &2. If the literal is specified in a comparison with a numeric value, the literal is not a valid numeric value. |
| <b>Recovery Text:</b>         | Specify a valid literal. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -678  |
| <b>SQLSTATE or SQLSTATEs:</b> | 53045   |

| <b>SQL0679</b>       |  |
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| <b>Message Text:</b> | Object &1 in &2 type *&3 not created due to pending operation.   |
| <b>Cause Text:</b>   | <p>The object &amp;1 has an outstanding DROP or CREATE under commitment control which is preventing the create. This could have occurred in one of the following ways:</p> <ul style="list-style-type: none"> <li>• This application process has performed a DROP under commitment control which has not been committed and is now trying to create the same object using commitment control level *NONE.</li> <li>• A different application process has performed a DROP under commitment control which has not been committed.</li> <li>• This application process has performed a DROP under commitment control using a different commit definition and the DROP has not been committed.</li> <li>• This application process has performed a CREATE under commitment control which has not been committed and is now trying to use the object on a subsequent CREATE under commitment control level *NONE.</li> </ul> |

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| <b>SQL0679</b>                |  |
| <b>Recovery Text:</b>         | <p>Do one of the following and try the request again:</p> <ul style="list-style-type: none"> <li>• If it was your application process which issued the uncommitted DROP or CREATE statement then issue a COMMIT before attempting the creation of the object or issue the CREATE statement from a program using a commitment control level other than *NONE.</li> <li>• If the application process that issued the DROP on this object is not your application, then that application process must perform a COMMIT or a ROLLBACK of the DROP statement.</li> <li>• If your application process issued the uncommitted DROP or CREATE statement under a different commit definition, issue a COMMIT or ROLLBACK for that commit definition.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | -679   |
| <b>SQLSTATE or SQLSTATEs:</b> | 57006  |

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| <b>SQL0680</b>                |  |
| <b>Message Text:</b>          | Too many columns specified.  |
| <b>Cause Text:</b>            | Too many columns were specified in the definition of a user defined table function. A maximum of 125 columns can be specified for the input parameters and the return columns combined. This maximum is reduced by one if both the SCRATCHPAD and DBINFO structures are requested. |
| <b>Recovery Text:</b>         | Reduce the number of parameters or return columns specified for the user defined table function. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -680   |
| <b>SQLSTATE or SQLSTATEs:</b> | 54011  |

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| <b>SQL0681</b>                |   |
| <b>Message Text:</b>          | Field procedure on column &1 returned SQLSTATE &5.                                    |
| <b>Cause Text:</b>            | Field procedure on column &1 returned SQLSTATE &5. The associated message text is &4. |
| <b>Recovery Text:</b>         | Change the field procedure to return a valid SQLSTATE. Try the request again.         |
| <b>SQLCODE or SQLCODEs:</b>   | -681  |
| <b>SQLSTATE or SQLSTATEs:</b> | 23507   |

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| <b>SQL0682</b>       |   |
| <b>Message Text:</b> | Program name &1 for field procedure cannot be used. |

| <b>SQL0682</b>                |   |
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| <b>Cause Text:</b>            | <p>The program name &amp;1 in &amp;2 that was specified for the field procedure is not found or there is insufficient authority to use the program. The reason code is &amp;3. The reason codes and their meanings are:</p> <ul style="list-style-type: none"> <li>• 1 -- The field procedure is not found.</li> <li>• 2 -- There is insufficient authority to use the program. *EXECUTE authority is required on the program and library containing the program.</li> <li>• 3 -- The program name does not specify an ILE program. It cannot refer to an OPM program, service program, or a Java procedure. If specified as the string form of an external program name, it must be of the form 'library-name/program-name'.</li> <li>• 4 -- The field procedure program cannot have an activation group of *NEW.</li> </ul> |
| <b>Recovery Text:</b>         | <p>Ensure the program name was specified correctly and that an ILE program exists by that name. If the program exists, obtain the required authority to use the program and library. Try the request again.</p>   |
| <b>SQLCODE or SQLCODEs:</b>   | -682  |
| <b>SQLSTATE or SQLSTATES:</b> | 57010   |

| <b>SQL0683</b>                |  |
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| <b>Message Text:</b>          | Clause not valid for specified type.   |
| <b>Cause Text:</b>            | <p>One of the following has occurred:</p> <ul style="list-style-type: none"> <li>• The FOR BIT DATA, the FOR MIXED DATA, the FOR SBCS DATA, or the CCSID clause was specified for the CAST scalar function, for a CREATE DISTINCT TYPE source data type, or for column or parameter &amp;1. These clauses are not valid if the type is numeric, date, time, timestamp, binary, NCHAR, or a user defined type. The FOR BIT DATA, FOR MIXED DATA, or FOR SBCS DATA clause is not valid if the type is graphic, XML, or DataLink.</li> <li>• The LINKTYPE option was specified for a column that is not a DataLink.</li> <li>• ROW CHANGE TIMESTAMP was specified and the data type is not timestamp with precision of 6.</li> <li>• FIELDPROC cannot be specified for a column that has a ROWID or DATALINK data type or that is defined as a row change timestamp or identity column.</li> <li>• FOR BIT DATA cannot be specified for result columns of the XMLTABLE function.</li> <li>• A CCSID cannot be specified for XML variables in an SQL routine.</li> </ul> |
| <b>Recovery Text:</b>         | Change or remove the clause that is not correct. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -683   |
| <b>SQLSTATE or SQLSTATES:</b> | 42842  |

| <b>SQL0684</b>        |  |
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| <b>Message Text:</b>  | FIELDPROC list of constants too long.  |
| <b>Cause Text:</b>    | The list of constants for FIELDPROC beginning with &1 is longer than 2000 bytes. |
| <b>Recovery Text:</b> | Shorten the list by using shorter values or fewer values. Try the request again. |



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| <b>SQL0684</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | -684  |
| <b>SQLSTATE or SQLSTATES:</b> | 54012 |

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| <b>SQL0685</b>                |   |
| <b>Message Text:</b>          | Field procedure on column &1 has returned invalid data. |
| <b>Cause Text:</b>            | Field procedure on column &1 has returned invalid data. |
| <b>Recovery Text:</b>         | Change the field procedure to return valid data.        |
| <b>SQLCODE or SQLCODEs:</b>   | -685  |
| <b>SQLSTATE or SQLSTATES:</b> | 58002   |

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| <b>SQL0696</b>                |   |
| <b>Message Text:</b>          | Correlation name or table &3 not valid.   |
| <b>Cause Text:</b>            | The correlation name or table &3 is not valid for trigger &1 in &2. The reason code is &4. One of the following reason codes indicates the error: <ul style="list-style-type: none"> <li>• 1 - NEW correlation name or NEW_TABLE &amp;3 was specified in a DELETE trigger.</li> <li>• 2 - OLD correlation name or OLD_TABLE &amp;3 was specified in an INSERT trigger.</li> <li>• 3 - OLD_TABLE or NEW_TABLE was specified in a BEFORE trigger or was specified with DB2ROW.</li> </ul> |
| <b>Recovery Text:</b>         | Change the referencing clause or the type of trigger so that the statement is valid. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -696  |
| <b>SQLSTATE or SQLSTATES:</b> | 42898   |

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| <b>SQL0697</b>                |  |
| <b>Message Text:</b>          | REFERENCING OLD or NEW not valid for statement trigger.  |
| <b>Cause Text:</b>            | REFERENCING OLD or NEW was specified for an SQL trigger. Old and new correlation variables are not valid for statement triggers. |
| <b>Recovery Text:</b>         | Remove the REFERENCING clause or specify FOR EACH ROW on the CREATE TRIGGER statement. Try the request again.                    |
| <b>SQLCODE or SQLCODEs:</b>   | -697   |
| <b>SQLSTATE or SQLSTATES:</b> | 42899  |

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| <b>SQL0707</b>       |                            |
| <b>Message Text:</b> | Name &1 in &2 not allowed. |

| <b>SQL0707</b>                |   |
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| <b>Cause Text:</b>            | Name &1 is not allowed for one of the following reasons: <ul style="list-style-type: none"> <li>• Distinct type, array type, sequence, or global variable &amp;1 in &amp;2 cannot be created or dropped. Either the name is a reserved word or the schema is specified as QSYS, QSYS2, SYSIBM or QTEMP. Distinct types, array types, sequences, and global variables cannot be created in QSYS, QSYS2, SYSIBM, SYSPROC, or QTEMP.</li> <li>• Savepoint &amp;1 cannot have a name that starts with SYS.</li> </ul> |
| <b>Recovery Text:</b>         | Change the name to a non-reserved word, or create the user-defined data type, sequence or global variable in a schema other than QSYS, QSYS2, SYSIBM, SYSPROC, or QTEMP.  |
| <b>SQLCODE or SQLCODEs:</b>   | -707  |
| <b>SQLSTATE or SQLSTATES:</b> | 42939   |

| <b>SQL0713</b>                |   |
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| <b>Message Text:</b>          | Value for &2 is not correct.  |
| <b>Cause Text:</b>            | The value specified in the SET &2 statement is not correct. The NULL value cannot be used to set the &2 special register. &2 can only be set using a character or UCS-2 or UTF-16 graphic string.<br><br>For SET ENCRYPTION PASSWORD WITH HINT, the hint value cannot be longer than 32 characters.<br><br>For SET SCHEMA, all letters in the schema name must be uppercase or the schema name must be delimited.<br><br>For SET CURRENT DEGREE, the value cannot be longer than 5 characters.<br><br>For SET SESSION AUTHORIZATION, the authorization name cannot be longer than 10 characters. An authorization name specified as a string literal or with a host variable cannot contain the special register strings USER, SYSTEM_USER, or SESSION_USER and cannot contain lower case letters or special characters.<br><br>For SET CURRENT DECFLOAT ROUNDING MODE, the value must not contain lowercase letters and must identify one of the supported rounding modes.<br><br>For SET CURRENT IMPLICIT XMLPARSE OPTION, the value must identify one of the supported whitespace options. |
| <b>Recovery Text:</b>         | Specify a valid value for the special register. Make sure it does not have the NULL value. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -713  |
| <b>SQLSTATE or SQLSTATES:</b> | 42815   |

| <b>SQL0723</b>       |  |
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| <b>Message Text:</b> | SQL trigger &1 in &2 failed with SQLCODE &3 SQLSTATE &4.   |
| <b>Cause Text:</b>   | An error has occurred in a triggered SQL statement in trigger &1 in schema &2. The SQLCODE is &3, the SQLSTATE is &4, and the message is &5. |

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| <b>SQL0723</b>                |   |
| <b>Recovery Text:</b>         | Refer to the joblog for more information regarding the detected error. Correct the error and try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -723  |
| <b>SQLSTATE or SQLSTATES:</b> | 09000   |

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| <b>SQL0724</b>                |   |
| <b>Message Text:</b>          | Too many cascaded trigger programs.   |
| <b>Cause Text:</b>            | The maximum depth of 200 cascaded triggers has been exceeded.                                 |
| <b>Recovery Text:</b>         | Remove any trigger that is causing repeated trigger programs to be called for the same table. |
| <b>SQLCODE or SQLCODEs:</b>   | -724  |
| <b>SQLSTATE or SQLSTATES:</b> | 54038   |

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| <b>SQL0727</b>                |  |
| <b>Message Text:</b>          | Evaluation of an expression associated with &5 in &6 failed.   |
| <b>Cause Text:</b>            | <p>One of the following has occurred:</p> <ul style="list-style-type: none"> <li>• An error occurred during evaluation of the DEFAULT clause of global variable &amp;5 in &amp;6.</li> <li>• An error occurred during the evaluation of the DEFAULT clause for a parameter for routine &amp;5 in &amp;6.</li> <li>• An error occurred during the evaluation of the rule text for PERMISSION or MASK &amp;5 in &amp;6.</li> </ul> <p>The SQLCODE associated with the failure is &amp;2. The SQLSTATE is &amp;3. The message tokens are &amp;4.</p> <p>This failure may also indicate an error occurred on a system other than DB2 for IBM i during implicit system action &amp;1.</p> |
| <b>Recovery Text:</b>         | Refer to the joblog or see the product documentation for more information regarding the detected error. Correct the error and try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -727   |
| <b>SQLSTATE or SQLSTATES:</b> | 56098  |

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| <b>SQL0751</b>       |                               |
| <b>Message Text:</b> | SQL statement &1 not allowed. |

| <b>SQL0751</b>                |   |
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| <b>Cause Text:</b>            | <p>The statement &amp;1 is not allowed in a stored procedure, user-defined function, or trigger.</p> <ul style="list-style-type: none"> <li>• Statements not allowed in a trigger program are CONNECT, SET CONNECTION, RELEASE, DISCONNECT, and SET RESULT SETS.</li> <li>• RUNSQLSTM is not allowed in a trigger program.</li> <li>• COMMIT and ROLLBACK are not allowed in a trigger program if the trigger program is running in the same activation group as the triggering program. COMMIT and ROLLBACK are not allowed in an SQL trigger.</li> <li>• ALTER TABLE is not allowed in a trigger program when commitment control is active.</li> <li>• COMMIT and ROLLBACK are not allowed if the procedure is defined as COMMIT ON RETURN YES or for a distributed unit of work.</li> <li>• The RETURN statement is not allowed in an SQL trigger.</li> <li>• The TRUNCATE statement is not allowed in an SQL before trigger.</li> </ul> |
| <b>Recovery Text:</b>         | Remove the statement &1 from your trigger program, user-defined function, or stored procedure. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -751  |
| <b>SQLSTATE or SQLSTATES:</b> | 0W000, 2F003, 38003, 42985, 42987   |

| <b>SQL0752</b>       |  |
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| <b>Message Text:</b> | Connection cannot be changed. Reason code is &1.   |
| <b>Cause Text:</b>   | <p>Connection cannot be made because the application process is not in a connectable state. The reason code is &amp;1. Reason codes and their meanings are:</p> <ul style="list-style-type: none"> <li>• 1 -- SQL is not in a connectable state. SQL enters the connectable state after a COMMIT or ROLLBACK. SQL leaves the connectable state when any SQL statement except a COMMIT, ROLLBACK, or CONNECT statement is run.</li> <li>• 2 -- There are pending changes or open files under commitment control at the current server and the relational database (RDB) specified on the CONNECT request is not the current server.</li> <li>• 3 -- A create SQL package request is being processed when not on a commit boundary.</li> <li>• 4 -- The connection is locked by another invocation of Interactive SQL, or there is a level mismatch between the Interactive SQL product and IBM i.</li> <li>• 5 -- The connection cannot be changed due to restrictions with remote connections and the job level commitment definition.</li> <li>• 6 -- The connection cannot be changed to a remote system due to a SET TRANSACTION statement.</li> <li>• 7 -- The connection cannot be changed using *RUW connection management because a previous connection is protected.</li> <li>• 8 -- CONNECT RESET cannot start a local connection to RDB &amp;2 because the RDB for the auxiliary storage pool (ASP) group of the thread is &amp;3.</li> <li>• 9 -- There is a mismatch between the active connection and the current ASP group of the thread.</li> </ul> |

| <b>SQL0752</b>                |   |
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| <b>Recovery Text:</b>         | <p>Do one of the following based on the reason code:</p> <ul style="list-style-type: none"> <li>• 1 -- Issue a COMMIT or ROLLBACK statement to enter the connectable state.</li> <li>• 2 -- Close all files open under commitment control and issue a COMMIT or ROLLBACK statement.</li> <li>• 3 -- Issue a COMMIT or ROLLBACK statement.</li> <li>• 4 -- Exit Interactive SQL and try the request again. If Interactive SQL is active, the current server can only be changed using Interactive SQL.</li> <li>• 5 -- All activation groups associated with the job level commitment definition must be local; or only one remote connection and no local connections can be associated with the job level commitment definition.</li> <li>• 6 -- Issue a COMMIT or ROLLBACK statement.</li> <li>• 7 -- Release the protected conversation followed by a COMMIT.</li> <li>• 8 -- Change the ASP group of the thread to the ASP group for relational database &amp;2.</li> <li>• 9 -- Either change the ASP group of the thread to the ASP group for relational database &amp;2 or use a CONNECT or SET CONNECTION statement to change the active connection.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | -752  |
| <b>SQLSTATE or SQLSTATES:</b> | 0A001   |

| <b>SQL0771</b>                |  |
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| <b>Message Text:</b>          | Use of ROWID not valid.  |
| <b>Cause Text:</b>            | <p>ROWID is not valid for one of the following reasons:</p> <ul style="list-style-type: none"> <li>• A table with a ROWID column cannot be created in QTEMP.</li> <li>• A table cannot be created with a ROWID column that has the NULL attribute.</li> <li>• ROWID cannot be specified as a type on the CREATE VARIABLE statement.</li> </ul> |
| <b>Recovery Text:</b>         | Remove the ROWID column or type or create the table in a schema other than QTEMP. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -771   |
| <b>SQLSTATE or SQLSTATES:</b> | 428C7  |

| <b>SQL0773</b>                |   |
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| <b>Message Text:</b>          | Case not found for CASE statement.  |
| <b>Cause Text:</b>            | A CASE statement without an ELSE clause was specified in the routine body of an SQL procedure. None of the conditions specified in the CASE statement were met. |
| <b>Recovery Text:</b>         | Change the CASE statement to handle all conditions that can occur.  |
| <b>SQLCODE or SQLCODEs:</b>   | -773  |
| <b>SQLSTATE or SQLSTATES:</b> | 20000   |

