

DB2[®] 9 for z/OS Reference Guide

*A guide to help with daily activities on
DB2[®] 9 for z/OS*

*YL&A, Inc.
www.ylassoc.com
www.db2expert.com*

Produced by:

YL&A, Inc
2743 S. Veterans Pkwy #226
Springfield, IL 62704
info@ylassoc.com

08/17/2007

Notice and Disclaimer

This DB2® 9 for z/OS Family Reference Guide was developed to help users in their daily activities in administrating and programming in DB2 on all platforms. There are no guarantees expressed or implied with the contents in this guide. YL&A, Inc., is not liable for any loss or damage, direct or indirect, resulting from usage of this reference guide.

We want to provide a quality and useful reference for users. Please notify us of any mistakes or errors in this reference guide at info@ylassoc.com.

The syntax diagrams and tables were reprinted with permission from the IBM Corporation. Much of the material in this guide has copyrights held by the IBM Corporation.

DB2 is a registered trademark of the IBM Corporation.
Windows is a registered trademark of the Microsoft Corporation.
Unix is a registered trademark of the Open Group.

Reading the IBM® Syntax Diagrams

Read the syntax diagrams from left to right, from top to bottom, following the path of the line.

The >>--- symbol indicates the beginning of a statement.

The ---> symbol indicates that the statement syntax is continued on the next line.

The >--- symbol indicates that a statement is continued from the previous line.

The --->< symbol indicates the end of a statement.

Diagrams of syntactical units other than complete statements start with the

>--- symbol and end with the ---> symbol.

Required items appear on the horizontal line (the main path).

>>__required_item_____><

Optional items appear below the main path.

>>__required_item_____><
|_optional_item_|

If an optional item appears above the main path, that item has no effect on the execution of the statement and is used only for readability.

>>__required_item_|_optional_item_|_____><

If you can choose from two or more items, they appear vertically, in a stack.

If you must choose one of the items, one item of the stack appears on the main path.

>>__required_item____required_choice1____><
|_required_choice2_|

If choosing one of the items is optional, the entire stack appears below the main path.

>>__required_item_____><
|_optional_choice1_|
|_optional_choice2_|

If one of the items is the default, it appears above the main path and the remaining choices are shown below.

>>__required_item_|_default_choice_|_____><
|_optional_choice_|
|_optional_choice_|

An arrow returning to the left, above the main line, indicates an item that can be repeated.

>>__required_item____repeatable_item_|_____><
<_____

If the repeat arrow contains a comma, you must separate repeated items with a comma.

>>__required_item____repeatable_item_|_____><
<_,_____

A repeat arrow above a stack indicates that you can repeat the items in the stack.

Keywords appear in uppercase (for example, FROM). They must be spelled exactly as shown. Variables appear in all lowercase letters (for example, column-name). They represent user-supplied names or values. If punctuation marks, parentheses, arithmetic operators, or other such symbols are shown, you must enter them as part of the syntax.

Table of Contents

DB2 9 FOR Z/OS	20
LANGUAGE ELEMENTS	20
SPECIAL REGISTERS	20
HOST VARIABLES	20
FUNCTIONS	21
TABLE FUNCTION	21
EXPRESSIONS	21
LABELED DURATIONS	21
CASE EXPRESSIONS	22
CAST	22
NEXT VALUE EXPRESSION	23
PREVIOUS VALUE EXPRESSION	23
ROW CHANGE EXPRESSION	23
OLAP	23
PREDICATES	24
BASIC PREDICATE	24
QUANTIFIED PREDICATE	24
BETWEEN PREDICATE	24
DISTINCT PREDICATE	25
EXISTS PREDICATE	25
IN PREDICATE	25
LIKE PREDICATE	25
NULL PREDICATE	25
XMLEXISTS	25
SEARCH CONDITIONS	25
COLUMN FUNCTIONS	26
AVG	26
CORRELATION	26
COUNT	26
COUNT_BIG	26
COVARIANCE OR COVARIANCE_SAMP	26
MAX	26
MIN	26
STDDEV	26
STDDEV_SAMP	26
SUM	26
VARIANCE OR VARIANCE_SAMP	27

XMLAGG	27
SCALAR FUNCTIONS	27
ABS	27
ACOS	27
ADD_MONTHS	27
ASCII	27
ASCII_CHR	27
ASCII_STR	27
ASIN	27
ATAN	27
ATANH	27
ATAN2	27
BIGINT	27
BLOB	28
BINARY	28
CCSID_ENCODING	28
CEILING	28
CHAR	28
CHARACTER_LENGTH	29
CLOB	29
COALESCE	29
COLLATION_KEY	29
COMPARE_DECFLOAT	29
CONCAT	29
COS	29
COSH	29
DATE	29
DAY	29
DAYOFMONTH	30
DAYOFWEEK	30
DAYOFWEEK_ISO	30
DAYOFYEAR	30
DAYS	30
DBCLOB	30
DECFLOAT	30
DECFLOAT_SORTKEY	30
DECIMAL OR DEC	30
DECRYPT	31
DEGREES	31
DIFFERENCE	31
DIGITS	31
DOUBLE OR DOUBLE_PRECISION	31

DSN_XMLVALIDATE	31
EBCDIC_CHR.....	31
EBCDIC_STR.....	31
ENCRYPT.....	32
EXP.....	32
EXTRACT	32
FLOAT	32
FLOOR.....	32
GENERATE UNIQUE	32
GETHINT	32
GETVARIABLE.....	32
GRAPHIC.....	32
HEX.....	32
HOUR	33
IDENTITY_VAL_LOCAL()	33
IFNULL.....	33
INSERT.....	33
INTEGER OR INT	33
JULIAN_DAY	33
LAST_DAY.....	33
LCASE OR LOWER.....	33
LEFT	33
LENGTH	33
LN	33
LOCATE.....	33
LOCATE_IN_STRING	34
LOG10	34
LOWER.....	34
LPAD.....	34
LTRIM	34
MAX	34
MICROSECOND	34
MIDNIGHT_SECONDS	34
MIN	34
MINUTE	34
MOD.....	34
MONTH.....	34
MONTHS_BETWEEN	34
NEXT_DAY.....	35
NORMALIZE_DECFLOAT.....	35
NORMALIZE_STRING	35
NULLIF.....	35
OVERLAY	35

POSITION	35
POSSTR.....	35
POWER.....	35
QUANTIZE	35
QUARTER.....	35
RADIANS	35
RAISE_ERROR	35
RAND	35
REAL	36
REPEAT	36
REPLACE.....	36
RID	36
RIGHT	36
ROUND	36
ROUND_TIMESTAMP	36
ROWID	36
RPAD	36
RTRIM	36
SECOND	36
SIGN.....	36
SIN	36
SINH.....	36
SMALLINT.....	36
SOUNDEX.....	37
SOAPHTTPC AND SOAPHTTPV	37
SPACE	37
SQRT	37
STRIP	37
SUBSTR.....	37
SUBSTRING	37
TAN	37
TANH.....	37
TIME.....	37
TIMESTAMP	37
TIMESTAMPADD.....	38
TIMESTAMP_FORMAT	38
TIMESTAMP_ISO	38
TIMESTAMPDIFF	38
TOTALORDER.....	38
TRANSLATE	38
TRUNCATE.....	38
TRUNC_TIMESTAMP	38
UCASE OR UPPER.....	38

UNICODE	38
UNICODE_STR	38
VALUE	38
VARBINARY	38
VARCHAR	39
VARCHAR_FORMAT	39
VARGRAPHIC	39
WEEK	39
WEEK_ISO	39
XMLATTRIBUTES	39
XMLCOMMENT	40
XML2CLOB	40
XMLCONCAT	40
XMLDOCUMENT	40
XMLELEMENT	40
XMLFOREST	40
XMLNAMESPACE	40
XMLPARSE	41
XMLPI	41
XMLQUERY	41
XMLSERIALIZE	41
XMLTEXT	41
YEAR	41
QUERIES	42
SUBSELECT	42
select-clause	42
FULLSELECT	44
STATEMENTS	46
ALLOCATE CURSOR	46
ALTER DATABASE	46
ALTER FUNCTION (EXTERNAL)	46
ALTER FUNCTION (SQL SCALAR)	48
ALTER INDEX	49
ALTER PROCEDURE (EXTERNAL)	50
ALTER PROCEDURE (SQL - EXTERNAL)	51
ALTER PROCEDURE (SQL - NATIVE)	52
ALTER SEQUENCE	52
ALTER STOGROUP	53
ALTER TABLE	53
ALTER TABLESPACE	58

ALTER TRUSTED CONTEXT	59
ALTER VIEW	60
ASSOCIATE LOCATORS	60
BEGIN DECLARE SECTION	60
CALL	60
CLOSE	61
COMMENT ON	61
COMMIT	62
CONNECT (TYPE 1 OR TYPE 2)	62
CREATE ALIAS	62
CREATE AUXILIARY TABLE	62
CREATE DATABASE	63
CREATE FUNCTION (EXTERNAL SCALAR)	63
CREATE FUNCTION (EXTERNAL TABLE)	65
CREATE FUNCTION (SOURCED)	67
CREATE FUNCTION (SQL SCALAR)	69
CREATE GLOBAL TEMPORARY TABLE	70
CREATE INDEX	71
CREATE PROCEDURE (EXTERNAL)	73
CREATE PROCEDURE (SQL - EXTERNAL)	75
CREATE PROCEDURE (SQL-NATIVE)	77
CREATE ROLE	80
CREATE SEQUENCE	80
CREATE STOGROUP	81
CREATE SYNONYM	81
CREATE TABLE	81
CREATE TABLESPACE	85
CREATE TRIGGER	86
CREATE TRUSTED CONTEXT	87
CREATE TYPE	87
CREATE VIEW	88
DECLARE CURSOR	88
DECLARE GLOBAL TEMPORARY TABLE	89
DECLARE STATEMENT	91
DECLARE TABLE	91
DECLARE VARIABLE	91
DELETE	91
DESCRIBE CURSOR	92
DESCRIBE INPUT	92
DESCRIBE OUTPUT	93
DESCRIBE PROCEDURE	93
DESCRIBE TABLE	93
DROP	93