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| <b>SQL0774</b>                |   |
| <b>Message Text:</b>          | Statement cannot be executed within a compound SQL statement. |
| <b>Cause Text:</b>            |   |
| <b>Recovery Text:</b>         |   |
| <b>SQLCODE or SQLCODEs:</b>   | -774  |
| <b>SQLSTATE or SQLSTATES:</b> | 2D522   |

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| <b>SQL0775</b>                |   |
| <b>Message Text:</b>          | Statement not allowed in specified SQL routine.   |
| <b>Cause Text:</b>            | <p>A statement specified in the routine body of an SQL procedure, SQL function, or compound(dynamic) statement is not allowed. A list of restrictions follows:</p> <ul style="list-style-type: none"> <li>• A COMMIT or ROLLBACK statement cannot be specified in an atomic compound statement in an SQL procedure or in an atomic compound(dynamic) statement.</li> <li>• An ATOMIC compound statement cannot be specified in an SQL function.</li> <li>• COMMIT, ROLLBACK, CONNECT, DISCONNECT, SET CONNECTION, SET RESULT SETS, and SET TRANSACTION statements cannot be specified in an SQL function.</li> <li>• The SET RESULT SETS statement cannot be specified in a compound (dynamic) statement or in an SQL procedure routine body unless RESULT SET is specified for the procedure.</li> </ul> |
| <b>Recovery Text:</b>         | Remove the statement from the SQL function, procedure, on compound(dynamic) statement.  |
| <b>SQLCODE or SQLCODEs:</b>   | -775  |
| <b>SQLSTATE or SQLSTATES:</b> | 42910   |

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| <b>SQL0776</b>                |   |
| <b>Message Text:</b>          | Cursor &1 specified in FOR statement not allowed.   |
| <b>Cause Text:</b>            | Cursor &1 is specified as the cursor name on a FOR statement in an SQL procedure. The cursor cannot be specified on a FETCH, OPEN, or CLOSE statement within the FOR statement. |
| <b>Recovery Text:</b>         | Remove the OPEN, CLOSE, or FETCH statement.   |
| <b>SQLCODE or SQLCODEs:</b>   | -776  |
| <b>SQLSTATE or SQLSTATES:</b> | 428D4   |

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| <b>SQL0777</b>       |  |
| <b>Message Text:</b> | CASE nested deeper than three levels.  |
| <b>Cause Text:</b>   | CASE statements in the routine body of an SQL procedure, function, or trigger can be nested up to three levels when used with a simple-when-clause. There is no nesting limit when the CASE uses a searched-when-clause. |

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| <b>SQL0777</b>                |  |
| <b>Recovery Text:</b>         | Change the CASE statement to use a searched-when-clause. |
| <b>SQLCODE or SQLCODEs:</b>   | -777   |
| <b>SQLSTATE or SQLSTATES:</b> | 42919  |

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| <b>SQL0778</b>                |  |
| <b>Message Text:</b>          | End label &1 not same as begin label.  |
| <b>Cause Text:</b>            | Label &1 specified at the end of a compound, FOR, WHILE, REPEAT, or LOOP statement in an SQL routine body is not the same as the label at the beginning of the statement. The end label cannot be specified if the begin label is not specified. |
| <b>Recovery Text:</b>         | Ensure the end label is the same as the begin label for compound, FOR, WHILE, REPEAT, and LOOP statements.   |
| <b>SQLCODE or SQLCODEs:</b>   | -778   |
| <b>SQLSTATE or SQLSTATES:</b> | 428D5  |

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| <b>SQL0779</b>                |   |
| <b>Message Text:</b>          | Label &1 specified not valid.   |
| <b>Cause Text:</b>            | Label &1 is specified on a LEAVE or a GOTO statement in an SQL routine body. The label is not a valid label or is not in the same scope as the current statement. |
| <b>Recovery Text:</b>         | Specify a valid label that is within the same scope. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -779  |
| <b>SQLSTATE or SQLSTATES:</b> | 42736   |

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| <b>SQL0780</b>                |   |
| <b>Message Text:</b>          | UNDO specified for a handler not valid.   |
| <b>Cause Text:</b>            | UNDO is specified for a handler in a compound statement in an SQL procedure, function, or trigger. UNDO cannot be specified unless the compound statement is ATOMIC. UNDO cannot be specified in a trigger. |
| <b>Recovery Text:</b>         | Either specify an ATOMIC compound statement or specify EXIT or CONTINUE on the handler.   |
| <b>SQLCODE or SQLCODEs:</b>   | -780  |
| <b>SQLSTATE or SQLSTATES:</b> | 428D6   |

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| <b>SQL0781</b>       |  |
| <b>Message Text:</b> | Condition &1 specified in handler not defined.                             |
| <b>Cause Text:</b>   | Condition &1 specified in a handler in an SQL routine body is not defined. |

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| <b>SQL0781</b>                |  |
| <b>Recovery Text:</b>         | Define the condition using the DECLARE CONDITION statement or remove the condition from the handler. |
| <b>SQLCODE or SQLCODEs:</b>   | -781   |
| <b>SQLSTATE or SQLSTATES:</b> | 42737  |

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| <b>SQL0782</b>                |   |
| <b>Message Text:</b>          | Condition value &1 specified in handler not valid.  |
| <b>Cause Text:</b>            | <p>Condition &amp;1 specified in a handler in an SQL routine body is not valid for one of the following reasons.</p> <ul style="list-style-type: none"> <li>• The condition value has already been specified by another handler in the same scope.</li> <li>• The condition or SQLSTATE was specified in the same handler as SQLEXCEPTION, SQLWARNING, or NOT FOUND.</li> </ul> |
| <b>Recovery Text:</b>         | Remove the condition from the handler.  |
| <b>SQLCODE or SQLCODEs:</b>   | -782  |
| <b>SQLSTATE or SQLSTATES:</b> | 428D7   |

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| <b>SQL0783</b>                |  |
| <b>Message Text:</b>          | Select list for cursor &1 in FOR statement not valid.  |
| <b>Cause Text:</b>            | <p>The select list in the FOR statement must contain unique column names.</p> <ul style="list-style-type: none"> <li>• The select list contains duplicate column names or unnamed expressions. If two column names are the same, the column name is &amp;2.</li> <li>• The FROM clause of the select references a table on a remote server.</li> </ul> |
| <b>Recovery Text:</b>         | Specify unique column names in the select list specified in the FOR statement.   |
| <b>SQLCODE or SQLCODEs:</b>   | -783   |
| <b>SQLSTATE or SQLSTATES:</b> | 42738  |

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| <b>SQL0784</b>        |   |
| <b>Message Text:</b>  | Constraint &1 cannot be dropped.  |
| <b>Cause Text:</b>    | Constraint &1 is a CHECK constraint or a UNIQUE constraint. It cannot be dropped because it is enforcing a primary key to be not null or a ROWID to be unique.  |
| <b>Recovery Text:</b> | <p>Do one of the following and try the request again:</p> <ul style="list-style-type: none"> <li>• Drop the primary key which this CHECK constraint is enforcing to be not null. If the primary key is needed, change the attributes of the columns that make up the primary key to be NOT NULL, and then add the primary key again.</li> <li>• Drop the ROWID column. An identity column could be used instead of the ROWID column.</li> </ul> |



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| <b>SQL0784</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | -784  |
| <b>SQLSTATE or SQLSTATES:</b> | 42860 |

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| <b>SQL0785</b>                |  |
| <b>Message Text:</b>          | Use of SQLCODE or SQLSTATE not valid.  |
| <b>Cause Text:</b>            | <p>SQLCODE or SQLSTATE was used as a variable in an SQL routine body, but is not valid for one of the following reasons:</p> <ul style="list-style-type: none"> <li>• SQLCODE is not declared as INT.</li> <li>• SQLSTATE is not declared as CHAR(5).</li> <li>• The variable is set to NULL.</li> <li>• SQLCODE or SQLSTATE is declared as a CONSTANT.</li> </ul> |
| <b>Recovery Text:</b>         | Declare the SQLCODE variable as INT and the SQLSTATE variable as CHAR(5). Set the variable to a valid value.   |
| <b>SQLCODE or SQLCODEs:</b>   | -785   |
| <b>SQLSTATE or SQLSTATES:</b> | 428D8  |

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| <b>SQL0787</b>                |  |
| <b>Message Text:</b>          | RESIGNAL statement not within a handler.   |
| <b>Cause Text:</b>            | The RESIGNAL statement, specified in an SQL routine, must be specified inside a handler. |
| <b>Recovery Text:</b>         | Remove the RESIGNAL statement or use a SIGNAL statement. Try the request again.          |
| <b>SQLCODE or SQLCODEs:</b>   | -787   |
| <b>SQLSTATE or SQLSTATES:</b> | 0K000  |

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| <b>SQL0788</b>                |   |
| <b>Message Text:</b>          | Duplicate row identified for MERGE target &1 in &2.   |
| <b>Cause Text:</b>            | The set of rows identified in the USING clause of the MERGE statement identifies the same row more than once in target table or view &1 in &2 specified in the INTO clause. Any row in the target table or view may only be identified once by the input of the USING clause. |
| <b>Recovery Text:</b>         | Change the data identified in the USING clause such that no rows occur more than once in the target table or view. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -788  |
| <b>SQLSTATE or SQLSTATES:</b> | 21506   |

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| <b>SQL0789</b>                |   |
| <b>Message Text:</b>          | Default value not valid for array parameter &1.                   |
| <b>Cause Text:</b>            | A default value cannot be specified for array parameter &1.       |
| <b>Recovery Text:</b>         | Remove the default value for parameter &1. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -789  |
| <b>SQLSTATE or SQLSTATES:</b> | 429BB   |

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| <b>SQL0798</b>                |   |
| <b>Message Text:</b>          | Value cannot be specified for GENERATED ALWAYS column &1.   |
| <b>Cause Text:</b>            | A value cannot be specified for column &1 because it is defined as GENERATED ALWAYS.  |
| <b>Recovery Text:</b>         | <p>Do one of the following and try the request again:</p> <ul style="list-style-type: none"> <li>• Remove the value from the INSERT or UPDATE statement, or specify DEFAULT to have a system value generated for the column.</li> <li>• Specify the OVERRIDING USER VALUE clause on the INSERT or UPDATE statement to override the GENERATED ALWAYS attribute and assign the value to the column.</li> <li>• Remove the column from the SET statement.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | -798  |
| <b>SQLSTATE or SQLSTATES:</b> | 428C9   |

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| <b>SQL0799</b>                |   |
| <b>Message Text:</b>          | Special register &1 does not exist at the application server.   |
| <b>Cause Text:</b>            | A SET statement references special register &1. This special register does not exist on the application server so it cannot be referenced in the statement. |
| <b>Recovery Text:</b>         | Remove the reference to the unsupported special register from the statement. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | +799  |
| <b>SQLSTATE or SQLSTATES:</b> | 01527   |

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| <b>SQL0802</b>       |  |
| <b>Message Text:</b> | Data conversion or data mapping error. |

| <b>SQL0802</b>                |  |
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| <b>Cause Text:</b>            | <p>Error type &amp;3 has occurred. Error types and their meanings are:</p> <ul style="list-style-type: none"> <li>• 1 -- Arithmetic overflow.</li> <li>• 2 -- Floating point overflow.</li> <li>• 3 -- Floating point underflow.</li> <li>• 4 -- Floating point conversion error.</li> <li>• 5 -- Not an exact result.</li> <li>• 6 -- Numeric data that is not valid.</li> <li>• 7 -- Double-byte character set (DBCS) or UTF-8 data that is not valid.</li> <li>• 8 -- Division by zero.</li> <li>• 9 -- Hash value cannot be computed for the requested query.</li> <li>• 10 -- User-defined function returned a mapping error.</li> <li>• 11 -- Not valid length found in a varying-length column returned from an array result set.</li> <li>• 12 -- Result of a concatenation operation on a varying-length field exceeded the maximum allowed length of the result type.</li> </ul> <p>If the error occurred when assigning a value to a host variable of a FETCH, embedded SELECT, SET, or VALUES INTO statement, the host variable name is &amp;2 and the relative position of the host variable in the INTO clause is &amp;1. If the host variable name is *N, the error occurred when attempting to resolve a search condition.</p> <p>If more than one data mapping error occurred, this is a description of the first error that occurred. For a description of any other data mapping errors, see the previously listed messages in the job log.</p> |
| <b>Recovery Text:</b>         | The error was caused by data that was not valid or that was too large. Look at the previously listed messages in the job log (DSPJOBLOG command) or press F10 (Display messages in job log) on this display to determine what row and columns were involved in the error. Correct the data and then try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | +802, -802   |
| <b>SQLSTATE or SQLSTATES:</b> | 01004, 01519, 01547, 01564, 01565, 22001, 22003, 22012, 22023, 22504   |

| <b>SQL0803</b>                |  |
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| <b>Message Text:</b>          | Duplicate key value specified.   |
| <b>Cause Text:</b>            | A unique index or unique constraint &1 in &2 exists over one or more columns of table &3 in &4. The operation cannot be performed because one or more values would have produced a duplicate key in the unique index or constraint.                                |
| <b>Recovery Text:</b>         | Change the statement so that duplicate keys are not produced. For information on what rows contain the duplicate key values, look at the previously listed messages in the job log (DSPJOBLOG command) or press F10 (Display messages in job log) on this display. |
| <b>SQLCODE or SQLCODEs:</b>   | -803   |
| <b>SQLSTATE or SQLSTATES:</b> | 23505  |

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| <b>SQL0804</b>                |  |
| <b>Message Text:</b>          | SQLDA or descriptor area not valid.  |
| <b>Cause Text:</b>            | <p>If the error type is 2, 3, 9, 12, or 13, the entry in error is &amp;2, the value of SQLTYPE or TYPE is &amp;3, and the value of SQLLEN, SQLLONGLEN, or LENGTH is &amp;4. If the error type is 13, the &amp;5 was being set when the inconsistency was found. The specified SQLDA or descriptor area is not valid because of error type &amp;1. Error types and their meanings are:</p> <ul style="list-style-type: none"> <li>• 1 -- The value of SQLN is less than zero, the value of SQLD is not between 0 and 8000, the value of SQLD is greater than the value of SQLN, or that the value of SQLD has not been initialized in REXX.</li> <li>• 2 -- The value of SQLTYPE is either not valid or not supported or has not been initialized in REXX.</li> <li>• 3 -- The value of SQLLEN or SQLLONGLEN is not valid or the value of SQLLEN, SQLPRECISION, or SQLSCALE has not been initialized in REXX. If REXX and SQLTYPE is decimal or numeric, then either SQLPRECISION or SQLSCALE has not been initialized. Otherwise, SQLLEN has not been initialized. If SQLTYPE is a LOB or XML variable, then SQLLONGLEN is not valid.</li> <li>• 4 -- The attributes in the descriptor for an array variable are not valid. The DATA item in the level 0 descriptor item must not be NULL except when the array is null.</li> <li>• 5 -- The SQLDA area was not on a 16-byte boundary.</li> <li>• 6 -- The value specified for SQLDABC is not valid. The value is either not large enough for the number of entries specified in SQLN or the value is greater than the maximum allowed.</li> <li>• 7 -- The value of SQLN was not at least twice the size of SQLD and LOB host variables were found in the SQLDA.</li> <li>• 8 -- The seventh byte of SQLDAID was not a '2', '3' or '4' and LOB host variables were found in the SQLDA.</li> <li>• 9 -- The SQLDATAL pointer was not null for a DBCLOB host variable, but the length value referenced by the SQLDATAL pointer had an odd value.</li> <li>• 10 -- The SQLTYPE for a LOB locator did not match the type associated with LOB locator.</li> <li>• 11 -- The row length is greater than the maximum allowed row length.</li> <li>• 12 -- The TYPE for an item in the descriptor area has not been set.</li> <li>• 13 -- The attributes of the item in the descriptor area are not consistent. TYPE, LENGTH, PRECISION, SCALE, DB2_CCSID, and DATETIME_INTERVAL_CODE need to be consistent with one another for each item set with the SET DESCRIPTOR statement.</li> <li>• 14 -- The value of LEVEL in the descriptor area is not valid.</li> <li>• 15 -- The value of DATETIME_INTERVAL_CODE in the descriptor area is not valid.</li> <li>• 16 -- Input and output descriptors used on a CALL statement did not match. Both descriptors must include all of the parameters for the CALL and the items must match, except when the descriptors were built by a DESCRIBE of the CALL statement.</li> <li>• 17 -- An ARRAY SQLTYPE was specified in an SQLDA.</li> </ul> |
| <b>Recovery Text:</b>         | Correct the error in the SQLDA or descriptor area and try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -804   |
| <b>SQLSTATE or SQLSTATES:</b> | 07002, 0700E, 0700F  |

| <b>SQL0805</b>                |   |
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| <b>Message Text:</b>          | SQL package &1 in &2 not found at DRDA Server.  |
| <b>Cause Text:</b>            | A remote request was attempted to &4 for SQL package &1 in &2. The SQL package was not found. If you are using Interactive SQL or Query Manager, an attempt to create a package on the remote system failed and the package requested does not exist.   |
| <b>Recovery Text:</b>         | <p>The most common cause of this problem in an Interactive SQL session to a server that is not DB2 for IBM i is that the connection is not updateable. In that case the package cannot be automatically created. To ensure the connection is updateable, do a RELEASE ALL command followed by a COMMIT before connecting to the relational database.</p> <p>In other cases, the SQL package can be created by using the CRTSQLPKG command. Also, precompiling an SQL program with the RDB parameter specified will create an SQL package on the system. Create or restore the SQL package. Run the application again.</p> <p>If you are using Interactive SQL or Query Manager or SQL Call Level Interface, exit the product or application and enter a CL COMMIT or ROLLBACK command. This will enable you to continue processing at the local system. Determine why the package creation failed by examining the job log. Correct the problem and attempt the Interactive SQL or Query Manager session again.</p> |
| <b>SQLCODE or SQLCODEs:</b>   | -805  |
| <b>SQLSTATE or SQLSTATES:</b> | 51002   |

| <b>SQL0809</b>                |   |
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| <b>Message Text:</b>          | Row length exceeds 3.5 gigabytes.   |
| <b>Cause Text:</b>            | The lengths of the values used as input in the INSERT or UPDATE statement would cause the row length to exceed the maximum length of 3.5 gigabytes. |
| <b>Recovery Text:</b>         | Change the statement so that the sum of all field lengths result in a row length of less than 3.5 gigabytes.  |
| <b>SQLCODE or SQLCODEs:</b>   | -809  |
| <b>SQLSTATE or SQLSTATES:</b> | 54018   |

| <b>SQL0811</b>              |   |
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| <b>Message Text:</b>        | Result of SELECT more than one row.   |
| <b>Cause Text:</b>          | The result table of a SELECT INTO statement, a subquery, or a subselect of a SET statement contains more than one row. The error type is &1. If the error type is 1 then a SELECT INTO statement attempted to return more than one row. If the error type is 2 then a subselect of a basic predicate has produced more than one row. Only one row is allowed.   |
| <b>Recovery Text:</b>       | Change the selection so that only one result row is returned and then try the request again. The DECLARE CURSOR, OPEN, and FETCH statements must be used to process more than one result row. For a subquery the IN, EXISTS, ANY or ALL predicates can be used to process more than one result row. If one row was expected, there may be data errors, such as duplicate rows, that are causing more than one row to be returned. |
| <b>SQLCODE or SQLCODEs:</b> | -811  |

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| <b>SQL0811</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 21000 |

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| <b>SQL0817</b>                |  |
| <b>Message Text:</b>          | Update operation not allowed.  |
| <b>Cause Text:</b>            | An attempt has been made to run an SQL statement that would change the contents of a table or create or drop a database object after SET TRANSACTION READ ONLY has been performed. |
| <b>Recovery Text:</b>         | Specify SET TRANSACTION READ WRITE, or remove the update operation from the program and try again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -817   |
| <b>SQLSTATE or SQLSTATES:</b> | 25006  |

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| <b>SQL0818</b>                |  |
| <b>Message Text:</b>          | Consistency tokens do not match.   |
| <b>Cause Text:</b>            | Package &3 in &4 on application server &5 cannot be run with the current application program because either the application program has been recompiled without rebuilding the package or the package has been restored from a back level version. |
| <b>Recovery Text:</b>         | Rebuild the package by using the CRTSQLPKG command or by using a CRTSQLxxx command specifying the correct relational database. Otherwise, restore the package from a version which matches the application program being run.                      |
| <b>SQLCODE or SQLCODEs:</b>   | -818   |
| <b>SQLSTATE or SQLSTATES:</b> | 51003  |

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| <b>SQL0822</b>       |  |
| <b>Message Text:</b> | Address in the SQLDA or descriptor area not valid.   |
| <b>Cause Text:</b>   | <p>The SQLDA or descriptor area contains an address, SQLDATA or DATA value, or SQLIND or INDICATOR value in entry number &amp;1 that is not valid. The incorrect address or value is type &amp;2.</p> <ul style="list-style-type: none"> <li>• Type 1 indicates that the SQLDATA or DATA address is not valid.</li> <li>• Type 2 indicates that the SQLIND or INDICATOR address is not valid.</li> <li>• Type 3 indicates that the SQLDA address is not valid.</li> <li>• Type 4 indicates that the row storage area is not large enough.</li> <li>• Type 5 indicates that the indicator area for a blocked FETCH statement is not large enough.</li> <li>• Type 6 indicates that the SQLDATA field was not initialized to a value in a REXX procedure.</li> <li>• Type 7 indicates that the SQLIND field was not initialized to a value in a REXX procedure.</li> <li>• Type 8 indicates that the SQLDATAL address is not valid.</li> </ul> |

| <b>SQL0822</b>                |  |
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| <b>Recovery Text:</b>         | For types 1, 2, 3, or 8, change the address in entry &1 to a valid address. For types 4 and 5, allocate enough area for all of the rows being requested. For types 6 and 7, initialize the SQLDATA or SQLIND fields to a valid value. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -822   |
| <b>SQLSTATE or SQLSTATES:</b> | 0700C, 51004   |

| <b>SQL0827</b>                |   |
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| <b>Message Text:</b>          | &1 in &2 type *SQLPKG cannot be accessed.   |
| <b>Cause Text:</b>            | SQL Package &1 in &2 was not created using the QSQPRCED API and cannot be accessed by the QSQPRCED API. *SQLPKG objects created using CRTSQLPKG or the CRTSQLxxx commands cannot be used by the QSQPRCED API. |
| <b>Recovery Text:</b>         | Use the QSQPRCED API to create a new *SQLPKG object. Change your request to use the package created by the API.   |
| <b>SQLCODE or SQLCODEs:</b>   | -827  |
| <b>SQLSTATE or SQLSTATES:</b> | 42862   |

| <b>SQL0840</b>                |  |
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| <b>Message Text:</b>          | Number of selected items exceeds 8000.   |
| <b>Cause Text:</b>            | The number of items returned in a select list or presented in the insert list exceeds the maximum of 8000. |
| <b>Recovery Text:</b>         | Reduce the number of selected items and try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -840   |
| <b>SQLSTATE or SQLSTATES:</b> | 54004  |

| <b>SQL0842</b>       |  |
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| <b>Message Text:</b> | Connection to relational database &1 already exists.   |
| <b>Cause Text:</b>   | An attempt was made to do one of the following: <ul style="list-style-type: none"> <li>• CONNECT to a relational database when the connection is active.</li> <li>• CONNECT to a relational database that has the same communication information as a connection to a relational database that is active.</li> </ul> The active relational database is &1. |

| <b>SQL0842</b>                |  |
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| <b>Recovery Text:</b>         | If CONNECT was specified, either use the SET CONNECTION statement to make relational database &1 the current connection or change the RDB directory entry (CHGRDBDIRE) for the relational database you are connecting to so that at least part of the communication information is different from what is specified in the entry for &1. For APPC connections, the communication information is the remote location, device description, local location, remote network identifier, mode, and transaction program. For TCP/IP connections, the communication information is the remote location and port identification. |
| <b>SQLCODE or SQLCODEs:</b>   | -842   |
| <b>SQLSTATE or SQLSTATES:</b> | 08002  |

| <b>SQL0843</b>                |   |
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| <b>Message Text:</b>          | Connection to relational database &1 does not exist.  |
| <b>Cause Text:</b>            | A SET CONNECTION, RELEASE, or DISCONNECT statement or a call to the SQLESETI API specified relational database name &1 which is not active. |
| <b>Recovery Text:</b>         | Specify the name of a relational database which has an active connection.   |
| <b>SQLCODE or SQLCODEs:</b>   | -843  |
| <b>SQLSTATE or SQLSTATES:</b> | 08003   |

| <b>SQL0845</b>                |   |
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| <b>Message Text:</b>          | PREVIOUS VALUE for sequence &1 cannot be used.  |
| <b>Cause Text:</b>            | A PREVIOUS VALUE expression specified sequence &1 in &2, but a value is not available in this application process. <ul style="list-style-type: none"> <li>• A NEXT VALUE expression must be evaluated before a PREVIOUS VALUE expression can be used.</li> <li>• A NEXT VALUE expression must be evaluated after a sequence is altered or dropped.</li> </ul> |
| <b>Recovery Text:</b>         | Evaluate the NEXT VALUE expression for sequence &1 in &2 in the same application process before using PREVIOUS VALUE.   |
| <b>SQLCODE or SQLCODEs:</b>   | -845  |
| <b>SQLSTATE or SQLSTATES:</b> | 51035   |

| <b>SQL0846</b>       |   |
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| <b>Message Text:</b> | Attributes not valid for IDENTITY column or sequence. |



| <b>SQL0846</b>                |   |
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| <b>Cause Text:</b>            | <p>Error &amp;6 occurred for an IDENTITY column or sequence. For an IDENTITY column, &amp;2 in schema &amp;3 is the name of the table. For a sequence, &amp;2 in &amp;3 is the name of the sequence.</p> <ul style="list-style-type: none"> <li>• Code 1 -- The data type of an IDENTITY column or sequence is not INTEGER, BIGINT, SMALLINT, or DECIMAL or NUMERIC with a scale of zero. An IDENTITY column that is DECIMAL or NUMERIC must have a precision less than or equal to 31.</li> <li>• Code 2 -- The value specified for START WITH, INCREMENT BY, MINVALUE, or MAXVALUE is outside the range for the data type specified.</li> <li>• Code 3 -- The value specified for MINVALUE is larger than the value specified for MAXVALUE.</li> <li>• Code 4 -- The value specified for CACHE is not valid. The minimum value for CACHE is 2.</li> <li>• Code 7 -- A sequence can only be altered to a distinct type if the current data type is a built-in data type and it is promotable to the source data type of the distinct type. If the current data type is a distinct type, it can only be changed to its source data type.</li> </ul> |
| <b>Recovery Text:</b>         | Specify valid attributes for the IDENTITY column or sequence. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -846  |
| <b>SQLSTATE or SQLSTATES:</b> | 42815   |

| <b>SQL0858</b>                |   |
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| <b>Message Text:</b>          | Cannot disconnect relational database &1 due to LU6.2 protected conversation.   |
| <b>Cause Text:</b>            | The DISCONNECT statement cannot be used to disconnect relational database &1 because the conversation uses an LU6.2 protected conversation. |
| <b>Recovery Text:</b>         | Use the RELEASE statement followed by a COMMIT statement to end LU6.2 protected conversations.  |
| <b>SQLCODE or SQLCODEs:</b>   | -858  |
| <b>SQLSTATE or SQLSTATES:</b> | 08501   |

| <b>SQL0862</b>                |   |
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| <b>Message Text:</b>          | Local program attempted to connect to a remote relational database.   |
| <b>Cause Text:</b>            | Local program &1 in &2 attempted to connect to a remote relational database. Either the CONNECT statement or the SET CONNECTION statement was specified and the relational database specified was a remote relational database. |
| <b>Recovery Text:</b>         | Specify the RDB parameter on the SQL precompile command.  |
| <b>SQLCODE or SQLCODEs:</b>   | -862  |
| <b>SQLSTATE or SQLSTATES:</b> | 55029   |

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| <b>SQL0863</b>                |   |
| <b>Message Text:</b>          | Mixed or DBCS CCSID not supported by relational database &1.  |
| <b>Cause Text:</b>            | The connection was completed, but remote relational database &1 does not support either the mixed or DBCS CCSID. SBCS data can be used. The product identification is &2. |
| <b>Recovery Text:</b>         | No recovery needed.   |
| <b>SQLCODE or SQLCODEs:</b>   | +863  |
| <b>SQLSTATE or SQLSTATES:</b> | 01539   |

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| <b>SQL0864</b>                |  |
| <b>Message Text:</b>          | Constraint attempted to update or delete a row of table &3.  |
| <b>Cause Text:</b>            | Referential constraint &1 in &2 attempted to update or delete a row of table &3 in &4 that was modified by a data change table reference. A data change table reference was specified in the FROM clause, but the target table of the data change table reference has a referential constraint which modifies the same table. Modifying the same row is not allowed. |
| <b>Recovery Text:</b>         | Remove the data change table reference from the FROM clause, or remove the referential constraint from table &3.   |
| <b>SQLCODE or SQLCODEs:</b>   | -864   |
| <b>SQLSTATE or SQLSTATES:</b> | 560C6  |