END DECLARE SECTION.....	94
EXCHANGE.....	94
EXECUTE.....	94
EXECUTE IMMEDIATE.....	95
EXPLAIN.....	95
FETCH.....	95
FREE LOCATOR.....	96
GET DIAGNOSTICS.....	96
GRANT.....	97
GRANT (COLLECTION PRIVILEGES).....	97
GRANT (DATABASE PRIVILEGES).....	98
GRANT (TYPE OR JAR PRIVILEGES).....	98
GRANT (FUNCTION OR PROCEDURE PRIVILEGES).....	98
GRANT (PACKAGE PRIVILEGES).....	99
GRANT (PLAN PRIVILEGES).....	100
GRANT (SCHEMA PRIVILEGES).....	100
GRANT (SEQUENCE PRIVILEGES).....	100
GRANT (SYSTEM PRIVILEGES).....	100
GRANT (TABLE OR VIEW PRIVILEGES).....	101
GRANT (USE PRIVILEGES).....	101
HOLD LOCATOR.....	101
INCLUDE.....	102
INSERT.....	102
LABEL ON.....	103
LOCK TABLE.....	103
MERGE.....	103
OPEN.....	105
PREPARE.....	105
REFRESH TABLE.....	106
RELEASE.....	106
RELEASE SAVEPOINT.....	106
RELEASE (CONNECTION).....	107
RENAME.....	107
REVOKE.....	107
REVOKE (COLLECTION PRIVILEGES).....	107
REVOKE (DATABASE PRIVILEGES).....	107
REVOKE (TYPE OR JAR PRIVILEGES).....	108
REVOKE (FUNCTION OR PROCEDURE PRIVILEGES).....	108
REVOKE (PACKAGE PRIVILEGES).....	109
REVOKE (PLAN PRIVILEGES).....	110
REVOKE (SCHEMA PRIVILEGES).....	110
REVOKE (SEQUENCE PRIVILEGES).....	110
REVOKE (SYSTEM PRIVILEGES).....	110

REVOKE (TABLE OR VIEW PRIVILEGES).....	111
REVOKE (USE PRIVILEGES)	111
ROLLBACK	112
SAVEPOINT	112
SELECT INTO	112
SET CONNECTION	112
SET CURRENT APPLICATION ENCODING SCHEME	112
SET CURRENT DEBUG MODE.....	113
SET CURRENT DECFLOAT ROUNDING MODE.....	113
SET CURRENT DEGREE.....	113
SET CURRENT LOCALE LC_CTYPE	113
SET CURRENT MAINTAINED TABLE TYPES FOR OPTIMIZATION	113
SET CURRENT OPTIMIZATION HINT	113
SET CURRENT PACKAGE PATH	114
SET CURRENT PACKAGESET	114
SET CURRENT PRECISION	114
SET CURRENT REFRESH AGE	114
SET CURRENT RULES	114
SET CURRENT ROUTINE VERSION.....	114
SET CURRENT SQLID	114
SET ENCRYPTION PASSWORD	114
SET HOST VARIABLE ASSIGNMENT	115
SET PATH.....	115
SET SCHEMA	115
SET TRANSITION VARIABLE	115
SIGNAL SQLSTATE	116
TRUNCATE.....	116
UPDATE.....	116
VALUES	117
VALUES INTO.....	117
WHenever.....	118
COMMANDS.....	119
-ACCESS DATABASE(DB2)	119
-ALTER BUFFERPOOL	119
-ALTER GROUPBUFFERPOOL	119
-ALTER UTILITY	120
-ARCHIVE LOG.....	120
-BIND PACKAGE	120
-BIND PLAN	121
-CANCEL THREAD	123
CHANGE IMS.....	123
DCLGEN	123

DISPLAY IMS.....	123
-DISPLAY ARCHIVE.....	124
-DISPLAY BUFFERPOOL.....	124
-DISPLAY DATABASE.....	124
-DISPLAY DDF.....	125
-DISPLAY FUNCTION SPECIFIC.....	125
-DISPLAY GROUP.....	126
-DISPLAY GROUPBUFFERPOOL.....	126
-DISPLAY LOCATION.....	126
-DISPLAY LOG.....	126
-DISPLAY PROCEDURE.....	126
-DISPLAY PROFILE.....	127
-DISPLAY RLIMIT.....	127
-DISPLAY THREAD.....	127
-DISPLAY TRACE.....	127
-DISPLAY UTILITY.....	129
DSN TSO.....	129
DSNC (CICS ATTACHMENT FACILITY).....	130
DSNC DISCONNECT (CICS ATTACHMENT FACILITY).....	130
DSNC DISPLAY (CICS ATTACHMENT FACILITY).....	130
DSNC MODIFY(CICS ATTACHMENT FACILITY).....	130
DSNC STOP (CICS ATTACHMENT FACILITY).....	130
DSNC START (CICS ATTACHMENT FACILITY).....	130
DSNH (TSO CLIST).....	130
END.....	130
FREE PACKAGE.....	130
FREE PLAN.....	131
MODIFY ADMTPROC, APPL=SHUTDOWN.....	131
MODIFY ADMTPROC, APPL=SHUTDOWN.....	131
MODIFY IRLMPROC, ABEND.....	131
MODIFY IRLMPROC, DIAG.....	131
MODIFY IRLMPROC, PURGE.....	131
MODIFY IRLMPROC, SET.....	131
MODIFY IRLMPROC, STATUS.....	131
-MODIFY TRACE (DB2).....	132
REBIND PACKAGE.....	133
REBIND PLAN.....	133
REBIND TRIGGER PACKAGE.....	135
-RECOVER BSDS.....	135
-RECOVER INDOUBT.....	135
-RECOVER POSTPONED.....	135
-REFRESH DB2, EARLY.....	135
-RESET GENERICLU.....	135

-RESET INDOUBT	136
RUN.....	136
-SET ARCHIVE	136
-SET LOG.....	136
-SET SYSPARM.....	136
SPUFI.....	136
/SSR.....	137
/START IMS	137
-START DATABASE	137
-START DB2.....	137
-START DDF	138
-START FUNCTION SPECIFIC	138
-START ADMTPROC	138
-START IRLMPROC	138
-START PROCEDURE	138
-START PROFILE	139
-START RLIMIT.....	139
-START TRACE	139
STOP.....	141
STOP ADMTPROC	141
-STOP DATABASE	141
-STOP DB2.....	142
-STOP DDF	142
-STOP FUNCTION SPECIFIC	142
STOP IRLMPROC	142
-STOP PROCEDURE	142
-STOP PROFILE	142
-STOP RLIMIT.....	143
-STOP TRACE	143
-TERM UTILITY.....	145
TRACE IMS.....	145
TRACE CT.....	145
SQL CONTROL STATEMENTS.....	146
SQL CONTROL STATEMENT.....	146
ASSIGNMENT.....	146
CALL	146
CASE.....	146
COMPOUND.....	146
IF	147
GET DIAGNOSTICS	148
GOTO.....	148
LEAVE.....	148

LOOP	148
REPEAT.....	148
WHILE.....	148
SQL PROCEDURE STATEMENT.....	148
PLAN TABLE	149
DSN_PREDICAT_TABLE	155
DSN_STRUCT_TABLE	157
DSN_PGROUP_TABLE	158
DSN_PTASK_TABLE	159
DSN_FILTER_TABLE	160
DSN_DETCOST_TABLE	161
DSN_SORT_TABLE	162
DSN_SORTKEY_TABLE	163
DSN_PGRANGE_TABLE	164
DSN_VIEWREF_TABLE	165
DSN_QUERY_TABLE.....	165
DSN_STATEMNT_TABLE.....	167
DSN_FUNCTION_TABLE.....	169
DSN_STATEMENT_CACHE_TABLE.....	170
DSNZPARMS	172

BIND PARAMETERS	179
DB2 LIMITS	182
IDENTIFIER LENGTH LIMITS	182
NUMERIC LIMITS	182
STRING LENGTH LIMITS	183
DATETIME LIMITS	184
DB2 LIMITS ON SQL STATEMENTS	184
DB2 SYSTEM LIMITS	186
SQL COMMUNICATION AREA (SQLCA)	187
THE REXX SQLCA	190
GET DIAGNOSTICS	192
STATEMENT INFORMATION	192
CONDITIONAL DATA TYPES	193
CONNECTION INFORMATION	194
PREDICATES	195
IFCIDS	197
EXCEPTIONS	209
DETERMINING PARTITION FROM PAGE NUMBER	212
CATALOG TABLES	214
SYSIBM.IPLIST	214
SYSIBM.IPNames	214
SYSIBM.LOCATIONS	216
SYSIBM.LULIST	217
SYSIBM.LUMODES	217
SYSIBM.LUNAMES	218
SYSIBM.MODESELECT	219
SYSIBM.SYSAUXRELS	220
SYSIBM.SYSCHECKDEP	220
SYSIBM.SYSCHECKS	220

SYSIBM.SYSCHECKS2	221
SYSIBM.SYSCOLAUTH	221
SYSIBM.SYSCOLDIST	222
SYSIBM.SYSCOLDIST_HIST	223
SYSIBM.SYSCOLDISTSTATS	224
SYSIBM.SYSCOLSTATS	225
SYSIBM.SYSCOLUMNS	226
SYSIBM.SYSCOLUMNS_HIST	232
SYSIBM.SYSCONSTDEP	234
SYSIBM.SYSCONTEXT	234
SYSIBM.SYSCONTEXTAUTHIDS	235
SYSIBM.SYSCOPY	236
SYSIBM.SYSCTXTTRUSTATTRS	240
SYSIBM.SYSDATABASE	241
SYSIBM.SYSDATATYPES	242
SYSIBM.SYSDBAUTH	243
SYSIBM.SYSDBRM	245
SYSIBM.SYSDEPENDENCIES	246
SYSIBM.SYSDUMMY1	247
SYSIBM.SYSENVIRONMENT	247
SYSIBM.SYSFIELDS	248
SYSIBM.SYSFOREIGNKEYS	249
SYSIBM.SYSINDEXES	249
SYSIBM.SYSINDEXES_HIST	253
SYSIBM.SYSINDEXPART	253
SYSIBM.SYSINDEXPART_HIST	256
SYSIBM.SYSINDEXSPACESTATS	257
SYSIBM.SYSINDEXSTATS	260
SYSIBM.SYSINDEXSTATS_HIST	260
SYSIBM.SYSJARCLASS_SOURCE	261
SYSIBM.SYSJARCONTENTS	261
SYSIBM.SYSJARDATA	261
SYSIBM.SYSJAROBJECTS	262
SYSIBM.SYSJAVAOPTS	262
SYSIBM.SYSJAVAPATHS	262
SYSIBM.SYSKEYCOLUSE	263
SYSIBM.SYSKEYS	263
SYSIBM.SYSKEYTARGETS	263
SYSIBM.SYSKEYTARGETSTATS	265
SYSIBM.SYSKEYTARGETS_HIST	265
SYSIBM.SYSKEYTGTDIST	266
SYSIBM.SYSKEYTGTDISTSTATS	267
SYSIBM.SYSKEYTGTDIST_HIST	268

SYSIBM.SYSLOBSTATS.....	269
SYSIBM.SYSLOBSTATS_HIST	270
SYSIBM.SYSOBJROLEDEP	270
SYSIBM.SYSPACKAGE	271
SYSIBM.SYSPACKAUTH.....	276
SYSIBM.SYSPACKDEP	277
SYSIBM.SYSPACKLIST	278
SYSIBM.SYSPACKSTMT.....	278
SYSIBM.SYSPARMS.....	280
SYSIBM.SYSPKSYSTEM.....	282
SYSIBM.SYSPLAN	283
SYSIBM.SYSPLANAUTH	287
SYSIBM.SYSPLANDEP	288
SYSIBM.SYSPLSYSTEM	288
SYSIBM.SYSRELS	289
SYSIBM.SYSRESAUTH	289
SYSIBM.SYSROLES	290
SYSIBM.SYSROUTINEAUTH	291
SYSIBM.SYSROUTINES.....	292
SYSIBM.SYSROUTINESTEXT.....	298
SYSIBM.SYSROUTINES_OPTS	298
SYSIBM.SYSROUTINES_SRC	299
SYSIBM.SYSSCHEMAAUTH	299
SYSIBM.SYSSEQUENCEAUTH	300
SYSIBM.SYSSEQUENCEDEP	301
SYSIBM.SYSSEQUENCES.....	301
SYSIBM.SYSSTMT.....	303
SYSIBM.SYSSTOGROUP	305
SYSIBM.SYSSTRINGS	306
SYSIBM.SYSSYNONYMS	306
SYSIBM.SYSTABAUTH.....	307
SYSIBM.SYSTABCONST	309
SYSIBM.SYSTABLEPART	309
SYSIBM.SYSTABLEPART_HIST	312
SYSIBM.SYSTABLES.....	314
SYSIBM.SYSTABLES_HIST	318
SYSIBM.SYSTABLESPACE.....	319
SYSIBM.SYSTABLESPACESTATS	322
SYSIBM.SYSTABSTATS.....	325
SYSIBM.SYSTABSTATS_HIST	326
SYSIBM.SYSTRIGGERS.....	326
SYSIBM.SYSUSERAUTH.....	327
SYSIBM.SYSVIEWDEP	329

SYSIBM.SYSVIEWS	330
SYSIBM.SYSVOLUMES	331
SYSIBM.SYSXMLRELS	331
SYSIBM.SYSXMLSTRINGS.....	331
SYSIBM.SYSUSERNAMES	332
SYSIBM.XSRCOMPONENT	332
SYSIBM.XSROBJECTS	333
SYSIBM.XSROBJECTCOMPONENTS.....	333
SYSIBM.XSROBJECTGRAMMER.....	334
SYSIBM.XSROBJECTHIERARCHIES.....	334
SYSIBM.XRSOBJECTPROPERTY	335
SYSIBM.XSRPROPERTY	335
UPDATEABLE CATALOG STATISTICS.....	336
IBM UTILITIES	338
BACKUP SYSTEM	338
CATENFM.....	338
CATMAINT.....	338
CHECK DATA.....	338
CHECK INDEX	339
CHECK LOB	340
COPY.....	340
COPYTOCOPY	341
DIAGNOSE	342
EXEC SQL	343
LISTDEF	343
LOAD	344
MERGECOPY.....	349
MODIFY RECOVERY	349
MODIFY STATISTICS	349
OPTIONS.....	350
QUIESCE.....	350
REBUILD INDEX	350
RECOVER	351
REORG INDEX.....	352
REORG TABLESPACE	354
REPAIR.....	358
REPORT	358
RESTORE SYSTEM.....	359
RUNSTATS.....	359
STOSPACE	361

TEMPLATE	361
UNLOAD	362
SQL POSITIVE RETURN CODES	367
SQL ERROR RETURN CODES	370
RESOURCE TYPES	393

DB2 9 for z/OS

Language Elements

Special registers

```

>>__ _CURRENT APPLICATION ENCODING SCHEME_><
|_CURRENT CLIENT_ACCTNG_|
|_CURRENT CLIENT_APPLNAME_|
|_CURRENT CLIENT_USERID_|
|_CURRENT CLIENT_WRKSTNNAME_|
|_CURRENT DATE_|
|_|
|_|_CURRENT_DATE_|
|_CURRENT DEBUG MODE_|
|_CURRENT DECFLOAT ROUNDING MODE_|
|_CURRENT DEGREE_|
|_|_LOCALE_| | | |
|_|_CURRENT_|_|_|_LC_CTYPE_|
|_|_CURRENT_LC_CTYPE_|
|_|_TABLE_|_|_FOR OPTIMIZATION_|
|_CURRENT MAINTAINED_|_|_TYPES_|_|
|_CURRENT MEMBER_|
|_CURRENT OPTIMIZATION HINT_|
|_CURRENT PACKAGE PATH_|
|_CURRENT PACKAGESET_|
|_CURRENT PATH_|
|_|_CURRENT_PATH_|
|_CURRENT PRECISION_|
|_CURRENT REFRESH AGE_|
|_CURRENT ROUTINE VERSION_|
|_CURRENT RULES_|
|_|_CURRENT SCHEMA_|
|_|_CURRENT_SCHEMA_|
|_CURRENT SERVER_|
|_CURRENT SQLID_|
|_|_CURRENT TIME_|
|_|_CURRENT_TIME_|
|_|_CURRENT_TIMESTAMP_|
|_|_CURRENT_TIMESTAMP_|
|_CURRENT TIMEZONE_|
|_SESSION_USER_|
|_|_USER_|

```

Host Variables

```

>__ :host-identifier_>
|_|_INDICATOR_|
|_|_|_|_:host-identifier_|

```

In PL/I, C, and COBOL, the syntax of host-variable is:

```
>__:_host-identifier_>
|_host-identifier_|
>
|_INDICATOR_|
|_|_:_host-identifier_|
|_host-identifier_|
```

Functions

```
>__function-name_(
|_ALL_| |<_|
|_DISTINCT_| |expression_|
|_TABLE_transition-table-name_|
```

Table Function

```
>_TABLE_(function-name(
|<_|
|_expression_|
|_TABLE_transition-table-name_|
```

Expressions

```
<_operator_
>_|_function-invocation_|
|_+_| |(expression)|
|_--| |_constant_|
|_|_column-name_|
|_|_host-variable_|
|_|_special-register_|
|_|_(scalar-fullselect)|
|_|_labeled-duration_|
|_|_case-expression_|
|_|_cast-specification_|
|_|_sequence-reference_|
|_|_row-change-expression_|
|_|_OLAP-specification_|

>_CONCAT_>
|_|_|
|_|_|
|_|_|
|_|_|
|_|_|
|_|_|
```

Labeled durations

```
>__function-invocation_ YEAR>
|_(expression)| |YEARS|
|_constant_| |MONTH|
|_column-name_| |MONTHS|
|_host-variable_| |DAY|
|_|_DAYS_|
|_|_HOUR_|
|_|_HOURS_|
|_|_MINUTE_|
|_|_MINUTES_|
```