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| <b>SQL0871</b>                |  |
| <b>Message Text:</b>          | Too many CCSID values specified.   |
| <b>Cause Text:</b>            | More than 80 unique combinations of character data type and Coded Character Set Identifier (CCSID) were used. When accessing remote data, there is a limit of 80 different CCSID values. |
| <b>Recovery Text:</b>         | Change that request to only access 80 different combinations of character data type and CCSID.   |
| <b>SQLCODE or SQLCODEs:</b>   | -871   |
| <b>SQLSTATE or SQLSTATES:</b> | 54019  |

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| <b>SQL0880</b>              |   |
| <b>Message Text:</b>        | Savepoint &1 does not exist or is not valid in this context.  |
| <b>Cause Text:</b>          | The RELEASE TO SAVEPOINT or ROLLBACK TO SAVEPOINT statement does not identify a savepoint that exists at the current savepoint level. |
| <b>Recovery Text:</b>       | Correct the statement to use a valid savepoint name, then try the statement again.  |
| <b>SQLCODE or SQLCODEs:</b> | -880  |

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| <b>SQL0880</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 3B001 |

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| <b>SQL0881</b>                |  |
| <b>Message Text:</b>          | Savepoint &1 already exists.   |
| <b>Cause Text:</b>            | The savepoint name was previously defined at the current savepoint level and either an existing savepoint or the new savepoint is defined with the UNIQUE keyword.   |
| <b>Recovery Text:</b>         | Either use a different savepoint name or omit the UNIQUE clause if the existing savepoint was created without the UNIQUE clause and the savepoint name is intended to be reused. An existing savepoint can be released using the RELEASE TO SAVEPOINT statement. |
| <b>SQLCODE or SQLCODEs:</b>   | -881   |
| <b>SQLSTATE or SQLSTATES:</b> | 3B501  |

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| <b>SQL0882</b>                |  |
| <b>Message Text:</b>          | Savepoint does not exist.  |
| <b>Cause Text:</b>            | A ROLLBACK TO SAVEPOINT without a savepoint name was attempted but no savepoint exists at the current savepoint level. |
| <b>Recovery Text:</b>         | Correct the application logic to either set a savepoint or to not attempt to rollback to a savepoint.                  |
| <b>SQLCODE or SQLCODEs:</b>   | -882   |
| <b>SQLSTATE or SQLSTATES:</b> | 3B502  |

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| <b>SQL0900</b>                |  |
| <b>Message Text:</b>          | Application process not in a connected state.  |
| <b>Cause Text:</b>            | One of the following occurred: <ul style="list-style-type: none"> <li>• The current connection was disconnected using the DISCONNECT statement.</li> <li>• The current connection was released and a commit occurred.</li> <li>• A previous error has left the application process in an unconnected state. Use the Display Job Log (DSPJOBLOG) command to see previous errors.</li> </ul> |
| <b>Recovery Text:</b>         | Issue CONNECT statement with the TO or RESET clause or the SET CONNECTION statement to enter the connected state.  |
| <b>SQLCODE or SQLCODEs:</b>   | -900   |
| <b>SQLSTATE or SQLSTATES:</b> | 08003  |

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| <b>SQL0901</b>       |                   |
| <b>Message Text:</b> | SQL system error. |

| <b>SQL0901</b>                |   |
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| <b>Cause Text:</b>            | An SQL system error has occurred. The current SQL statement cannot be completed successfully. The error will not prevent other SQL statements from being processed. Previous messages may indicate that there is a problem with the SQL statement and SQL did not correctly diagnose the error. The previous message identifier was &1. Internal error type &2 has occurred. If precompiling, processing will not continue beyond this statement. |
| <b>Recovery Text:</b>         | See the previous messages to determine if there is a problem with the SQL statement. To view the messages, use the DSPJOBLOG command if running interactively, or the WRKJOB command to view the output of a precompile. An application program receiving this return code may attempt further SQL statements. Correct any errors and try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -901  |
| <b>SQLSTATE or SQLSTATES:</b> | 58004   |

| <b>SQL0904</b>       |   |
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| <b>Message Text:</b> | Resource limit exceeded.  |
| <b>Cause Text:</b>   | <p>Resource limit type &amp;1 exceeded with reason code &amp;2. A list of the limit types follows:</p> <ul style="list-style-type: none"> <li>• Type 1 indicates that the user profile storage limit or the machine storage limit was exceeded.</li> <li>• Type 2 indicates that the machine lock limit was exceeded.</li> <li>• Type 3 indicates that the query resource limit was exceeded. For more information see the previously listed message CPD4365.</li> <li>• Type 4 indicates that a journal error has occurred.</li> <li>• Type 5 indicates that the commit lock limit was exceeded.</li> <li>• Type 6 indicates that the maximum size of the table has been reached.</li> <li>• Type 7 indicates that the maximum size of the prepared statement area has been reached.</li> <li>• Type 8 indicates that the maximum number of cursors have been opened for this job.</li> <li>• Type 9 indicates that the maximum number of entries in the lock table have been used for this job.</li> <li>• Type 12 indicates that the maximum DRDA communications buffer size was exceeded.</li> <li>• Type 13 indicates that the maximum amount of blocked data was exceeded.</li> <li>• Type 14 indicates that the maximum amount of descriptor space has been allocated.</li> <li>• Type 15 indicates that the maximum size of the parameter default area has been reached.</li> </ul> |

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| <b>SQL0904</b>                |  |
| <b>Recovery Text:</b>         | <p>Do one of the following: If this is error type 1, contact the security officer to increase the user profile storage limit, or delete some objects to free up storage and then try the request again.</p> <ul style="list-style-type: none"> <li>• If this is error type 2, then try the operation when the number of machine locks held has decreased.</li> <li>• If this is error types 3, 4, or 5, see previously listed messages in the job log for recovery information.</li> <li>• If this is error type 6, Some of the rows from this table must be moved to another table.</li> <li>• If this is error type 7, issue a COMMIT or ROLLBACK without the HOLD clause before issuing anymore PREPARE statements.</li> <li>• If this is error type 8, issue a CLOSE before issuing any more OPEN statements.</li> <li>• If this is error type 9, issue a COMMIT or ROLLBACK without the HOLD clause.</li> <li>• If this is error type 12, reduce the total size of column data supplied with the SQL request.</li> <li>• If this is error type 13, reduce the number of rows in the block.</li> <li>• If this is error type 14, reduce the number of allocated descriptors with the DEALLOCATE DESCRIPTOR statement.</li> <li>• If this is error type 15, simplify the parameter defaults.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | +904, -904   |
| <b>SQLSTATE or SQLSTATES:</b> | 01687, 57011   |

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| <b>SQL0906</b>                |  |
| <b>Message Text:</b>          | Operation not performed because of previous error.   |
| <b>Cause Text:</b>            | A previous error has made cursor &1 not usable.  |
| <b>Recovery Text:</b>         | <p>The cursor is not usable. Perform the following steps:</p> <ol style="list-style-type: none"> <li>1) Close the cursor.</li> <li>2) Open the cursor.</li> <li>3) Try the operation again.</li> </ol> |
| <b>SQLCODE or SQLCODEs:</b>   | -906   |
| <b>SQLSTATE or SQLSTATES:</b> | 24514  |

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| <b>SQL0907</b>        |  |
| <b>Message Text:</b>  | Data change violation occurred.  |
| <b>Cause Text:</b>    | The row referenced by the statement which caused a trigger program to be invoked was referenced again in the trigger program. The reference in the trigger program attempted to update or delete the row. This is called a destructive data change and is not allowed. |
| <b>Recovery Text:</b> | Remove the statement which caused the error from your trigger program and attempt the request again.   |

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| <b>SQL0907</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | -907  |
| <b>SQLSTATE or SQLSTATES:</b> | 27000 |

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| <b>SQL0910</b>                |   |
| <b>Message Text:</b>          | Object &1 in &2 type *&3 has a pending change.  |
| <b>Cause Text:</b>            | <p>Object &amp;1 has an outstanding change made under commitment control that is preventing this operation. One of the following may have occurred:</p> <ul style="list-style-type: none"> <li>• This application process performed an operation on this object under commitment control. The operation has not been committed. The application process is now attempting to change the same object using commitment control level *NONE.</li> <li>• A different application process has performed an operation on this object under commitment control. The operation has not been committed.</li> <li>• This application process has performed an operation on this object under commitment control using a different commit definition. The operation has not been committed.</li> <li>• This application process has performed an operation on this object under commitment control. The operation has not been committed. The table cannot be altered until the changes are committed or rolled back.</li> </ul> |
| <b>Recovery Text:</b>         | <p>Do one of the following and try the request again:</p> <ul style="list-style-type: none"> <li>• If your application process issued the uncommitted operation, either issue a COMMIT or ROLLBACK before attempting any other operations on this object, or issue the statement from a program using a commitment control level other than *NONE.</li> <li>• If the application process that issued the uncommitted operation on this object is not your application process, then that application process must perform a COMMIT or a ROLLBACK.</li> <li>• If your application process issued the uncommitted operation using a different commit definition, issue a COMMIT or ROLLBACK for that commit definition.</li> <li>• Issue either a COMMIT or ROLLBACK before attempting an ALTER TABLE statement on this object.</li> </ul>  |
| <b>SQLCODE or SQLCODEs:</b>   | -910  |
| <b>SQLSTATE or SQLSTATES:</b> | 57007   |

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| <b>SQL0913</b>       |  |
| <b>Message Text:</b> | Row or object &1 in &2 type *&3 in use.  |
| <b>Cause Text:</b>   | The requested object &1 in &2 type *&3 is either in use by another application process or a row in the object is in use by either another application process or another cursor in this application process. |

| <b>SQL0913</b>                |   |
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| <b>Recovery Text:</b>         | <p>Look at the previously listed messages in the job log (DSPJOBLOG command) or from interactive SQL press F10 (Display messages in job log) on this display to determine if this is an object or record lock wait time out.</p> <p>Do one of the following:</p> <ul style="list-style-type: none"> <li>• If the object is locked by another application process, try the SQL statement again when the object is not in use. Use the Work with Object Locks (WRKOBJLCK) command to determine who is currently using the object.</li> <li>• If the object is a schema and an attempt was made to create a table, view, or index into this schema under commitment control, a save-while-active operation may be in progress on the same schema by another job in the system. Try the request again when the save-while-active processing is complete.</li> <li>• If a record is locked by another application process, try the SQL statement again when the record is not in use. The Display Record Locks (DSPRCDLCK) command will determine who is currently using the record.</li> <li>• If this is a record lock held by another cursor in the same application process, you must issue a COMMIT, ROLLBACK, or another FETCH statement on the cursor that is holding the lock before issuing this SQL statement.</li> </ul> <p>If this error occurs frequently, use the Change Physical File (CHGPF), Change Logical File (CHGLF), or Override Data Base File (OVRDBF) command to change the object or record wait time out.</p> |
| <b>SQLCODE or SQLCODEs:</b>   | -913  |
| <b>SQLSTATE or SQLSTATES:</b> | 57033   |

| <b>SQL0918</b>                |  |
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| <b>Message Text:</b>          | ROLLBACK required.   |
| <b>Cause Text:</b>            | <p>The activation group requires a ROLLBACK to be performed prior to running any other SQL statements. One of the following has occurred:</p> <ul style="list-style-type: none"> <li>• An SQL statement updated a distributed database server, but the database server can be used only for read-only operations.</li> </ul> |
| <b>Recovery Text:</b>         | Issue a ROLLBACK CL command or an SQL ROLLBACK statement and then continue. If SQL server mode was used, consider switching to use the distributed unit of work setting.   |
| <b>SQLCODE or SQLCODEs:</b>   | -918   |
| <b>SQLSTATE or SQLSTATES:</b> | 51021  |

| <b>SQL0950</b>       |   |
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| <b>Message Text:</b> | Relational database &1 not in relational database directory.  |
| <b>Cause Text:</b>   | A request for relational database &1 was made. However the relational database name was not found in the relational database directory. |

| <b>SQL0950</b>                |   |
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| <b>Recovery Text:</b>         | <p>Do one of the following:</p> <ul style="list-style-type: none"> <li>• Change the name of the relational database specified on the CONNECT, SET CONNECTION, RELEASE, or DISCONNECT statement or the RDB parameter of the SQL precompile commands.</li> <li>• Add the relational database name to the relational database directory using the Add Relational Database Directory Entry (ADDRDBDIRE) command.</li> <li>• If the CREATE TABLE statement specifies a node group, add this system to the relational database directory on the target system.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | -950  |
| <b>SQLSTATE or SQLSTATES:</b> | 42705, 55006  |

| <b>SQL0951</b>                |  |
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| <b>Message Text:</b>          | Object &1 in &2 not altered.   |
| <b>Cause Text:</b>            | Object &1 in &2 was not altered because it, or a related object, is being used by the same application process. A table may be related in a referential constraint relationship with another table being used by the same application process. |
| <b>Recovery Text:</b>         | Close the cursor and try the alter request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -951   |
| <b>SQLSTATE or SQLSTATES:</b> | 55007  |

| <b>SQL0952</b>        |   |
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| <b>Message Text:</b>  | Processing of the SQL statement ended. Reason code &1.  |
| <b>Cause Text:</b>    | <p>The SQL operation was ended before normal completion. The reason code is &amp;1. Reason codes and their meanings are:</p> <ul style="list-style-type: none"> <li>• 1 -- An SQLCancel API request has been processed, for example from ODBC.</li> <li>• 2 -- SQL processing was ended by sending an exception.</li> <li>• 3 -- Abnormal termination.</li> <li>• 4 -- Activation group termination.</li> <li>• 5 -- Reclaim activation group or reclaim resources.</li> <li>• 6 -- Process termination.</li> <li>• 7 -- An EXIT function was called.</li> <li>• 8 -- Unhandled exception.</li> <li>• 9 -- A Long Jump was processed.</li> <li>• 10 -- A cancel reply to an inquiry message was received.</li> <li>• 11 -- Open Database File Exit Program (QIBM_QDB_OPEN).</li> <li>• 0 -- Unknown cause.</li> </ul> |
| <b>Recovery Text:</b> | If the reason code is 1, a client request was made to cancel SQL processing. For all other reason codes, see previous messages to determine why SQL processing was ended.   |



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| <b>SQL0952</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | -952  |
| <b>SQLSTATE or SQLSTATES:</b> | 57014 |

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| <b>SQL0969</b>                |  |
| <b>Message Text:</b>          | Error occurred while passing request to application requester driver program.  |
| <b>Cause Text:</b>            | An unexpected error occurred while passing the SQL request to the application requester driver program for relational database &1. See previously listed messages in the job log for the cause of the failure. |
| <b>Recovery Text:</b>         | Correct any problems and try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -969   |
| <b>SQLSTATE or SQLSTATES:</b> | 58033  |

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| <b>SQL0971</b>                |   |
| <b>Message Text:</b>          | Constraint &4 in check pending state.   |
| <b>Cause Text:</b>            | The operation being performed on table &2 in &3 failed. Constraint &4 in &5 could not be enforced because of reason code &1. The reason codes and their meanings are: <ul style="list-style-type: none"> <li>• 1 -- The dependent file is in check pending status due to a referential constraint violation.</li> <li>• 2 -- The dependent or parent file's access path is not valid.</li> <li>• 3 -- The file is in check pending status due to a check constraint violation.</li> </ul> |
| <b>Recovery Text:</b>         | For reason codes 1 and 3, use the CHGPFCST command to disable the constraint. Then use the DSPCPCST command to see the records causing the check pending status. Correct the data in the file and then use the CHGPFCST command to enable the constraint. For reason code 2, use the EDTRBDAP command or Manage Index Rebuilds in System i Navigator to rebuild the file's access path.   |
| <b>SQLCODE or SQLCODEs:</b>   | -971  |
| <b>SQLSTATE or SQLSTATES:</b> | 57011   |