__SECOND__
__SECONDS__
__MICROSECOND__
__MICROSECONDS__

CASE expressions

```

> __CASE__ searched-when-clause__ |__ELSE NULL__|
    |__simple-when-clause__| |__ELSE__result-expression__|
> __END__

```

searched-when-clause:

```

<
> __WHEN__ search-condition__ THEN__ result-expression__ |
    |__NULL__|

```

simple-when-clause:

```

<
> __expression__ WHEN__ expression__ THEN__ result-expression__ |
    |__NULL__|

```

CAST

```

> __CAST__(__expression__ AS__ data-type__)
    |__NULL__|
    |__parameter-marker__|

```

data-type:

```

> __built-in-data-type__
    |__schema.__| |__distinct-type-name__|

```

built-in data-type:

```

> __SMALLINT__ ><
|__INTEGER__|
|__INT__|
|__BIGINT__|
|__DECIMAL__(5,0)|
|__DEC__(integer)|
|__NUMERIC__(integer)|
|__DECFLOAT__(34)|
|__(16)|
|__(53)|
|__FLOAT__(integer)|
|__REAL__|
|__PRECISION__|
|__DOUBLE__(1 OCTETS)|
|__CHARACTER__(length)|
|__CHARACTER_VARYING__(length)|
|__CHAR__|
|__VARIABLE__|
|__CHARACTER_LARGE_OBJECT__(lob-len)|
|__CHAR__|
|__CLOB__|
|__GRAPHIC__(1 CODEUNITS16)|
|__length__|
|__CCSID__ASCII__|
|__FOR__SBCS__DATA__|
|__EBCDIC__|
|__MIXED__|
|__UNICODE__|
|__BIT__|
|__CCSID__integer__|

```

	VARGRAPHIC(_length_)_____		_EBCDIC_
	_ (1M CODEUNITS16)_		_UNICODE_
	DBCLOB		_integer_
	_ (lob-length)_____		
	_ (1)_____		
	BINARY		
	_ (integer)_____		
	BINARY VARYING (integer)_____		
	VARBINARY		
	_ (1M)_____		
	BINARY LARGE OBJECT		
	BLOB		_ (integer)_____
			K
			M
			G
	DATE		
	TIME		
	TIMESTAMP		
	ROWID		
	XML		

length:

>_integer_____>
 |_CODEUNITS16_|
 |_CODEUNITS32_|
 |_OCTETS_____|

Lob-length:

>_integer_____>
 |_K_| |_CODEUNITS16_|
 |_M_| |_CODEUNITS32_|
 |_G_| |_OCTETS_____|

NEXT VALUE expression

>__NEXT VALUE FOR sequence-name_____>

PREVIOUS VALUE expression

>__PREVIOUS VALUE FOR sequence-name_____>

ROW CHANGE expression

>_ROW CHANGE_____TIMESTAMP_____FOR_ table-designator_____>
 |_TOKEN_____|

OLAP

>__ranking-specification _____>
 |_numbering-specification_|

ranking-specification:

>_RANK_____()_OVER_(_____window-order-clause_)_>
 |_DENSE_RANK_| |_window-partition-clause_|

numbering-specification:

```
> __ROW_NUMBER__(_)_OVER__(____window-order-clause_)_>
|_window-partition-clause_|
```

window-partition-clause:

```
<_,____
>_PARTITION BY__ partition-expression_|____>
```

window-order-clause:

```
<_,____
|_NULLS LAST_|
|_ASC_|_____|
>_ORDER BY__sort-key-expression_|_____|
|_ASC NULLS FIRST_|
|_NULLS FIRST_|
|_DESC_|_____|
|_DESC NULLS LAST_|
```

Predicates

```
>____basic predicate____>
|_quantified predicate_|
|_BETWEEN predicate_|
|_EXISTS predicate_|
|_IN predicate_|
|_LIKE predicate_|
|_NULL predicate_|
|_XMLEXISTS predicate_|
```

Basic predicate

```
>>__expression__=___expression____><
|_<>_|
|_<_|
|_>_|
|_<=_|
|_>=_|
|_(row-value-expression)=__(row-value-expression)|
|_<>_|
```

Quantified predicate

```
>>__expression__=___SOME__(fullselect1)____><
|_<>_|
|_<_|
|_>_|
|_<=_|
|_>=_|
|_(row-value-expression)=__SOME__(fullselect2)|
|_ANY_|
|_(row-value-expression)<>__ALL__(fullselect2)|
```

BETWEEN predicate

```
>__expression____BETWEEN__expression__AND__expression____><
```


|_NOT_|

DISTINCT predicate

```
>__expression_IS_____DISTINCT FROM__expression_____><
|_|_NOT_|
|_(row-value-expression)_IS_____DISCTINCT FROM_(row-value-expression)_|
|_|_NOT_|
```

EXISTS predicate

```
>__EXISTS(fullselect)_____><
```

IN predicate

```
>>__expression1_____IN_____(fullselect1)_____><
|_|_NOT_| |
|_|_<_,_____||
|_|_(expression2_|_)_|
|_(row-value-expression)_____IN_____(fullselect2)_____|
|_|_NOT_|
```

LIKE predicate

```
>__match-expression_____LIKE__pattern-expression_____>
|_|_NOT_|
>_____>
|_|_ESCAPE__escape-expression_|
```

NULL predicate

```
>__expression__IS_____NULL_____>
|_|_NOT_|
```

XMLEXISTS

```
>_XMLEXISTS_(xquery-expression-constant_____>
>_____)><
|_|_BY REF_|
|_|_PASSING_|_____|xquery-argument____|
```

xquery-argument

```
>__xquery-context-item-expression_____><
|_|_<_,_____||
|_|_xquery-context-item-expression_AS_identifier_|_|
```

Search conditions

```
>_____predicate_____>
|_|_NOT_|_|_(search-condition)_|
<
>_____>
|_|_AND_____predicate_|
|_|_OR_|_|_NOT_|_|_(search-condition)_|
```

Column Functions

AVG

```
> __AVG( _ | _ALL_ | _expression_ ) >
      | _DISTINCT_ |
```

CORRELATION

```
> __CORRELATION(expression-1, expression-2) >
```

COUNT

```
> __COUNT( _ | _ALL_ | _expression_ ) >
            | _DISTINCT_ |
            | _ * _ |
```

COUNT_BIG

```
> __COUNT_BIG( _ | _ALL_ | _expression_ ) >
                | _DISTINCT_ |
                | _ * _ |
```

COVARIANCE or COVARIANCE_SAMP

```
> __COVARIANCE( _expression-1, expression-2 ) >
  | _COVARIANCE_SAMP_ |
```

MAX

```
> __MAX( _ | _ALL_ | _expression_ ) >
        | _DISTINCT_ |
```

MIN

```
> __MIN( _ | _ALL_ | _expression_ ) >
        | _DISTINCT_ |
```

STDDEV

```
> __STDDEV( _ | _ALL_ | _expression_ ) >
            | _DISTINCT_ |
```

STDDEV_SAMP

```
> __STDDEV_SAMP( _ | _ALL_ | _expression_ ) >
                | _DISTINCT_ |
```

SUM

```
> __SUM( _ | _ALL_ | _expression_ ) >
        | _DISTINCT_ |
```

VARIANCE or VARIANCE SAMP

```
> _____VARIANCE_____ ( _ ALL _____ | _____expression) _____>
    | _____VARIANCE_SAMP_ | | _____DISTINCT_ |
```

XMLAGG

```
> _____XMLAGG(XML-expression_____ ) _____>
                                     |
                                     | _____<_, _____>
                                     |
                                     | _____ORDER BY_sort-key_____ | _____ASC_____ |
                                     | _____DESC_____ | _____|_____ |
sort-key
> _____column-name_____><
    | _____expression_ |
```

Scalar functions**ABS**

```
> __ABS(numeric-expression) _____>
```

ACOS

```
> __ACOS(numeric-expression) _____>
```

ADD_MONTHS

```
> __ADD_MONTHS(expression,numeric-expression) _____>
```

ASCII

```
> __ASCII(string-expression) _____>
```

ASCII_CHR

```
> __ASCII_CHR(expression) _____>
```

ASCII_STR

```
> __ASCII_CHR(string-expression) _____>
```

ASIN

```
> __ASIN(numeric-expression) _____>
```

ATAN

```
> __ATAN(numeric-expression) _____>
```

ATANH

```
> __ATANH(numeric-expression) _____>
```

ATAN2

```
> __ATAN2(numeric-expression1,numeric-expression2) _____>
```

BIGINT

Numeric to Big Integer:

```
> __BIGINT(numeric-expression) _____>
```

String to Big Integer:

>__BIGINT(string-expression)_____>

BLOB

>__BLOB(expression)_____>
|_,__integer_|

BINARY

>__BINARY(string-expression)_____>
|_,__integer_|

CCSID_ENCODING

>__CCSID_ENCODING(expression)_____>

CEILING

>__CEILING_____(__expression_)_____>

CHAR

Datetime to Character:

>__CHAR(datetime-expression)_____>
|_,__ISO_|
|_USA_|
|_EUR_|
|_JIS_|
|_LOCAL_|

Character to Character:

>__CHAR(character-expression)_____>
|_,__integer_|
|_,__CODEUNITS16_|
|_CODEUNITS32_|
|_OCTETS_|

Graphic to Character:

>__CHAR(graphic-expression)_____>
|_,__integer_|
|_,__CODEUNITS16_|
|_CODEUNITS32_|

Integer to Character:

>__CHAR(integer-expression)_____>

Decimal to Character:

>__CHAR(decimal-expression)_____>
|_,__decimal-character_|

Decimal floating-Point to Character:

>__CHAR(decimal-floating-point-expression)_____>

Floating-Point to Character:

>__CHAR(floating-point-expression)_____>

Row ID to Character:

>__CHAR(row-ID-expression)_____>

CHARACTER_LENGTH

Character string:

```
> __CHARACTER_LENGTH(character-expression, __CODEUNITS16____)____>
                                     |__CODEUNITS32_|
                                     |__OCTETS_____|
```

Graphic string:

```
> __CHARACTER_LENGTH(graphic-expression, __CODEUNITS16____)____>
                                     |__CODEUNITS32_|
```

CLOB

Character to CLOB:

```
> __CLOB(character-expression_____)____>
                                     |__,_integer_____|
                                     |__, |__CODEUNITS16_|
                                     |__, |__CODEUNITS32_|
                                     |__, |__OCTETS_____|
```

GRAPHIC to CLOB:

```
> __CLOB(graphic-expression_____)____>
                                     |__,_integer_____|
                                     |__, |__CODEUNITS16_|
                                     |__, |__CODEUNITS32_|
```

COALESCE

```
> ____COALESCE____(expression____, expression|_<_____)____>
```

COLLATION_KEY

```
> __COLLATION_KEY(string-expression, collation-name_____)____>
                                     |__,_integer_|
```

COMPARE_DECFLOAT

```
> __COMPAR_DECFLOAT(decfloat-expression1, decfloat-expression2_____)____>
```

CONCAT

```
> ____CONCAT____(expression1, expression2)____>
    |_"||"____|
```

COS

```
> __COS(numeric-expression)____>
```

COSH

```
> __COSH(numeric-expression)____>
```

DATE

```
> __DATE(expression)____>
```

DAY

```
> __DAY(expression)____>
```

DAYOFMONTH

```
> __DAYOFMONTH(expression)_____>
```

DAY OF WEEK

```
> __DAYOFWEEK(expression)_____>
```

DAYOFWEEK_ISO

```
> __DAYOFWEEK_ISO(expression)_____>
```

DAYOFYEAR

```
> __DAYOFYEAR(expression)_____>
```

DAYS

```
> __DAYS(expression)_____>
```

DBCLOB

Character to DBCLOB:

```
>_DBCLOB(character-expression_____)____>
|_,_integer_____|
|_,_|CODEUNITS16_|
|_|CODEUNITS32_|
```

GRAPHIC to DBCLOB

```
> __DBCLOB(graphic-expression_____)____>
|_,_integer_____|
|_,_|_CODEUNITS16_|
|_|_CODEUNITS32_|
```

DECFLOAT

numeric to DECFLOAT:

```
>__DEC_FLOAT _(_numeric-expression_|          |_____)>  
                                |_,34_|  
                                |_,16_|
```

string to DECFLOAT:

```
> __DEC_FLOAT _(_string-expression_|_____)>
```

DECFLOAT_SORTKEY

```
>_DECFLOAT_SORTKEY_ (_decfloat-expression_)_____>
```

DECIMAL or DEC

Numeric to decimal:

```
> DECIMAL ( numeric-expression ) precision scale >
```

String to decimal:

```
>_DECIMAL_(string-expression_____)____>
|_DEC_|                |_,precision_____|
                        |_,scale_____|
                        |_,decimal-char_|
```

DECRYPT

```
>> __DECRYPT_BINARY_____(encrypted-expression _____)>
    |__DECRYPT_BIT____|
    |__DECRYPT_CHAR____|
    |__DECRYPT_DB____|
> _____)____<
    |__,_password-string-expression_ - _____|
    |__DEFAULT_____||__,_ccsid-constant_
```

DEGREES

```
> __DEGREES(expression)_____>
```

DIFFERENCE

```
> __DIFFERENCE(expression1, expression2)_____>
```

DIGITS

```
> __DIGITS(expression)_____>
```

DOUBLE or DOUBLE_PRECISION

```
> __DOUBLE_____(__numeric-expression____)_____>
    |__DOUBLE_PRECISION_|    |__string-expression_|
```

DSN_XMLVALIDATE

CLOB input with an XML schema name:

```
> __DSN_XMLVALIDATE(clob-expression, varchar-expression____)_____>
```

CLOB input with namespace and location hint URIs:

```
> __DSN_XMLVALIDATE(clob-expression,varchar-expression1, varchar-
expression1)____>
```

BLOB input with an XML schema name:

```
> __DSN_XMLVALIDATE(blob-expression, varchar-expression____)_____>
```

BLOB input with namespace and location hint URIs:

```
> __DSN_XMLVALIDATE(blob-expression,varchar-expression1, varchar-
expression1)____>
```

Varchar input with an XML schema name:

```
> __DSN_XMLVALIDATE(varchar-expression, varchar-expression____)_____>
```

Varchar input with namespace and location hint URIs:

```
> __DSN_XMLVALIDATE(varhchar-expression1,varchar-expression2,varchar-
expressn3)____>
```

EBCDIC_CHR

```
>> __EBCDIC(expression)_____>
```

EBCDIC_STR

```
>> __EBCDIC_STR(string-expression)_____>
```


IDENTITY_VAL_LOCAL()

IFNULL

INSERT

INTEGER or INT***JULIAN_DAY***

LAST_DAY

LCASE or LOWER

LEFT

LENGTH

LN

LOCATE

33

```
|_CODEUNITS32_|
|_OCTETS_____|
```

LOCATE_IN_STRING

```
>__LOCATE(source-string,search-string_____>
|_,_start_____|
|_,_instance_|
>_____)><
|_,_CODEUNITS16_|
|_CODEUNITS32_|
|_OCTETS_____|
```

LOG10

```
>__LOG10(numeric-expression)_____>
```

LOWER

```
>__LOWER(string-expression_____)>
|_,_locale-name_| |_,_integer_|
```

LPAD

```
>__LPAD(string-expression,integer_____)>
|_,_pad_|
```

LTRIM

```
>__LTRIM(string-expression)_____>
```

MAX

```
>__MAX(expression, <_____>
expression_|_)_____>
```

MICROSECOND

```
>__MICROSECOND(expression)_____>
```

MIDNIGHT_SECONDS

```
>__MIDNIGHT_SECONDS(expression)_____>
```

MIN

```
>__MIN(expression, <_____>
expression_|_)_____>
```

MINUTE

```
>__MINUTE(expression)_____>
```

MOD

```
>__MOD(numeric-expression1,numeric-expression2)_____>
```

MONTH

```
>__MONTH(expression)_____>
```

MONTHS_BETWEEN

```
>__MONTHS_BETWEEN(expression1,expression2)_____>
```

NEXT_DAY

> __NEXT_DAY(expression, string-expression) _____>

NORMALIZE_DECFLOAT

> __NORMALIZE_DECFLOAT(decfloat-expression) _____>

NORMALIZE_STRING

> __NORMALIZE_STRING(unicode-string, _NFC_|_NFD_|_NFKC_|_NFKD_|_integer_) _____>

NULLIF

> __NULLIF(expression, expression) _____>

OVERLAY

> __OVERLAY(source-string _____>
 > __PLACING(insert-string FROM start _____ USING CODEUNITS16 _____>
 | _____ |_FOR length_| |CODEUNITS32_| |
 | _____ |_OCTETS _____| |
 |, insert-string, start _____, CODEUNITS16 _____|
 | _____ |_length_| |CODEUNITS32_|
 | _____ |_OCTETS _____|

POSITION

> __POSITION(search-string, source-string, _CODEUNITS16_|_CODEUNITS32_|_OCTETS_) _____>

POSSTR

> __POSSTR(source-string, search-string) _____>

POWER

> __POWER(numeric-expression1, numeric-expression2) _____>

QUANTIZE

> __QUANTIZE(numeric-expression, exp-expression) _____>

QUARTER

> __QUARTER(expression) _____>

RADIANS

> __RADIANS(numeric-expression) _____>

RAISE_ERROR

> __RAISE_ERROR(sqlstate, diagnostic-string) _____>

RAND

> __RAND(_____) _____>
 |_expression_|

REAL

```
>__REAL(____numeric-expression____)____>
      |__string-expression__|
```

REPEAT

```
>__REPEAT(string-expression,integer)____>
```

REPLACE

```
>__REPLACE(source-string, search-string, replace-string)____>
```

RID

```
>__RID(table-designator)____>
```

RIGHT

```
>__RIGHT(string-expression,length)____>
                                     |__,_CODEUNITS16____|
                                     |__,_CODEUNITS32____|
                                     |__,_OCTETS_____|
```

ROUND

```
>__ROUND(numeric-expression1,numeric-expression2)____>
```

ROUND_TIMESTAMP

```
>__ROUND_TIMESTAMP(timestamp-expression_____)____>
                    |__,_format-string____|
```

ROWID

```
>__ROWID(expression)____>
```

RPAD

```
>__RPAD(string-expression,integer_____)____>
                                     |__,_pad____|
```