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| <b>SQL0989</b>              |   |
| <b>Message Text:</b>        | Trigger &1 attempted to modify a row in table &3.   |
| <b>Cause Text:</b>          | Target table &3 in &4 of a data change table reference has an AFTER trigger &1 in &2 that modifies the same table. Modification of the same table by an AFTER trigger is not allowed. |
| <b>Recovery Text:</b>       | Remove the data change table reference from the FROM clause, or change the AFTER trigger to not modify the same table as the data change table reference.                             |
| <b>SQLCODE or SQLCODEs:</b> | -989  |

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| <b>SQL0989</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 560C3 |

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| <b>SQL0990</b>                |   |
| <b>Message Text:</b>          | Outcome unknown for the unit of work.   |
| <b>Cause Text:</b>            | The unit of work completed but the outcome is not fully known at all sites. Either a conversation failure occurred and resynchronization is occurring to correct the problem, or a ROLLBACK occurred at one of the resources. |
| <b>Recovery Text:</b>         | No user action is necessary.  |
| <b>SQLCODE or SQLCODEs:</b>   | +990  |
| <b>SQLSTATE or SQLSTATES:</b> | 01587   |

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| <b>SQL1530</b>                |   |
| <b>Message Text:</b>          | SET CURRENT DEGREE statement not fully enabled.   |
| <b>Cause Text:</b>            | Parallel processing is not enabled on this machine because the system feature DB2 Symmetric Multiprocessing is not installed on the system. |
| <b>Recovery Text:</b>         |   |
| <b>SQLCODE or SQLCODEs:</b>   | +1530   |
| <b>SQLSTATE or SQLSTATES:</b> | 01623   |

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| <b>SQL1583</b>                |  |
| <b>Message Text:</b>          | PAGESIZE value &1 not correct.   |
| <b>Cause Text:</b>            | The PAGESIZE value of &1 was not correct for one of the following reasons. <ul style="list-style-type: none"> <li>• It cannot be specified for an ENCODED VECTOR index.</li> <li>• The valid values for PAGESIZE are 8, 16, 32, 64, 128, 256, and 512.</li> <li>• The PAGESIZE value may conflict with the key length of the index.</li> </ul> |
| <b>Recovery Text:</b>         | Change the PAGESIZE value to one of the allowed values. Make sure this is not an ENCODED VECTOR index. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -1583  |
| <b>SQLSTATE or SQLSTATES:</b> | 428DE  |

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| <b>SQL1596</b>       |  |
| <b>Message Text:</b> | WITH EMPTY TABLE not valid for &1 in &2.   |
| <b>Cause Text:</b>   | The ALTER TABLE cannot have the WITH EMPTY TABLE clause specified for table &1 in &2. The table is either a materialized query table or the parent table in a referential constraint which conflicts with the WITH EMPTY TABLE clause. |

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| <b>SQL1596</b>                |   |
| <b>Recovery Text:</b>         | Change the name of the table and try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -1596   |
| <b>SQLSTATE or SQLSTATES:</b> | 42928   |

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| <b>SQL4300</b>                |   |
| <b>Message Text:</b>          | Java support is not installed or properly configured on this platform.  |
| <b>Cause Text:</b>            | Support for Java stored procedures and user-defined functions is not installed and configured on this server. |
| <b>Recovery Text:</b>         | Ensure that a compatible Java Development Kit is installed.   |
| <b>SQLCODE or SQLCODEs:</b>   | -4300   |
| <b>SQLSTATE or SQLSTATES:</b> | 42724   |

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| <b>SQL4301</b>                |   |
| <b>Message Text:</b>          | Java interpreter startup or communication failed for reason code &1.  |
| <b>Cause Text:</b>            | An error occurred while attempting to start or communicate with a Java interpreter. The reason codes and their meanings follow: <ul style="list-style-type: none"> <li>• 1 -- Java environment variables or Java database configuration parameters are invalid.</li> <li>• 2 -- A Java Native Interface call to the Java interpreter failed.</li> <li>• 4 -- The Java interpreter has terminated itself and cannot be restarted.</li> </ul> |
| <b>Recovery Text:</b>         | Ensure that Java environment variables or Java database configuration parameters are valid. Ensure that a Java method called by the Java interpreter does not use System.out. Ensure that internal DB2 classes (com.ibm.db2) are not overridden by user classes.  |
| <b>SQLCODE or SQLCODEs:</b>   | -4301   |
| <b>SQLSTATE or SQLSTATES:</b> | 58004   |

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| <b>SQL4302</b>                |   |
| <b>Message Text:</b>          | Java stored procedure or user-defined function &1, specific name &2 aborted with an exception "&3".   |
| <b>Cause Text:</b>            | The Java stored procedure or user-defined function aborted with a Java exception. If SQJAVA component trace is on, then the component trace for the job contains a Java stack traceback for the aborted method. |
| <b>Recovery Text:</b>         | Debug the Java method to eliminate the exception.   |
| <b>SQLCODE or SQLCODEs:</b>   | -4302   |
| <b>SQLSTATE or SQLSTATES:</b> | 38000   |

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| <b>SQL4303</b>                |   |
| <b>Message Text:</b>          | Java stored procedure or user-defined function &1, specific name &2, could not be identified from external name &3.   |
| <b>Cause Text:</b>            | The CREATE PROCEDURE, ALTER PROCEDURE, CREATE FUNCTION, or ALTER FUNCTION statement that declared this stored procedure or user-defined function had a badly formatted EXTERNAL NAME clause. The external name must be formatted as follows: "package.subpackage.class.method". |
| <b>Recovery Text:</b>         | Change the external name on the statement. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -4303   |
| <b>SQLSTATE or SQLSTATES:</b> | 42724   |

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| <b>SQL4304</b>                |   |
| <b>Message Text:</b>          | Java stored procedure or user-defined function &1, specific name &2 could not load Java class &3 for reason code &4.  |
| <b>Cause Text:</b>            | The Java class given by the EXTERNAL NAME clause of a CREATE PROCEDURE, ALTER PROCEDURE, CREATE FUNCTION or ALTER FUNCTION statement could not be loaded. The reason codes and their meanings follow: <ul style="list-style-type: none"> <li>• 1 -- The class was not found on the CLASSPATH.</li> <li>• 2 -- The class did not implement the required interface ("com.ibm.db2.app.StoredProc" or "com.ibm.db2.app.UDF") or lacked the Java "public" access flag.</li> <li>• 3 -- The default constructor failed or was unavailable.</li> </ul> |
| <b>Recovery Text:</b>         | Ensure that the compiled ".class" file is installed in the CLASSPATH, for example under "/QIBM/UserData/OS400/SQLLib/Function". Ensure it implements the required Java interfaces and is "public".  |
| <b>SQLCODE or SQLCODEs:</b>   | -4304   |
| <b>SQLSTATE or SQLSTATES:</b> | 42724   |

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| <b>SQL4306</b>                |   |
| <b>Message Text:</b>          | Java stored procedure or user-defined function &1, specific name &2 could not call Java method &3, signature &4.  |
| <b>Cause Text:</b>            | The Java method given by the EXTERNAL NAME clause of a CREATE PROCEDURE or CREATE FUNCTION statement could not be found. Its declared argument list may not match what the database expects, or it may not be a "public" instance method. |
| <b>Recovery Text:</b>         | Ensure that a Java instance method exists with the "public" flag and the expected argument list for this call.  |
| <b>SQLCODE or SQLCODEs:</b>   | -4306   |
| <b>SQLSTATE or SQLSTATES:</b> | 42724   |

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| <b>SQL4701</b>                |   |
| <b>Message Text:</b>          | Too many partitions specified.  |
| <b>Cause Text:</b>            | <p>One of the following has occurred:</p> <ul style="list-style-type: none"> <li>• There are too many partitions specified on the CREATE TABLE statement.</li> <li>• There was an attempt to add a partition to a existing table with an ALTER TABLE statement but the table already has the maximum number of partitions.</li> </ul> <p>There is a maximum of 256 partitions allowed in a partitioned table.</p> |
| <b>Recovery Text:</b>         | For a CREATE TABLE statement, correct the number of partitions so that the number does not exceed the maximum. For an ALTER TABLE statement, remove the ADD PART clause. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -4701   |
| <b>SQLSTATE or SQLSTATEs:</b> | 54054   |

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| <b>SQL4729</b>                |   |
| <b>Message Text:</b>          | Procedure &1 in &2 cannot be called because call stack already contains an autonomous procedure.  |
| <b>Cause Text:</b>            | Procedure &1 in &2 is defined as autonomous and another autonomous procedure is already on the call stack. Only one invocation of an autonomous procedure can be present on the call stack at any given time. |
| <b>Recovery Text:</b>         | Call a procedure that is not autonomous when the call stack already has one autonomous procedure running.   |
| <b>SQLCODE or SQLCODEs:</b>   | -4729   |
| <b>SQLSTATE or SQLSTATEs:</b> | 51043   |

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| <b>SQL4903</b>                |  |
| <b>Message Text:</b>          | The length of parameter &1 of function &2 is not valid.      |
| <b>Cause Text:</b>            | The length of parameter &1 of function &2 is not valid.      |
| <b>Recovery Text:</b>         | Correct the specified parameter and call the function again. |
| <b>SQLCODE or SQLCODEs:</b>   | -4903  |
| <b>SQLSTATE or SQLSTATEs:</b> | 42611  |

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| <b>SQL4905</b>       |   |
| <b>Message Text:</b> | The value of parameter &1 of function &2 is not within the valid range.   |
| <b>Cause Text:</b>   | The value of parameter &1 of function &2 is outside the valid range for that parameter. If the specified parameter is a structure, it may contain values that are within the valid range but are not valid when considered together. Some structures contain headers that specify the allocated size and how much of that size is being used. It is not valid for the allocated size to be less than the used size. |

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| <b>SQL4905</b>                |  |
| <b>Recovery Text:</b>         | Correct the specified parameter and call the function again. |
| <b>SQLCODE or SQLCODEs:</b>   | -4905  |
| <b>SQLSTATE or SQLSTATEs:</b> | 42611  |

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| <b>SQL4917</b>                |   |
| <b>Message Text:</b>          | Element &1 in the option array is not valid.  |
| <b>Cause Text:</b>            | The option array contains an element with an option type or option value that is not valid. Array element &1 contains this value. |
| <b>Recovery Text:</b>         | Correct the values passed in the option array. Call the function again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -4917   |
| <b>SQLSTATE or SQLSTATEs:</b> | 42611   |

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| <b>SQL5001</b>       |   |
| <b>Message Text:</b> | Column qualifier or table &2 undefined. |

| <b>SQL5001</b>                |   |
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| <b>Cause Text:</b>            | <p>Name &amp;2 was used to qualify a column name or was specified as the operand of the RRN, RID, HASHED_VALUE, PARTITION, NODENAME, NODENUMBER, DBPARTITIONNAME, DBPARTITIONNUM, DATAPARTITIONNAME, or DATAPARTITIONNUM scalar function, or was specified for the ROW CHANGE TIMESTAMP or ROW CHANGE TOKEN expression. The name is not defined to be a table designator in this SQL statement or the table designator cannot be referenced where it is specified in the SQL statement. The table designator for a VALUES fullselect cannot be used as the operand of any of the functions listed above.</p> <p>If a correlation name is specified following the table name in a FROM clause, the correlation name is considered to be the table designator. If a correlation name is not specified, the table name is considered to be the table designator. If using SQL naming and the table is qualified with authorization name, then the table designator is authorization-name.table-name. If the authorization name is not specified, the table designator is the implicit authorization name followed by the table name.</p> <p>Correlation from a nested table expression to a higher level table is only allowed if the TABLE keyword is used for the definition of the nested table expression.</p> <p>If the name is *N, a lateral correlation reference from a nested table expression is not allowed. You cannot correlate to a table at a higher level than the nested table expression for one of the following reasons:</p> <ul style="list-style-type: none"> <li>• The nested table expression contains a UNION, EXCEPT, or INTERSECT.</li> <li>• The nested table expression uses the DISTINCT keyword in the SELECT clause.</li> <li>• The nested table expression contains an ORDER BY clause.</li> <li>• The correlated provider is in the same FROM clause as the nested table expression but is part of a RIGHT OUTER JOIN, RIGHT EXCEPTION JOIN, or FULL OUTER JOIN.</li> <li>• The nested table expression is in the FROM clause of another nested table expression that contains one of these restrictions.</li> </ul> <p>In an OLAP function, the ORDER OF table designator must refer to a table designator in the FROM clause of the subselect.</p> |
| <b>Recovery Text:</b>         | Ensure all column names are qualified with a valid table designator. Make sure a table designator is specified as the argument to the function. Use the TABLE keyword to allow correlated columns within a nested table expression. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -5001   |
| <b>SQLSTATE or SQLSTATES:</b> | 42703   |

| <b>SQL5002</b>              |   |
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| <b>Message Text:</b>        | Collection must be specified for table &1.  |
| <b>Cause Text:</b>          | Table &1 is not implicitly or explicitly qualified by a collection name. A collection name is required for the CREATE TABLE statement in system naming mode.  |
| <b>Recovery Text:</b>       | Explicitly qualify the table &1 with the collection name. The correct form of a qualified table name in system naming is collection-name/table-name. For a program, the table name can be implicitly qualified with the default collection by specifying the DFTRDBCOL parameter on the CRTSQLxxx command. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b> | -5002   |

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| <b>SQL5002</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 42812 |

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| <b>SQL5003</b>                |  |
| <b>Message Text:</b>          | Cannot perform operation under commitment control.   |
| <b>Cause Text:</b>            | <p>The following operations cannot be performed under commitment control with COMMIT(*CHG), COMMIT(*CS), or COMMIT(*ALL) specified:</p> <ul style="list-style-type: none"> <li>• DROP SCHEMA statement.</li> <li>• GRANT or REVOKE statement to an object that has an authority holder.</li> <li>• CREATE statement in SQL naming mode of an object that has an authority holder.</li> <li>• Drop of a text search index.</li> </ul> <p>These operations cannot be committed or rolled back.</p> |
| <b>Recovery Text:</b>         | Specify COMMIT(*NONE), and try the statement again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -5003  |
| <b>SQLSTATE or SQLSTATES:</b> | 42922  |

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| <b>SQL5005</b>                |   |
| <b>Message Text:</b>          | Operator &4 not consistent with operands.   |
| <b>Cause Text:</b>            | <p>The operator specified is not consistent with the previous operands. The arithmetic operators (*, /, and **) are not valid with concatenation operators or with the DIGITS and SUBSTR scalar functions.</p> <p>The concatenation operator is not valid with other operations or functions that result in a numeric value, such as the arithmetic operators (* and /) or the LENGTH, DECIMAL, FLOAT, or INTEGER scalar functions.</p> |
| <b>Recovery Text:</b>         | Change the SQL statement so all expressions are valid numeric expressions, string expressions, or date/time expressions.  |
| <b>SQLCODE or SQLCODEs:</b>   | -5005   |
| <b>SQLSTATE or SQLSTATES:</b> | 42815   |

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| <b>SQL5012</b>              |  |
| <b>Message Text:</b>        | Host variable &1 not numeric with zero scale.  |
| <b>Cause Text:</b>          | <p>Host variable &amp;1 was specified in a position where it is not allowed. The host variable was not usable for one of the following reasons:</p> <ul style="list-style-type: none"> <li>• It is not numeric.</li> <li>• The scale is not zero.</li> </ul> |
| <b>Recovery Text:</b>       | Change the host variable to a numeric type with zero scale.  |
| <b>SQLCODE or SQLCODEs:</b> | -5012  |



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| <b>SQL5012</b>                |       |
| <b>SQLSTATE or SQLSTATES:</b> | 42618 |

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| <b>SQL5016</b>                |   |
| <b>Message Text:</b>          | Qualified object name &1 not valid.   |
| <b>Cause Text:</b>            | <p>One of the following has occurred:</p> <ul style="list-style-type: none"> <li>• The syntax used for the qualified object name is not valid for the naming option specified. With system naming, the qualified form of an object name is schema-name/object-name or schema-name.object-name. With SQL naming the qualified form of an object name is authorization-name.object-name.</li> <li>• The syntax used for the qualified object name is not allowed. User-defined types, functions, variables, and sequences cannot be qualified with the schema name using the / separator in the system naming convention when used in a query.</li> </ul>         |
| <b>Recovery Text:</b>         | <p>Do one of the following and try the request again:</p> <ul style="list-style-type: none"> <li>• If you want to use the SQL naming convention, specify the SQL naming option and qualify the object names in the form authorization-id.object-name.</li> <li>• If you want to use the system naming convention, specify the system naming option and qualify the object names in the form schema-name/object-name or schema-name.object-name.</li> <li>• With the system naming convention, either make sure the user-defined types, functions, variables can be found in the current path or use the period form of naming to qualify the object.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | -5016   |
| <b>SQLSTATE or SQLSTATES:</b> | 42833   |

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| <b>SQL5017</b>                |  |
| <b>Message Text:</b>          | Too many users specified for GRANT or REVOKE.  |
| <b>Cause Text:</b>            | More than the maximum of 50 users are specified on the GRANT or REVOKE statement.          |
| <b>Recovery Text:</b>         | Change the GRANT or REVOKE statement to specify a maximum 50 users. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -5017  |
| <b>SQLSTATE or SQLSTATES:</b> | 54009  |

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| <b>SQL5021</b>       |  |
| <b>Message Text:</b> | FOR UPDATE column &1 not valid.  |
| <b>Cause Text:</b>   | <p>One of the following has occurred:</p> <ul style="list-style-type: none"> <li>• A column in the FOR UPDATE clause is specified in the ORDER BY clause. If the column name is *N, a list of columns was not specified in the FOR UPDATE clause. This is the same as listing all columns.</li> <li>• A DATALINK column in the FOR UPDATE clause is specified in the SELECT list.</li> </ul> |

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| <b>SQL5021</b>                |  |
| <b>Recovery Text:</b>         | Remove the duplicate column from one of the clauses. If no columns were specified in the FOR UPDATE clause, remove either the FOR UPDATE clause or the ORDER BY clause. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -5021  |
| <b>SQLSTATE or SQLSTATES:</b> | 42930  |

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| <b>SQL5023</b>                |  |
| <b>Message Text:</b>          | Statement name &1 previously referred to.  |
| <b>Cause Text:</b>            | The statement name &1 referred to in this DECLARE CURSOR statement has already been referred to in a previous DECLARE CURSOR. A statement name can only be associated with one cursor. |
| <b>Recovery Text:</b>         | Check the statement names specified on all DECLARE CURSOR statements in an application program or REXX procedure to make sure they are unique. Try the request again.                  |
| <b>SQLCODE or SQLCODEs:</b>   | -5023  |
| <b>SQLSTATE or SQLSTATES:</b> | 26510  |

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| <b>SQL5024</b>                |   |
| <b>Message Text:</b>          | Variable &1 not character, UCS-2 graphic, or UTF-16 graphic.  |
| <b>Cause Text:</b>            | <p>Host variable or global variable &amp;1 is not defined as character, UCS-2 graphic, or UTF-16 graphic. Host variables in a precompiled program or REXX procedure or global variables must be character, UCS-2 graphic, or UTF-16 graphic if used as:</p> <ul style="list-style-type: none"> <li>• The statement string in a PREPARE or EXECUTE IMMEDIATE statement.</li> <li>• The table name in a DESCRIBE TABLE statement.</li> <li>• The procedure name in a CALL statement.</li> <li>• The server name, authorization name, or password in a CONNECT, SET CONNECTION, RELEASE, DISCONNECT, SET ENCRYPTION PASSWORD, or SET SESSION AUTHORIZATION statement.</li> <li>• The special register value in a SET special register statement such as SET PATH, SET SCHEMA, or SET CURRENT DECFLOAT ROUNDING MODE.</li> <li>• The SQLSTATE value or signal information value in a SIGNAL statement.</li> <li>• A descriptor name.</li> </ul> |
| <b>Recovery Text:</b>         | Specify a variable that is character, UCS-2 graphic, or UTF-16 graphic. Try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -5024   |
| <b>SQLSTATE or SQLSTATES:</b> | 42618   |

| <b>SQL5027</b>                |  |
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| <b>Message Text:</b>          | OPTION(*SYS) valid only if relational database &1 (product identification &2) is DB2 for IBM i.                        |
| <b>Cause Text:</b>            | SQL naming is required when the create of a SQL package is to a relational database that is not another DB2 for IBM i. |
| <b>Recovery Text:</b>         | Change the program to use SQL naming, then retry the CRTSQLxxx command with the parameter OPTION(*SQL).                |
| <b>SQLCODE or SQLCODEs:</b>   | -5027  |
| <b>SQLSTATE or SQLSTATES:</b> | 560C4  |

| <b>SQL5028</b>                |   |
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| <b>Message Text:</b>          | COMMIT(*NONE) valid only if relational database &1 (product identification &2) is DB2 for IBM i.  |
| <b>Cause Text:</b>            | Commit level of *CHG, *CS or *ALL required when relational database &1 is not another DB2 for IBM i.  |
| <b>Recovery Text:</b>         | Change the program to use commitment control, then retry the CRTSQLxxx command with a commitment control level of *CHG, *CS, or *ALL specified. |
| <b>SQLCODE or SQLCODEs:</b>   | -5028   |
| <b>SQLSTATE or SQLSTATES:</b> | 560C4   |

| <b>SQL5047</b>                |  |
|-------------------------------|--|
| <b>Message Text:</b>          | Error processing SRTSEQ or LANGID parameter. Message is &3, &4.  |
| <b>Cause Text:</b>            | An error occurred during an attempt to retrieve the sort sequence table for the SRTSEQ parameter &1 and LANGID parameter &2. Message &3 was returned.      |
| <b>Recovery Text:</b>         | Correct the errors as indicated by message &3 and issue the request again. If a sort sequence table is not required, specify *HEX as the SRTSEQ parameter. |
| <b>SQLCODE or SQLCODEs:</b>   | -5047  |
| <b>SQLSTATE or SQLSTATES:</b> | 42616  |

| <b>SQL5051</b>       |                                   |
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| <b>Message Text:</b> | Qualifier &1 not same as name &2. |

| <b>SQL5051</b>                |   |
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| <b>Cause Text:</b>            | <p>One of the following has occurred:</p> <ul style="list-style-type: none"> <li>• An object created in a CREATE SCHEMA statement is qualified by a name other than the schema name. All objects created in a CREATE SCHEMA statement must be either qualified by the schema name &amp;2 or not qualified. Unqualified objects are implicitly qualified by the schema name.</li> <li>• A constraint name was qualified by a name that is not the same as the qualifier for the table. A constraint for a table must be qualified by the same schema as the table. If not explicitly qualified, a constraint name is implicitly qualified by the default schema, if one is specified. Otherwise, the constraint name is implicitly qualified by the authorization ID for SQL names and by the qualifier of the table name for system names.</li> </ul> |
| <b>Recovery Text:</b>         | <p>Do one of the following and try the request again:</p> <ul style="list-style-type: none"> <li>• Explicitly qualify the object in the schema with &amp;2 or remove qualifier &amp;1 from the object name.</li> <li>• Use the same qualification for constraint names and table names.</li> </ul>  |
| <b>SQLCODE or SQLCODEs:</b>   | -5051   |
| <b>SQLSTATE or SQLSTATES:</b> | 42875   |

| <b>SQL7001</b>                |   |
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| <b>Message Text:</b>          | Table &1 in &2 not database file.   |
| <b>Cause Text:</b>            | SQL processing is only valid for a database file. All other file types are not allowed. |
| <b>Recovery Text:</b>         | Make certain that the table and schema names are correct.                               |
| <b>SQLCODE or SQLCODEs:</b>   | -7001   |
| <b>SQLSTATE or SQLSTATES:</b> | 42858   |

| <b>SQL7002</b>                |   |
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| <b>Message Text:</b>          | Override parameter not valid.   |
| <b>Cause Text:</b>            | An Override Data Base File (OVRDBF) command was issued for one of the files referenced in the SQL statement. A parameter on the OVRDBF command is not valid for SQL. See message CPF4276 in the job log for information about which parameter is not valid. |
| <b>Recovery Text:</b>         | Delete the override (DLTOVR command). Use the OVRDBF command again without the parameter that is not valid, if necessary, and then try the operation again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -7002   |
| <b>SQLSTATE or SQLSTATES:</b> | 42847   |

| <b>SQL7003</b>       |   |
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| <b>Message Text:</b> | File &1 in &2 has more than one format. |

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| <b>SQL7003</b>                |  |
| <b>Cause Text:</b>            | SQL cannot process a file unless it has only one format.                     |
| <b>Recovery Text:</b>         | Make certain that the correct filename was specified. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -7003  |
| <b>SQLSTATE or SQLSTATES:</b> | 42857  |

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| <b>SQL7006</b>                |  |
| <b>Message Text:</b>          | Cannot drop schema &1.   |
| <b>Cause Text:</b>            | &1 is a schema that is in the library list.  |
| <b>Recovery Text:</b>         | Remove &1 from the library list before attempting the DROP. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -7006  |
| <b>SQLSTATE or SQLSTATES:</b> | 55018  |

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| <b>SQL7007</b>                |  |
| <b>Message Text:</b>          | COMMIT, ROLLBACK, or SAVEPOINT not valid.  |
| <b>Cause Text:</b>            | A COMMIT, ROLLBACK, or SAVEPOINT statement was issued, but commitment control is not active.   |
| <b>Recovery Text:</b>         | Change the commitment control level *NONE to *CHG, *CS, or *ALL. The SET TRANSACTION statement can be used to change the isolation level to something other than *NONE. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -7007  |
| <b>SQLSTATE or SQLSTATES:</b> | 51009  |

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| <b>SQL7008</b>       |                                   |
| <b>Message Text:</b> | &1 in &2 not valid for operation. |

**SQL7008****Cause Text:**

The reason code is &3. Reason codes are:

- 1 -- &1 has no members.
- 2 -- &1 has been saved with storage free.
- 3 -- &1 not journaled, no authority to the journal, or the journal state is \*STANDBY. Files with an RI constraint action of CASCADE, SET NULL, or SET DEFAULT must be journaled to the same journal.
- 4 and 5 -- &1 is in or being created into production library but the user has debug mode UPDPROD(\*NO).
- 6 -- Schema being created, but user in debug mode with UPDPROD(\*NO).
- 7 -- A based-on table used in creation of a view is not valid. Either the table is program described table or it is in a temporary schema.
- 8 -- Based-on table resides in a different ASP than ASP of object being created.
- 9 -- Index is currently held or is not valid.
- 10 -- A constraint or trigger is being added to an invalid type of table, or the maximum number of triggers has been reached, or all nodes of the distributed table are not at the same release level.
- 11 -- Distributed table is being created in schema QTEMP, or a view is being created over more than one distributed table.
- 12 -- Table could not be created in QTEMP, QSYS, QSYS2, or SYSIBM because it contains a column of type DATALINK having the FILE LINK CONTROL option.
- 13 -- The table contains a DATALINK, LOB, or XML column that conflicts with the data dictionary.
- 14 -- A DATALINK, LOB, XML, or IDENTITY column cannot be added to a non SQL table.
- 15 -- Attempted to create or change an object using a commitment definition in a different ASP.
- 16 -- Sequence &1 in &2 was incorrectly modified with a CL command.
- 17 -- The table is not usable because it contains partial transactions.

| <b>SQL7008</b>                |  |
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| <b>Recovery Text:</b>         | <p>Do one of the following based on the reason code:</p> <ul style="list-style-type: none"> <li>• 1 -- Add a member to &amp;1 (ADDPFM).</li> <li>• 2 -- Restore &amp;1 (RSTOBJ).</li> <li>• 3 -- Start journaling on &amp;1 (STRJRNPF), get access to the journal, or change the journal state to *ACTIVE (CHGJRN).</li> </ul> <p>4, 5, or 6 -- Perform a CHGDBG command with UPDPROD(*YES).</p> <ul style="list-style-type: none"> <li>• 7 -- Remove table names which identify files in QTEMP or program described files.</li> <li>• 8 -- Use tables in the same ASP.</li> <li>• 9 -- Use the EDTRBDAP command to change the sequence of the access path from HELD to 1-99 or *OPN, or rebuild or delete the unique index or constraint.</li> <li>• 10 -- Specify tables that are valid for constraints or triggers.</li> <li>• 11 -- Specify a schema other than QTEMP, or create the view over only one distributed table.</li> <li>• 12 -- Specify a schema other than QTEMP, QSYS, QSYS2, or SYSIBM.</li> <li>• 13 -- Specify a schema that does not contain a data dictionary or remove all DATALINK, LOB, and XML columns.</li> <li>• 14 -- Specify an SQL table.</li> <li>• 15 -- Specify an object in the same ASP as the current commitment definition or end the current commitment definition.</li> <li>• 16 -- Specify a different sequence, or delete the data area associated with sequence &amp;1 in &amp;2 and recreate the sequence.</li> <li>• 17 -- See previous message in the job log.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | -7008  |
| <b>SQLSTATE or SQLSTATES:</b> | 55019  |
| <b>SQL7009</b>                |  |
| <b>Message Text:</b>          | &1 in &2 not valid for operation.  |

| <b>SQL7009</b>                |   |
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| <b>Cause Text:</b>            | <p>The reason code is &amp;3. Reason codes are:</p> <ul style="list-style-type: none"> <li>• 1 -- A materialized query table that was deferred when it was restored cannot be refreshed using REFRESH TABLE or altered using ALTER TABLE.</li> <li>• 2 -- The target of a data change table reference is a distributed file.</li> <li>• 3 -- Distributed table &amp;1 exists on the requester system but does not exist on the target system.</li> <li>• 4 -- Field procedure &amp;1 in &amp;2 failed.</li> <li>• 5 -- Service program &amp;1 in &amp;2 is not a global variable.</li> <li>• 22 -- MERGE target &amp;1 in &amp;2 is a logical file with multiple members that is not an SQL view.</li> <li>• 40 -- Row or column access control cannot be defined on a global temporary table or a table in QTEMP.</li> <li>• 45 -- The table contains multiple columns defined as date or time that do not have the same date or time format.</li> <li>• 47 -- External function &amp;1 in &amp;2 cannot be created as SECURED because the associated program or service program cannot be marked as SECURED.</li> </ul> |
| <b>Recovery Text:</b>         | <p>Do one of the following based on the reason code:</p> <ul style="list-style-type: none"> <li>• 1 -- Ensure the materialized query table's based-on files and their members are available. Then save and restore the deferred materialized query table using the Save Object (SAVOBJ) and Restore Object (RSTOBJ) commands.</li> <li>• 2 -- Specify a data change table reference that is not a distributed file.</li> <li>• 3 -- Specify a different table that exists on the requester and target systems.</li> <li>• 4 -- Ensure the field procedure is valid.</li> <li>• 5 -- Specify a different variable, or delete the service program associated with the variable &amp;1 in &amp;2 and recreate the global variable.</li> <li>• 22 -- Specify an SQL view, and SQL table, or a logical file with only one member.</li> <li>• 45 -- Change the columns so they have the same date or time format.</li> <li>• 47 -- Specify the name of an existing ILE *PGM or *SRVPGM with an SQL associated space that can be updated with the attributes of the new function.</li> </ul>                                     |
| <b>SQLCODE or SQLCODEs:</b>   | -7009   |
| <b>SQLSTATE or SQLSTATES:</b> | 55019   |