RTRIM

```
>__RTRIM(string-expression)____>
```

SECOND

```
>__SECOND(expression)____>
```

SIGN

```
>__SIGN(numeric-expression)____>
```

SIN

```
>__SIN(numeric-expression)____>
```

SINH

```
>__SINH(numeric-expression)____>
```

SMALLINT

```
>__SMALLINT(____numeric-expression____)____>
          |__string-expression__|
```

SOAPHTTPC and SOAPHTTPV

SPACE

SQRT

STRIP

SUBSTR

SUBSTRING

TAN

TANH

TIME

TIMESTAMP

TIMESTAMPADD

```
>__TIMESTAMPADD(interval, number, timestamp)_____>
```

TIMESTAMP_FORMAT

```
>__TIMESTAMP_FORMAT(string-expression,format-string)_____>
```

TIMESTAMP_ISO

```
>__TIMESTAMP_ISO(expression)_____>
```

TIMESTAMPDIFF

```
>__TIMESTAMPDIFF(numeric-expression,string-expression)_____>
```

TOTALORDER

```
>__TOTALORDER(decfloat-expression1,decfloat-expression2)_____>
```

TRANSLATE

```
>__TRANSLATE(expression_____)>
      |_,_to-string_____|
      |
      |_,_from-string_|_,_'_'_|
      |_,_pad-character_|
```

TRUNCATE

```
>__TRUNCATE(numeric-expression1,numeric-expression2)_____>
```

TRUNC_TIMESTAMP

```
>__TRUNC_TIMESTAMP_(expression1_____)>
      |_,_format-string_|
```

UCASE or UPPER

```
>____UCASE____(string-expression_____)>
      |_,_UPPER_|          |_,_locale-name_| |_,_integer_|
```

UNICODE

```
>____UNICODE____(string-expression)_____>
```

UNICODE_STR

```
>____UNICODE_STR_(string-expression)_|_____|_>
      |_,_UTF-8_|
      |_,_UTF16_|
```

VALUE

```
>____VALUE_(expression_, expression_|_)_____>
```

VARBINARY

```
>__VARCHAR(string-expression_____)>
      |_,_integer_|
```

VARCHAR

Varchar to Character:

```
>__VARCHAR(character-expression)____>
                        |_,_integer_____|
                        |_,_CODEUNITS16_|
                        |_,_CODEUNITS32_|
                        |_,_OCTETS_____|
```

Graphic to Varchar:

```
>__VARCHAR(graphic-expression)____>
                        |_,_integer_____|
                        |_,_CODEUNITS16_|
                        |_,_CODEUNITS32_|
```

Datetime to Varchar:

```
>__VARCHAR(datetime-expression)____>
```

Integer to Varchar:

```
>__VARCHAR(integer-expression)____>
```

Decimal to Varchar:

```
>__VARCHAR(decimal-expression)____>
                        |_,_decimal-character_|
```

Decimal floating-Point to Varchar:

```
>__VARCHAR(decimal-floating-point-expression)____>
```

Floating-Point to Varchar:

```
>__VARCHAR(floating-point-expression)____>
```

Row ID to Varchar:

```
>__VARCHAR(row-ID-expression)____>
```

VARCHAR_FORMAT

```
>__VARCHAR_FORMAT(expression,format-string)____>
```

VARGRAPHIC

Character to Vargraphic:

```
>__VARGRAPHIC(character-expression)____>
                        |_,_integer_____|
                        |_,_CODEUNITS16_|
                        |_,_CODEUNITS32_|
```

Graphic to Vargraphic:

```
>__VARGRAPHIC(graphic-expression)____>
                        |_,_integer_____|
                        |_,_CODEUNITS16_|
                        |_,_CODEUNITS32_|
```

WEEK

```
>__WEEK(expression)____>
```

WEEK_ISO

```
>__WEEK_ISO(expression)____>
```

XMLATTRIBUTES

```
<_,____>
>__XMLATTRIBUTES(_attribute-value-expression)____>
```

|_AS_attribute-name_|

XMLCOMMENT

> __XML2COMMENT(string-expression)_____>

XML2CLOB

> __XML2CLOB(XML-value-expression)_____>

XMLCONCAT

> __XMLCONCAT(XML-expression_____,XML-expression_|_)_____>

XMLDOCUMENT

> __XML2DOCUMENT(XML-expression)_____>

XMLELEMENT

> __XMLELEMENT(_NAME_ element-name_____>

|_,_xmlns:namespace-declaration_|

<_____>

> |_,_XML-attributes-function_| |_,_element-content-expression_|_____>

> _____>

OPTION	<_____>		
	EMPTY ON NULL		
	NULL ON NULL	_____	

	USING		
	XMLBINARY	_____	_BASE64_
	USING		
	XMLBINARY	_____	_HEX_

XMLFOREST

> __XMLFOREST(_ _____>

|_XMLnamespace-function_,_|

<_,_____>

> _ element-content-expression _____>

|_AS_element-name_|

> _____>

OPTION	<_____>		
	EMPTY ON NULL		
	NULL ON NULL	_____	

	USING		
	XMLBINARY	_____	_BASE64_
	USING		
	XMLBINARY	_____	_HEX_

XMLNAMESPACE

> __XMLNAMESPACES(<_,_____>
 |_namespace-uri_AS_namespace-prefix_|_)_____>
 |_DEFAULT_XML-namespace-uri_|


```
>_XMLPARSE(DOCUMENT_string-expression_|_STRIP WHITESPACE_|_)_____|_>
|_XML-host-variable_|_|_PRESERVE WHITESPACE_|
```

```
>_XMLPI(NAME_pi-name_____)_____>
      |_,_string-expression_|
```

```

>_XMLQUERY(xquery-expression-constant)_____>
|_____|_BY REF_|_____| |
|_PASSING_|_____|_xquery-argument_|_____|
|_____|_BY REF_|_____|
|_RETURNING SEQUENCE_|_____|_EMPTY ON EMPTY_|_____|
>_|_____||_|_____||_____>

```

```

>_xquery-context-item-expression_>
|_-'_|
|_|
|_V_xquery-variable-expression AS identifier_|_

```

```

      _CONTENT_
>_XMLSERIALIZE( |_ |_XML-expression AS data-type_____>
      <_____
      _VERSION__'1.0'_____||
>_|_____>
      _EXCLUDING XMLDECLARATION_
      _|_INCLUDING XMLDECLARATION_|_|

```

CHARACTER LARGE OBJECT		_(_1M_)
_CHAR		_integer
_CLOB		_K
_DBCLOB		_M
_BINARY LARGE OBJECT		_G
_BLOB		

```
>_XMLTEXT(_string-expression _____)>
```

```
>_YEAR(expression)_____>
```

Queries

subselect

```
>>__select-clause__from-clause_____>
|_where-clause_|
>_____>
|_group-by-clause_| |_having-clause_|
>_____><
|_order-by-clause_| |_fetch-first-clause_|
```

select-clause

```
>>__SELECT_|_ALL_|_____>
|_DISTINCT_|
>_*_____><
|<_,_____|| | | | |
|_expression_|_|
|_|_AS_|_|_|_column-name_|_|
|_|_table-name_|_|_*_|_|
|_|_view-name_|_|
|_|_correlation-name_|
```

from-clause:

```
>>__FROM__table-reference_|_____><
```

table-reference:

```
>>_____single-table_____><
|_nested-table-expression_|
|_table-function-reference_|
|_data-change-table-reference_|
|_joined-table_|
|_table-locator-reference_|
```

single-table:

```
>>__table-name_____><
|_view-name_| |_correlation-clause_|
```

table-locator-reference:

```
>>__TABLE_( _table-locator-variable_LIKE_table-name_)_____><
|_correlation-name_|
```

nested-table-expression:

```
>>_____(fullselect)__correlation-clause_____><
|_TABLE_|
```

table-function-reference:

```
>>__TABLE__(function-name(_____)_____)>
|<_,_____||
|_expression_|_|
|_TABLE__transition_table_name_|
```

```

>>__table-UDF-cardinality-clause__>
>>__correlation-clause__><

table-UDF-cardinality-clause:
>>__CARDINALITY__integer-constant__><
|__CARDINALITY MULTIPLIER numeric-constant_|

data-change-table-reference:
>>__FINAL TABLE__(INSERT statement)__><
|__FINAL TABLE (searched UPDATE statement)|__correlation-clause_|
|__OLD__|
|__OLD TABLE__(searchred DELETE statement)|
|__FINAL TABLE__(MERGE statement)|

correlation-clause:
__AS__
>>__|__|__correlation-name__><
|<_,_____|
|_( __column-name|_ )_|

joined-table:
>>__table-reference_|__INNER__|__JOIN__table-reference_ON_join-condition__><
| | |__OUTER__| |
| |__LEFT__| | |
| |__RIGHT__|
| |__FULL__|
|_( __joined-table__ )_|

For INNER, LEFT OUTER, and RIGHT OUTER joins:
>>__search-condition__><

For FULL OUTER joins:
<_AND
>>__full-join-expression__=__full-join-expression_|__><

full-join-expression:
>>__column-name__><
| |__cast-function__| | |
| |<_____|
|__COALESCE__( __column-name_____, column-name|_ )_|
| |__cast-function__| |_, cast-function_|

where-clause:
>>__WHERE__search-condition__><

group-by-clause:
<_,_____|
>>__GROUP BY__grouping-expression_|__><

having-clause:
>>__HAVING__search-condition__><

order-by-clause:
<_,_____|