| <b>SQL7010</b>                |  |
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| <b>Message Text:</b>          | Logical file &1 in &2 not valid for CREATE VIEW.   |
| <b>Cause Text:</b>            | Logical file &1 in &2 is specified in the subselect clause of a CREATE VIEW. Views cannot be created over logical files. |
| <b>Recovery Text:</b>         | Remove logical file &1 from the CREATE VIEW statement and try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -7010  |
| <b>SQLSTATE or SQLSTATES:</b> | 42850  |



| <b>SQL7011</b>                |  |
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| <b>Message Text:</b>          | &1 in &2 not table, view, or physical file.  |
| <b>Cause Text:</b>            | The SQL statement &3 cannot be performed on a file which is not a table, view, single format logical file, or physical file.   |
| <b>Recovery Text:</b>         | Do one of the following: <ul style="list-style-type: none"> <li>• Use a control language (CL) command to do the function.</li> <li>• Select the correct table, view, logical, or physical file.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | -7011  |
| <b>SQLSTATE or SQLSTATES:</b> | 42851  |

| <b>SQL7017</b>                |  |
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| <b>Message Text:</b>          | Unable to run statement with specified commit level.   |
| <b>Cause Text:</b>            | SQL is unable to run the statement with the specified commit level because SQL cannot register a resource with commitment control. |
| <b>Recovery Text:</b>         | See previous messages for more information.  |
| <b>SQLCODE or SQLCODEs:</b>   | -7017  |
| <b>SQLSTATE or SQLSTATES:</b> | 42971  |

| <b>SQL7018</b>                |  |
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| <b>Message Text:</b>          | COMMIT HOLD or ROLLBACK HOLD not allowed.  |
| <b>Cause Text:</b>            | COMMIT HOLD or ROLLBACK HOLD was attempted to an application server or from an application requester that is not DB2 for IBM i. HOLD is only allowed when the application requester and the application server are both DB2 for IBM i. |
| <b>Recovery Text:</b>         | Remove HOLD and submit the statement again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -7018  |
| <b>SQLSTATE or SQLSTATES:</b> | 42970  |

| <b>SQL7020</b>        |   |
|-----------------------|---|
| <b>Message Text:</b>  | SQL package creation failed.  |
| <b>Cause Text:</b>    | An SQL package must exist on the application server to run SQL statements. Creation of a package for this purpose failed on the application server and returned SQLCODE &1, SQLSTATE &2. The name of the package being created was &3 in schema &4 on relational database &5. |
| <b>Recovery Text:</b> | Do the response as indicated for the SQLCODE &1 and SQLSTATE &2. If you are running with commitment control, exit Interactive SQL or Query Manager and issue a CL COMMIT or ROLLBACK command. This will enable you to continue processing at the local system.                |

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| <b>SQL7020</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | -7020 |
| <b>SQLSTATE or SQLSTATES:</b> | 42969 |

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| <b>SQL7021</b>                |   |
| <b>Message Text:</b>          | Local program attempting to run on application server.                                |
| <b>Cause Text:</b>            | An attempt was made to run an SQL program in a process that is an application server. |
| <b>Recovery Text:</b>         | Initiate another job and run the SQL program in that job.                             |
| <b>SQLCODE or SQLCODEs:</b>   | -7021   |
| <b>SQLSTATE or SQLSTATES:</b> | 57043   |

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| <b>SQL7022</b>                |  |
| <b>Message Text:</b>          | User &1 not the same as current user &2.   |
| <b>Cause Text:</b>            | <p>One of the following occurred.</p> <ul style="list-style-type: none"> <li>• User &amp;1 was specified in a CONNECT statement that specified the local relational database name. The user specified is not the same as the current job user &amp;2.</li> <li>• User &amp;1 was specified in a CONNECT statement and a connection using &amp;2 already exists to the specified relational database using connection method *DUW.</li> </ul> |
| <b>Recovery Text:</b>         | <p>If connecting to the local relational database, change the statement so the user specified on the CONNECT is the same as the current job user ID.</p> <p>If connecting to a remote relational database, either use the SET CONNECTION statement to use the existing connection or end the current connection and issue the CONNECT statement with the new user id.</p>  |
| <b>SQLCODE or SQLCODEs:</b>   | -7022  |
| <b>SQLSTATE or SQLSTATES:</b> | 42977  |

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| <b>SQL7024</b>        |   |
| <b>Message Text:</b>  | CCSIDs incompatible.  |
| <b>Cause Text:</b>    | An attempt was made to create an index or to group columns, but the columns have incompatible CCSIDs. The sort sequence is not *HEX. If the statement is CREATE INDEX, index &1 in schema &2 was not created. The CCSIDs of character key columns or character columns in a GROUP BY clause must be associated CCSIDs when the sort sequence is not *HEX. All associated CCSIDs must have the same single-byte code page. |
| <b>Recovery Text:</b> | <p>Do one of the following:</p> <ul style="list-style-type: none"> <li>• - Change the sort sequence to *HEX and try the statement again.</li> <li>• - Change the CCSIDs of the columns so that they are either 65535 or associated CCSIDs and try the statement again.</li> </ul>   |

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| <b>SQL7024</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | -7024 |
| <b>SQLSTATE or SQLSTATES:</b> | 42876 |

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| <b>SQL7026</b>                |  |
| <b>Message Text:</b>          | Auxiliary storage pool &4 or &5 not found.   |
| <b>Cause Text:</b>            | Object &1 in &2 type *&3 was not created because auxiliary storage pool (ASP) &4 or device name &5 does not exist on the system or in the ASP group of the thread. |
| <b>Recovery Text:</b>         | Specify a correct ASP number or ASP device name and try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -7026  |
| <b>SQLSTATE or SQLSTATES:</b> | 42896  |

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| <b>SQL7027</b>                |  |
| <b>Message Text:</b>          | Cannot GRANT specified privileges on object &1 in &2 type *&3.   |
| <b>Cause Text:</b>            | A GRANT operation was attempted on view &1 in &2 type *&3. This operation cannot be performed because it would give the user specified additional privileges to the underlying file &4 in &5. The user has *OBJOPR or *OBJMGT system privileges to the underlying file.                                  |
| <b>Recovery Text:</b>         | One of the following may be done: <ul style="list-style-type: none"> <li>• Grant the specified privileges to &amp;4</li> <li>• Obtain the required authority from either the security officer or the object owner</li> <li>• Delete the current authority to &amp;4.</li> </ul> Try the operation again. |
| <b>SQLCODE or SQLCODEs:</b>   | -7027  |
| <b>SQLSTATE or SQLSTATES:</b> | 42984  |

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| <b>SQL7028</b>                |  |
| <b>Message Text:</b>          | Owner and primary group cannot be the same.  |
| <b>Cause Text:</b>            | While attempting to create an object, SQL attempted to change the owner of the object. The new owner was the same as the primary group for that object. This is not allowed. |
| <b>Recovery Text:</b>         | Change the primary group for the user profile and try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -7028  |
| <b>SQLSTATE or SQLSTATES:</b> | 42944  |

| <b>SQL7029</b>                |   |
|-------------------------------|---|
| <b>Message Text:</b>          | System name &3 cannot be specified.   |
| <b>Cause Text:</b>            | For a CREATE TABLE, CREATE VIEW, CREATE INDEX, RENAME, or CREATE SCHEMA of &1 in &2, &3 was specified as the system name. If two names are specified in the CREATE TABLE, CREATE VIEW, CREATE INDEX, or RENAME statement, only the name following SYSTEM NAME can be a valid system name. For CREATE VIEW with the REPLACE option, the original system name and the new system name must be the same. If two names are specified in the CREATE SCHEMA statement, only the name following FOR SCHEMA can be a valid system name. |
| <b>Recovery Text:</b>         | Do one of the following and try the request again: <ul style="list-style-type: none"> <li>• Remove the SYSTEM NAME or FOR SCHEMA clause.</li> <li>• Change the first name specified for the CREATE TABLE, CREATE VIEW, CREATE INDEX, RENAME, or CREATE SCHEMA to be a name that is not valid as a system name.</li> </ul>   |
| <b>SQLCODE or SQLCODEs:</b>   | -7029   |
| <b>SQLSTATE or SQLSTATES:</b> | 428B8   |

| <b>SQL7030</b>                |  |
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| <b>Message Text:</b>          | Alias &1 for table &2 in &3 not valid for statement.   |
| <b>Cause Text:</b>            | The SQL statement cannot be performed on alias &1 because the alias refers to a member of table &2 in schema &3. |
| <b>Recovery Text:</b>         | Specify a valid table or an alias that does not refer to a member. Try the request again.                        |
| <b>SQLCODE or SQLCODEs:</b>   | -7030  |
| <b>SQLSTATE or SQLSTATES:</b> | 55042  |

| <b>SQL7031</b>                |  |
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| <b>Message Text:</b>          | Sort sequence table &1 too long.   |
| <b>Cause Text:</b>            | Sort sequence table &1 in &2 is a UCS-2 sort sequence table that is greater than 31560 bytes long. It cannot be used with Distributed Relational Database Architecture (DRDA). |
| <b>Recovery Text:</b>         | Specify a different sort sequence table to be used with Distributed Relational Database Architecture (DRDA).   |
| <b>SQLCODE or SQLCODEs:</b>   | -7031  |
| <b>SQLSTATE or SQLSTATES:</b> | 54044  |

| <b>SQL7032</b>       |   |
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| <b>Message Text:</b> | SQL procedure, function, trigger, or variable &1 in &2 not created. |

| <b>SQL7032</b>                |  |
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| <b>Cause Text:</b>            | SQL procedure, function, trigger, or variable &1 in &2 was not created.<br><br>The compile was not successful. SQL creates an SQL procedure, function, trigger, or variable as a C program that contains embedded SQL. Errors not found during the initial parsing of the CREATE PROCEDURE, ALTER PROCEDURE, CREATE FUNCTION, ALTER FUNCTION, CREATE TRIGGER. or CREATE VARIABLE statement can be found during the precompile. |
| <b>Recovery Text:</b>         | If a compile error occurred, see the appropriate listing in QSYSPRT. If the SQL precompile failed, there is always a listing with the error. If the C compile failed, the listing is only created if requested. Specify SET OPTION OUTPUT=*PRINT prior to the routine body in the CREATE PROCEDURE, CREATE FUNCTION, or CREATE TRIGGER statement if listings are required.   |
| <b>SQLCODE or SQLCODEs:</b>   | -7032  |
| <b>SQLSTATE or SQLSTATES:</b> | 42904  |

| <b>SQL7033</b>                |   |
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| <b>Message Text:</b>          | Alias name &1 in &2 not allowed.  |
| <b>Cause Text:</b>            | Alias name &1 cannot be used. This program was compiled on a release before alias names were supported. The table name it is using has now been defined as an alias name. |
| <b>Recovery Text:</b>         | Recompile the program on a release that supports alias names or remove the alias from the system.   |
| <b>SQLCODE or SQLCODEs:</b>   | -7033   |
| <b>SQLSTATE or SQLSTATES:</b> | 42923   |

| <b>SQL7034</b>                |  |
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| <b>Message Text:</b>          | LOB and XML locators are not allowed with COMMIT(*NONE).                           |
| <b>Cause Text:</b>            | LOB and XML locators cannot be used with commitment control level of *NONE or *NC. |
| <b>Recovery Text:</b>         | Use a commitment control level of *CHG, *UR, *CS, *ALL, *RS, or *RR.               |
| <b>SQLCODE or SQLCODEs:</b>   | -7034  |
| <b>SQLSTATE or SQLSTATES:</b> | 42926  |

| <b>SQL7036</b>        |   |
|-----------------------|---|
| <b>Message Text:</b>  | System User-Defined Type name used in SQLDA.  |
| <b>Cause Text:</b>    | A User-Defined Type name returned in the extended SQLVAR entry of the SQLDA is longer than 19 characters. Since there is not room in the SQLNAME entry, the system name is substituted instead. The system name is 10 characters. |
| <b>Recovery Text:</b> |   |

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| <b>SQL7036</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | +7036 |
| <b>SQLSTATE or SQLSTATES:</b> | 01634 |

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| <b>SQL7037</b>                |  |
| <b>Message Text:</b>          | Data in a distributed file &1 in &2 cannot be redistributed.   |
| <b>Cause Text:</b>            | An attempt was made to change the node group, partitioning file, partitioning key, or an attribute of a partitioning key. These changes can cause data to be redistributed, but data in file &1 in &2 cannot be redistributed because it contains a DataLink with FILE LINK CONTROL. |
| <b>Recovery Text:</b>         | Change the request so that data will not be redistributed, and try the function again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -7037  |
| <b>SQLSTATE or SQLSTATES:</b> | 429B6  |

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| <b>SQL7038</b>                |  |
| <b>Message Text:</b>          | Delete cascade not valid for &1 in &2.   |
| <b>Cause Text:</b>            | A delete cascade rule can not be added to &1 in &2 as it contains a DataLink column. |
| <b>Recovery Text:</b>         | Either remove the DataLink column or remove the specified delete cascade rule.       |
| <b>SQLCODE or SQLCODEs:</b>   | -7038  |
| <b>SQLSTATE or SQLSTATES:</b> | 429B7  |

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| <b>SQL7048</b>                |   |
| <b>Message Text:</b>          | Operation not allowed because trigger is invalid.   |
| <b>Cause Text:</b>            | An open of an SQL table or view failed as a result of inoperative trigger &1 in schema &2. The open could be due to an insert, update, delete, or open cursor statement.  |
| <b>Recovery Text:</b>         | Drop and recreate trigger &1 in &2. See the previous CPF418A escape message for the name of the file that failed to open. Preceding the CPF418A will be CPD502B messages for each invalid trigger found. The SYSTRIGGERS catalog can also be used to determine the SQL table an invalid trigger is attached to. |
| <b>SQLCODE or SQLCODEs:</b>   | -7048   |
| <b>SQLSTATE or SQLSTATES:</b> | 51037   |