```



```
                                |_ROW_|
with-clause:
>>__WITH__CS_____><
      |_UR_____|
      |_RR_____|
      |_lock-clause_|
      |_RS_____|
      |_lock-clause_|
lock-clause:
>_USE AND KEEP__EXCLUSIVE__LOCKS_____><
      |__UPDATE__|
      |__SHARE__|
queryno-clause:
>>__QUERYNO__integer_____><

SKIP LOCKED DATA:
>>__SKIP LOCKED DATA_____><
```

Statements

ALLOCATE CURSOR

```
>>__ALLOCATE__cursor-name__CURSOR FOR RESULT SET__rs-locator-variable__>
```

ALTER DATABASE

```
>>__ALTER DATABASE__database-name__<
    BUFFERPOOL__bpname__|__>
    |__INDEXBP__bpname__|
    |__STOGROUP__stogroup-name__|
    |__CCSID__ccsid-value__|
```

ALTER FUNCTION (external)

```
>>__ALTER__FUNCTION__function-name__>
    |__<__,__>|
    |__(_(__integer__|__)|__)|
    |__parameter-type__|
    |__SPECIFIC FUNCTION__specific-name__|
>__option-list__><
parameter-type:
>>__data-type__><
    |__AS LOCATOR__|
    |__TABLE LIKE__table-name__AS LOCATOR__|
data-type:
>>__built-in-data-type__><
    |__distinct-type-name__|
```

built-in-data-type:

```
>__SMALLINT__><
|__INTEGER__|
|__INT__|
|__BIGINT__|
|__DECIMAL__|__ (5,0) __|
|__DEC__|__ (_integer__ ) __|
|__NUMERIC__|__ (_integer__ , integer__ ) __|
|__DECFLOAT__|__ (34) __|
|__ (16) __|
|__ (53) __|
|__FLOAT__|__ (_integer__ ) __|
|__REAL__|
|__PRECISION__|
|__DOUBLE__|__ (1 OCTETS) __|
|__CHARACTER__|__ (_length__ ) __|
|__CHAR__|__ (_length__ ) __|
|__CHARACTER VARYING__ (_length__ ) __|
|__CHAR__|
|__VARIABLE__|
|__CHARACTER LARGE OBJECT__|__ (1M OCTETS) __|
|__CHAR__|__ (_lob-len__ ) __|
|__CLOB__|
|__ (1 CODEUNITS16) __|
|__GRAPHIC__|__ (_length__ ) __|
|__VARGRAPHIC__ (_length__ ) __|
|__ (1M CODEUNITS16) __|
|__CCSID__ ASCII__|
|__FOR__ SBCS__ DATA__|
|__EBCDIC__|
|__MIXED__|
|__UNICODE__|
|__BIT__|
|__CCSID__ integer__|
```

DBCLOB	_integer_
_ (lob-length) _	
_ (1) _	
BINARY	_ (integer) _
_BINARY VARYING _ (integer)	
VARBINARY	
_ (1M) _	
BINARY LARGE OBJECT	_integer_
BLOB	_ (integer) _
	K
	M
	G
DATE	
TIME	
TIMESTAMP	
ROWID	

options-list

```

>> _EXTERNAL_ _LANGUAGE_ _ASSEMBLE_ >
      | _NAME_ _'string'_ | _C_
      | _identifier_ | _COBOL_
      | _PLI_
> _PARAMETER STYLE_ _SQL_ _NOT DETERMINISTIC_ >
      | _JAVA_ | _DETERMINISTIC_
> _RETURNS NULL ON NULL INPUT_ _CONTAINS SQL_ >
      | _CALLED ON NULL INPUT_ | _READS SQL DATA_
      | _MODIFIES SQL DATA_
      | _NO SQL_
> _NO EXTERNAL ACTION_ _NO SCRATCHPAD_ >
      | _EXTERNAL ACTION_ | _SCRATCHPAD_ length_
> _PACKAGE PATH package path_ >
      | _NO PACKAGEPATH_
> _NO FINAL CALL_ _ALLOW PARALLEL_ _NO DBINFO_ >
      | _FINAL CALL_ | _DISALLOW PARALLEL_ | _DBINFO_
> _CARDINALITY_ integer_ _NO COLLID_ >
      | _COLLID_ collection-id_
> _WLM ENVIRONMENT_ name_ >
      | _ (name, *) _
> _ASUTIME_ _NO LIMIT_ _STAY RESIDENT_ _NO_ >
      | _LIMIT_ integer_ | _YES_
> _PROGRAM TYPE_ _SUB_ _SECURITY_ _DB2_ >
      | _MAIN_ | _USER_
      | _DEFINER_
> _STOP AFTER SYSTEM DEFAULT FAILURES_ >
      | _STOP AFTER-integer-FAILURES_
      | _CONTINUE AFTER FAILURE_
> _RUN OPTIONS_ run-time-options_ >
> _INHERIT SPECIAL REGISTERS_ _STATIC DISPATCH_ ><
      | _DEFAULT SPECIAL REGISTERS_

```

external-java-routine-name

```

| _jar-name:_ method-name_
| _jar-name:_ | _method-signature_
jar-name
| _jar-id_
| _schema-name._
method-name:

```

```

<_____
|_____|_class-id_.._|_method-id_|
|_package-id_.._|_!_|
|_/_|
method-signature:
|_____|
|_(_|_)|
|_<_,_|_|
|_java-datatype_|_

```

ALTER FUNCTION (SQL scalar)

```

>>_ALTER_ FUNCTION _function-name_>
|_<_,_|_|_
|_(_|_)|_
|_parameter-type_|_
|_SPECIFIC FUNCTION _specific-name_|_
>_option-list_><
parameter-type:
>>_data-type_><
|_AS LOCATOR_|_
|_TABLE LIKE _table-name_ AS LOCATOR_|_
data-type:
>>_built-in-data-type_><
|_distinct-type-name_|_

```

built-in-data-type:

```

>_SMALLINT_><
|_INTEGER_|_
|_INT_|_
|_BIGINT_|_
|_DECIMAL_|_ (5,0) _
|_DEC_|_ (integer) _
|_NUMERIC_|_ (integer) _
|_DECFLOAT_|_ (34) _
|_FLOAT_|_ (16) _
|_REAL_|_ (53) _
|_DOUBLE_|_ (integer) _
|_PRECISION_|_
|_DOUBLE_|_ (1 OCTETS) _
|_CHARACTER_|_ (length) _ |_CCSID_ ASCII |_FOR_ SBCS DATA |
|_CHAR_|_ (length) _ |_EBCDIC_|_ |_MIXED_|_
|_CHARACTER VARYING (length)_|_ |_UNICODE_|_ |_BIT_|_
|_CHAR_|_ |_CCSID_ integer _
|_VARCHAR_|_ (1M OCTETS) _
|_CHARACTER LARGE OBJECT_|_ (lob-len) _ |_CCSID_ ASCII |_FOR_ SBCS DATA |
|_CHAR_|_ |_EBCDIC_|_ |_MIXED_|_
|_CLOB_|_ |_UNICODE_|_ |_BIT_|_
|_CCSID_ integer _
|_GRAPHIC_|_ (1 CODEUNITS16) _
|_VARGRAPHIC (length)_|_ |_CCSID_ ASCII |_
|_DBCLOB_|_ (1M CODEUNITS16) _ |_EBCDIC_|_
|_ (lob-length)_|_ |_UNICODE_|_
|_ (1)_|_ |_integer_|_
|_BINARY_|_

```


		(integer)	
		_BINARY VARYING _(integer)_	
		VARBINARY	
		(1M)	
		BINARY LARGE OBJECT	
		BLOB	
		K	
		M	
		G	
		DATE	
		TIME	
		TIMESTAMP	
		ROWID	

option-list:

```
>> _LANGUAGE SQL _____>
      | _NOT DETERMINISTIC_|
      | _DETERMINISTIC_|
> _____>
      | _EXTERNAL ACTION_| | _CONTAINS SQL_|
      | _NO EXTERNAL ACTION_| | _READS SQL DATA_|
> _STATIC DISPATCH_ CALLED ON NULL INPUT _____><
```

ALTER INDEX

```
>> _ALTER INDEX _index-name _____>
      | _REGENERATE_|
< _____>
> _____>
      | _BUFFERPOOL _bpname_|
      | _CLOSE _YES_|
      | | _NO_|
      | _COPY _NO_|
      | | _YES_|
      | _PIECESIZE _integer_ _K_|
      | | _M_|
      | | _G_|
      | _using-block_|
      | _free-block_|
      | _gbpcache-block_|
      | _CLUSTER_|
      | | _NOT CLUSTER_|
      | _COMPRESS NO_|
      | | _COMPRESS YES_|
      | _NOT PADDED_|
      | | _PADDED_|
      | _ADD COLUMN_(column name_| _ASC_|)
      | | _DESC_|
      | | _RANDOM_|
> _____>
      | <_,' _____>
      | | <_,' _____>
      | | _____<
      | | _ALTER_| | _partition-element_| | _____<
      | | _____<
      | | _____<
```

```

                                |_using-block_|
                                |_free-block_|
                                |_gbpcache-block_|
using-block
  <_____>
>> _____ USING VCAT catalog-name _____><
      |_____|_STOGROUP_stogroup-name_|
      |_PRIQTY_integer|
      |_SECQTY_integer|
      |_ERASE_YES|
      |_NO_|
free-block
  <_____>
>> _____ FREEPAGE_integer _____><
      |_PCTFREE_integer|
gbpcache-block
>> _____ GBPCACHE CHANGED _____><
      |_ALL_|
      |_NONE_|
partition-element
>> _____ PARTITION_integer _____>
      |_____|_AT_|_<_,_____|_INCLUSIVE_|
      |_ENDING_|_|_(_constant_|_)_|
      |_MAXVALUE_|
      |_MINVALUE_|