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| <b>SQL7049</b>       |   |
| <b>Message Text:</b> | An internal object limit has been exceeded. |

| <b>SQL7049</b>                |   |
|-------------------------------|---|
| <b>Cause Text:</b>            | <p>The SQL statement cannot be run successfully because an internal object limitation has been encountered. The reason code is &amp;1. The operation failed for one of the following reasons:</p> <ul style="list-style-type: none"> <li>• 1 - The maximum number of stored procedures with open result sets has been exceeded.</li> <li>• 2 - An internal space limitation has been reached while processing result sets.</li> <li>• 3 - A limit has been reached creating the C program for an SQL procedure, function, or trigger.</li> <li>• 4 - An internal limit on SQL program or package size has been reached. &amp;2 in &amp;3 type *&amp;4 reached the limit.</li> <li>• 5 - An array cannot exceed 4 gigabytes in size.</li> <li>• 6 - The number of permissions and masks that can be defined on &amp;2 in &amp;3 type *&amp;4 has been exceeded.</li> </ul> |
| <b>Recovery Text:</b>         | <p>The reason codes and their recovery follow:</p> <ul style="list-style-type: none"> <li>• 1 - Either fetch a result set or close an open result set for a stored procedure.</li> <li>• 2 - Fetch or close one or more open result sets, or reduce the size of the array result set.</li> <li>• 3 - Modify the SQL routine by reducing the number of SQL statements.</li> <li>• 4 - Reduce the number of SQL statements in the program or package or move some SQL statements to a different module, and recompile the program or package.</li> <li>• 5 - Do not attempt to reference the array beyond the 4 gigabyte limit.</li> <li>• 6 - Analyze the row and column access control requirements for &amp;2 in &amp;3 type *&amp;4 and reduce or simplify the masks and permissions.</li> </ul>  |
| <b>SQLCODE or SQLCODEs:</b>   | -7049   |
| <b>SQLSTATE or SQLSTATEs:</b> | 54035   |

| <b>SQL7050</b>                |  |
|-------------------------------|--|
| <b>Message Text:</b>          | Result sets are not available from procedure &1 in &2.   |
| <b>Cause Text:</b>            | <p>An SQL CALL statement was performed for procedure &amp;1 in &amp;2. It opened &amp;3 result sets, but all were closed before they could be processed. This can be caused by the ending of an activation group, or by some other function that closes SQL cursors, such as a Reclaim Resources (RCLRSC) CL command. This can also happen if the procedure contains a SET RESULT SETS statement, and an error occurred on that statement.</p> |
| <b>Recovery Text:</b>         | <p>If the procedure was created with *NEW as the activation group, change it to *CALLER or a named activation group. Remove any functions that might be closing SQL cursors. If the procedure contains the SET RESULT SETS statement, make sure it completes successfully and does not identify cursors that are not open.</p>   |
| <b>SQLCODE or SQLCODEs:</b>   | +7050  |
| <b>SQLSTATE or SQLSTATEs:</b> | 01646  |

| <b>SQL7051</b>                |  |
|-------------------------------|--|
| <b>Message Text:</b>          | MODE DB2SQL before trigger converted to MODE DB2ROW.   |
| <b>Cause Text:</b>            | MODE DB2SQL before triggers are not supported. The SQL trigger &1 in &2 will be converted from MODE DB2SQL to MODE DB2ROW. |
| <b>Recovery Text:</b>         | MODE DB2ROW should be specified for all BEFORE triggers. Change the statement and try the request again.                   |
| <b>SQLCODE or SQLCODEs:</b>   | +7051  |
| <b>SQLSTATE or SQLSTATES:</b> | 01647  |

| <b>SQL7052</b>                |   |
|-------------------------------|---|
| <b>Message Text:</b>          | Object &1 type *&3 cannot be created in &2.   |
| <b>Cause Text:</b>            | An attempt to create object &1 type *&3 in &2 failed because the library is not valid for user objects. |
| <b>Recovery Text:</b>         | Perform the operation using a different library.  |
| <b>SQLCODE or SQLCODEs:</b>   | -7052   |
| <b>SQLSTATE or SQLSTATES:</b> | 55050   |

| <b>SQL7053</b>                |   |
|-------------------------------|---|
| <b>Message Text:</b>          | Relational database directory not available.  |
| <b>Cause Text:</b>            | An attempt to connect to relational database (RDB) &1 failed because the RDB directory is not available. A vary on operation may be in progress for the Auxiliary Storage Pool (ASP) devices. |
| <b>Recovery Text:</b>         | If a vary on operation is in progress for any ASP devices, wait until the operation is complete. If repeated attempts fail, you may need to run the command RCLSTG SELECT(*DBXREF).           |
| <b>SQLCODE or SQLCODEs:</b>   | -7053   |
| <b>SQLSTATE or SQLSTATES:</b> | 57011   |

| <b>SQL7054</b>                |   |
|-------------------------------|---|
| <b>Message Text:</b>          | The open failed due to exit program &1.   |
| <b>Cause Text:</b>            | An exit program was installed to examine all file opens using the ADDEXITPGM EXITPNT(QIBM_QDB_OPEN) FORMAT(DBOP0100) command. The exit program ended this open request. |
| <b>Recovery Text:</b>         |   |
| <b>SQLCODE or SQLCODEs:</b>   | -7054   |
| <b>SQLSTATE or SQLSTATES:</b> | 58002   |



|                               |   |
|-------------------------------|---|
| <b>SQL7055</b>                |   |
| <b>Message Text:</b>          | Cursor &1 is ambiguous.   |
| <b>Cause Text:</b>            | Cursor &1 will become ambiguous because there is another cursor with the same name already opened from a different invocation of the procedure.   |
| <b>Recovery Text:</b>         | Close all other cursors with the same name opened in other invocations of the procedure or include the cursor in the set of result sets specified on this SET RESULT SETS statement. Try the request again. |
| <b>SQLCODE or SQLCODEs:</b>   | -7055   |
| <b>SQLSTATE or SQLSTATES:</b> | 24502   |

|                               |  |
|-------------------------------|--|
| <b>SQL7056</b>                |  |
| <b>Message Text:</b>          | Database support not available for reason &1.  |
| <b>Cause Text:</b>            | <p>A required licensed program is not installed. The reason code is &amp;1.</p> <ul style="list-style-type: none"> <li>• 1 - IBM XML Toolkit for i (5733XT2) or International Components for Unicode (5770-SS1) is not installed.</li> <li>• 2 - Java Developer Kit 5.0 (5770JV1), or J2SE 5.0 32 bit (5770JV1), or J2SE 5.0 64 bit (5770JV1), or Portable App Solutions Environment (5770-SS1) is not installed.</li> <li>• 3 - IBM Advanced Data Security for i (5770SS1 option 47) is not installed.</li> </ul> |
| <b>Recovery Text:</b>         | Make sure the required licensed programs are correctly installed. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -7056  |
| <b>SQLSTATE or SQLSTATES:</b> | 560CR  |

|                               |   |
|-------------------------------|---|
| <b>SQL7057</b>                |   |
| <b>Message Text:</b>          | &1 was changed to PROGRAM TYPE MAIN.  |
| <b>Cause Text:</b>            | <p>An SQL procedure &amp;1 in &amp;2 has been changed from PROGRAM TYPE SUB to PROGRAM TYPE MAIN. The specific name of the procedure is &amp;3. A PROGRAM TYPE SUB procedure is implemented using an ILE *SRVPGM, while a PROGRAM TYPE MAIN procedure is implemented using an ILE *PGM. The procedure call processing for an ILE *SRVPGM is faster than the procedure call processing for an ILE *PGM, so it is beneficial to create SQL procedures with the PROGRAM TYPE SUB option to achieve the best performance. If you see this message, it indicates that a procedure is being changed from PROGRAM TYPE SUB to PROGRAM TYPE MAIN on behalf of an ALTER PROCEDURE SQL statement or a RESTORE OBJECT (RSTOBJ) system command.</p> |
| <b>Recovery Text:</b>         | Either recreate the procedure using CREATE PROCEDURE or alter the procedure using the ALTER PROCEDURE SQL statement.  |
| <b>SQLCODE or SQLCODEs:</b>   | +7057   |
| <b>SQLSTATE or SQLSTATES:</b> | 01693   |

| <b>SQL7058</b>                |   |
|-------------------------------|---|
| <b>Message Text:</b>          | Table &1 in &2 not allowed on MERGE statement.  |
| <b>Cause Text:</b>            | Table &1 in schema &2 cannot be specified as the target of a MERGE statement containing a global variable, a function, or a subselect because it has a trigger or is a parent of a referential constraint with a delete rule of CASCADE, SET NULL, or SET DEFAULT. If &1 is a view, the view definition cannot reference a table with these attributes. |
| <b>Recovery Text:</b>         | Remove the global variable, subselect, or function in order to specify table &1 in &2 for the MERGE. Try the request again.   |
| <b>SQLCODE or SQLCODEs:</b>   | -7058   |
| <b>SQLSTATE or SQLSTATES:</b> | 560D1   |

| <b>SQL7059</b>                |   |
|-------------------------------|---|
| <b>Message Text:</b>          | The activation group for procedure &1 in &2 is not valid.   |
| <b>Cause Text:</b>            | <p>The activation group of the program or service program referenced by procedure &amp;1 in &amp;2 is not valid for one of the following reasons:</p> <ul style="list-style-type: none"> <li>• Procedure &amp;1 is defined as an autonomous external procedure but the external program or service program is not created to run in activation group QSQAUTOAG. An autonomous procedure must run in activation group QSQAUTOAG.</li> <li>• Procedure &amp;1 is not an autonomous external procedure but the external program or service program is created to run in activation group QSQAUTOAG. Only an autonomous procedure is allowed to run in activation group QSQAUTOAG.</li> </ul> |
| <b>Recovery Text:</b>         | Change the procedure, program, or service program and try the request again.  |
| <b>SQLCODE or SQLCODEs:</b>   | -7059   |
| <b>SQLSTATE or SQLSTATES:</b> | 51047   |

| <b>SQL7905</b>       |  |
|----------------------|--|
| <b>Message Text:</b> | Table &1 in &2 created but was not journaled.  |
| <b>Cause Text:</b>   | The table &1 was created in &2, but the table was not journaled. Either a QDFTJRN data area indicated that journaling should not be started, the default journal did not exist, or the default journal did exist but the journaling could not be started. The default journal may be damaged, unable to accept journal entries, or may not exist. The SQL name for the table is &1 and the system name for the table is &3. For a distributed table, journaling could not be started on all of the systems. The default journal must exist, and be able to accept journal entries, on each of the systems in the node group. |

| <b>SQL7905</b>                |  |
|-------------------------------|--|
| <b>Recovery Text:</b>         | <p>The table was created, but until the table is journaled, COMMIT(*CHG), COMMIT(*CS), COMMIT(*RS), COMMIT(*RR), COMMIT(*UR), and COMMIT(*ALL) will not be allowed for table &amp;1.</p> <p>If the default journal does not exist, create the journal (CRTJRN command) and start journaling (STRJRNP command).</p> <p>If the journal is in error, correct the problem to the journal</p> <p>If the table is distributed, correct the problems on all the systems in the node group and start journaling (STRJRNP command).</p> |
| <b>SQLCODE or SQLCODEs:</b>   | +7905  |
| <b>SQLSTATE or SQLSTATES:</b> | 01567  |

| <b>SQL7906</b>                |  |
|-------------------------------|--|
| <b>Message Text:</b>          | SQL function not supported on prior release. Function is - &1.   |
| <b>Cause Text:</b>            | The *PRV or VxRxMx value was specified for the Target Release (TGTRLS) parameter on the precompile command or for the SET OPTION statement. The created program cannot be saved and restored to that release because an SQL function is not supported on the target release.   |
| <b>Recovery Text:</b>         | <p>The program is compiled with a severity level 30 message in the precompile listing for each SQL statement containing a function which cannot be restored, and the program object is marked as not being able to be restored. To avoid the messages, change the value on the TGTRLS parameter to the *CURRENT value or change the program so every SQL statement contains only the functions that are supported on the release to which you want to restore.</p> <p>If the SET OPTION statement is used for a routine, the routine will not create unless all SQL statements within the routine are supported on the release specified for the TGTRLS value.</p> |
| <b>SQLCODE or SQLCODEs:</b>   | -7906  |
| <b>SQLSTATE or SQLSTATES:</b> | 42997  |

| <b>SQL7909</b>       |   |
|----------------------|---|
| <b>Message Text:</b> | &1 was created, changed, or dropped, but object not modified. |

| <b>SQL7909</b>                |   |
|-------------------------------|---|
| <b>Cause Text:</b>            | <p>The routine or global variable &amp;1 in &amp;2 was created, changed, or dropped successfully but the object's attributes could not be saved, changed, or removed from the associated program or service program object. For a routine, the specific name is &amp;3. If the object was just created or modified, when the *PGM or *SRVPGM object is saved and then restored, the SQL catalogs will not be updated with the new attributes for this routine. If the object was just dropped, the SQL catalogs could be incorrectly updated on a future restore of the object due to not removing the object information from the associated program or service program.</p> <p>Reason code is &amp;4. Reason codes and their meanings are:</p> <ul style="list-style-type: none"> <li>• 1 -- The external program did not exist when the CREATE, ALTER, COMMENT, LABEL, or DROP statement was issued.</li> <li>• 2 -- The external program library is QSYS.</li> <li>• 3 -- The external program was not an ILE *PGM or *SRVPGM.</li> <li>• 4 -- The program object for the corresponding routine or variable was in use by another job.</li> <li>• 5 -- The SQL associated space in the program was in use by another job.</li> <li>• 6 -- The SQL associated space in the program could not be expanded.</li> <li>• 7 -- The external program was compiled in a release prior to V4R4M0.</li> <li>• 8 -- The SQL associated space in the external program already contains the maximum number of routine definitions.</li> <li>• 9 -- The external program is not in the same Independent ASP (IASP) as the routine.</li> </ul> |
| <b>Recovery Text:</b>         | <p>Do one of the following based on the reason code:</p> <ul style="list-style-type: none"> <li>• 1 -- Ensure that the external program exists when the CREATE statement is issued.</li> <li>• 2 -- Ensure that the external program library is not QSYS.</li> <li>• 3 -- Ensure that the external program is an ILE *PGM or *SRVPGM.</li> <li>• 4 -- Use WRKOBJLCK to ensure that the program is available when the object is created or changed.</li> <li>• 5 -- Ensure that the program is available when the object is created or changed.</li> <li>• 6 -- Try recompiling the external program to rebuild the program's associated space. For a global variable, simplify the default value expression.</li> <li>• 7 -- Recompile the external program in a more recent release.</li> <li>• 8 -- Drop one of the routines currently defined for the external program.</li> <li>• 9 -- Ensure the external program is in the same IASP as the procedure.</li> </ul>   |
| <b>SQLCODE or SQLCODEs:</b>   | +7909   |
| <b>SQLSTATE or SQLSTATES:</b> | 01660   |

| <b>SQL7941</b>        |  |
|-----------------------|--|
| <b>Message Text:</b>  | Application process not at a commit boundary.  |
| <b>Cause Text:</b>    | A commitment control level other than *NONE was specified on the RUNSQLSTM command, but the application process is not at a commit boundary. |
| <b>Recovery Text:</b> | Issue a COMMIT or ROLLBACK to get to a commit boundary, or specify COMMIT(*NONE) on the RUNSQLSTM command.                                   |

|                               |       |
|-------------------------------|-------|
| <b>SQL7941</b>                |       |
| <b>SQLCODE or SQLCODEs:</b>   | -7941 |
| <b>SQLSTATE or SQLSTATES:</b> | 42981 |

|                               |  |
|-------------------------------|--|
| <b>SQL9012</b>                |  |
| <b>Message Text:</b>          | IBM DB2 Query Manager and SQL Development Kit for i not available.   |
| <b>Cause Text:</b>            | Either IBM DB2 Query Manager and SQL Development Kit for i is not installed, or the limit for the number of concurrent licensed users has been reached. Refer to the job log for details.  |
| <b>Recovery Text:</b>         | Do one of the following and try the request again. <ul style="list-style-type: none"> <li>• Install IBM DB2 Query Manager and SQL Development Kit for i.</li> <li>• Request that a current user discontinue use of the product.</li> <li>• Ask your system administrator to contact the software vendor to increase the limit for the number of licensed users.</li> </ul> |
| <b>SQLCODE or SQLCODEs:</b>   | -9012  |
| <b>SQLSTATE or SQLSTATES:</b> | 42968  |

### Related concepts

[SQL message concepts](#)

SQL messages are displayed when Db2 for i returns an error or warning code to the application that uses it.

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