```

ALTER PROCEDURE (external)

```

>> _____ ALTER PROCEDURE procedure-name option-list _____>
option-list
  > _____ DYNAMIC RESULT SETS integer _____><
      |_____|_EXTERNAL NAME_'string'|
      |_____|_identifier_|
      |_____|_LANGUAGE ASSEMBLE|
      |_____|_C_|
      |_____|_COBOL_|
      |_____|_JAVA_|
      |_____|_PLI_|
      |_____|_REXX_|
      |_____|_PARAMETER STYLE SQL|
      |_____|_GENERAL_|
      |_____|_GENERAL WITH NULLS_|
      |_____|_JAVA_|
      |_____|_NOT DETERMINISTIC|
      |_____|_DETERMINISTIC_|
      |_____|_PACKAGE PATH_package path|
      |_____|_NO PACKAGE PATH_|
      |_____|_CONTAINS SQL|
      |_____|_READS SQL DATA_|
      |_____|_MODIFIES SQL DATA_|
      |_____|_NO SQL_|
      |_____|_NO DBINFO_|

```

ALTER PROCEDURE (SQL - external)

DB2® 9 for z/OS
51

MODIFIES SQL DATA
NO COLLID
_COLLID__collection-id_
_WLM ENVIRONMENT__name_
_(__name__,*__)_
_ASUTIME__NO LIMIT_
_LIMIT__integer_
_STAY RESIDENT__NO_
YES
_PROGRAMTYPE__SUB_
MAIN
_SECURITY__DB2_
USER
DEFINER
_RUN OPTIONS__run-time-options_
_COMMIT ON RETURN__NO_
YES
INHERIT SPECIAL REGISTERS
DEFAULT SPECIAL REGISTERS
STOP AFTER SYSTEM DEFAULT FAILURES
STOP AFTER integer FAILURES
CONTINUE AFTER FAILURE

ALTER PROCEDURE (SQL - native)

>_ALTER PROCEDURE__procedure-name_____>

>_	_ALTER_	_ACTIVE VERSION_____	_option-list _____	><
		_VERSION__routine-version-id_		
		_ACTIVE VERSION_____		
	REPLACE	_routine-specification _____		
		VERSION routine-version-id		
	_ADD VERSION__routine-version-id__	_routine-specification _____		
	_ACTIVATE VERSION__routine-version-id_			
		_ACTIVE VERSION_____		
	REGENERATE	_routine-specification _____		
		VERSION--routine-version-id		
	_DROP VERSION__routine-version-id_			

Routine-specification:

>_____SQL-routine-body_>
option-list
_(_______)_
_<_____
parameter-declaration

ALTER SEQUENCE

>>_ALTER SEQUENCE__sequence-name_____>

<_____>

>_RESTART_____|_____><

|_WITH__numeric-constant_|

INCREMENT BY	numeric-constant
NO MINVALUE	
MINVALUE	numeric-constant
NO MAXVALUE	
MAXVALUE	numeric-constant
NO CYCLE	
CYCLE	
NO CACHE	
CACHE	integer-constant
NO ORDER	
ORDER	

ALTER STOGROUP

```
>> ALTER STOGROUP stogroup-name
<
> ADD VOLUMES( volume-id )
|
| < ' * '
|
| REMOVE VOLUMES( volume-id )
|
| < ' * '
|
>
| _DATACLAS_dc-name_ | _MGMTCLAS_mc-name_ | _STORCLAS_sc-name_ |
```

ALTER TABLE

```
>> ALTER TABLE table-name
<
> ADD column-definition
|
| unique-constraint
| referential-constraint
| check-constraint
| add-partition
| partitioning-clause
| RESTRICT ON DROP
| CLONE clone-table-name
|
| ALTER column-alteration
| partition-alteration
| ROTATE partition-rotation
| DROP PRIMARY KEY
| FOREIGN KEY constraint-name
| UNIQUE
| CHECK
| CONSTRAINT
| RESTRICT ON DROP
| CLONE
|
| VALIDPROC program-name
| NULL
|
| AUDIT NONE
| CHANGES
| ALL
|
| DATA CAPTURE NONE
```

```
>>__|_COLUMN_|_column-name_data-type_____>
<_____|_____>
>_____||_____|_____<
|_|_NOT NULL_____| | | | |
|_WITH_|_____|
|_|_____||_DEFAULT_____|
|_____||_constant_____||
|_____||_SESSION_USER_____||
|_|_USER_____||
|_____||_CURRENT SQLID_____||
|_____||_NULL_____||
|_____||_cast-function-name_( _constant_____)_|
|_____||_SESSION_USER_____||
|_____||_USER_____||
|_____||_CURRENT SQLID_____||
|_____||_NULL_____||
|_GENERATED_____||_ALWAYS_____||
|_____||_BY DEFAULT_|_||_as-identity-clause_|
|_____||_as-row-change-timestamp-clause_|
|_references-clause_____|
|_check-constraint_____|
|_FIELDPROC_program-name_____|
|_____||_<_,_____||
|_____||_( __constant_|_)_|
|_AS SECURITY LABEL_____|
|_IMPLICITLY HIDDEN_____|
```

```
>> _____built-in-data-type_____<<
      |__distinct-type-name__|
```

SMALLINT	
INTEGER	
INT	
BIGINT	
	(5,0)
DECIMAL	
DEC	(integer)
NUMERIC	(integer)
	(34)
DECFLOAT	
	(16)

__FLOAT__	__(53)__	
__REAL__	__(integer)__	
__DOUBLE__	__PRECISION__	
__CHARACTER__	__(1)__	
__CHAR__	__(integer)__	__FOR SBCS DATA__
__CHARACTER VARYING__	__(integer)__	__MIXED__
__CHAR__		__BIT__
__VARCHAR__		
__CHARACTER LARGE OBJECT__	__(1M)__	
__CHAR__	__(integer)__	__FOR SBCS DATA__
__CLOB__		__MIXED__
		__K__
		__M__
		__G__
__GRAPHIC__	__(1)__	
__VARGRAPHIC__	__(integer)__	
__DBCLOB__	__(1M)__	
	__(integer)__	
		__K__
		__M__
		__G__
__BINARY__	__(1)__	
	__(integer)__	
__BINARY VARYING__	__(integer)__	
__VARBINARY__		
__BINARY LARGE OBJECT__	__(1M)__	
__BLOB__	__(integer)__	
		__K__
		__M__
		__G__
__DATE__		
__TIME__		
__TIMESTAMP__		
__ROWID__		
__XML__		

as-identity-clause:

```

>> __AS IDENTITY__ ><
    <__, __START WITH__ numeric-constant__, __)_>
        __1__
        __INCREMENT BY__ numeric-constant__
        __CACHE 20__
        __NO CACHE__
        __CACHE integer__
        __NO CYCLE__
        __CYCLE__
        __NO MAXVALUE__
        __MAXVALUE numeric-constant__
        __NO MINVALUE__
        __MINVALUE numeric-constant__
        __NO ORDER__
        __ORDER__

```

as-row-change-timestamp-clause:

```

>>__FOR EACH ROW ON UPDATE AS ROW CHANGE TIMESTAMP____>
unique-constraint:
>>____PRIMARY KEY____<_,____>
|_CONSTRAINT__constraint-name_|_UNIQUE____|

referential-constraint:
>>____FOREIGN KEY____<_,____>
|_CONSTRAINT__constraint-name_|
>_references-clause____><

references-clause:
>>__REFERENCES__table-name____>
|____<_,____|
|_(__column-name_|_)_|
>____><
|_ON DELETE____RESTRICT____|
|____NO ACTION____|
|____CASCADE____|
|____SET NULL____|

|_ENFORCED____|_ENABLE QUERY OPTIMIZATION____|
>_|_NOT ENFORCED____|____><
check-constraint:
>>____CHECK____(check-condition)____><
|_CONSTRAINT__constraint-name_|
add-partition:
>>__PARTITION__ENDING_____AT____<_,_____INCLUSIVE____><
|____|_(__constant_|_)_|____|____|
|____MAXVALUE____|
|____MINVALUE____|
partitioning-clause:
>>__PARTITION__BY_____RANGE____<_,____>
|____|_(__partition-expression_|_)____>
<_,____>
>_(__partition-element_|_)____><

partitioning-expression:
>>__column-name_____NULLS LAST_____ASC____>
|____|____|____|
|____DESC____|

partition-element:
>>__PARTITION__integer ENDING_____AT____<_,_____INCLUSIVE____><
|____|_(__constant_|_)_|____|____|
|____MAXVALUE____|
|____MINVALUE____|

partition-alteration:
>>__PARTITION__integer ENDING_____AT____<_,_____INCLUSIVE____><
|____|_(__constant_|_)_|____|____|
|____MAXVALUE____|
|____MINVALUE____|

column-alteration:
>>_|_COLUMN____>
|____|_column-name_SET__DATA TYPE__altered-data-type____><

```


	defulat-clause
	generation-alteration
	identity-alteration
	generation-alteration

altered-data-type:

```

> _SMALLINT_>
|_INTEGER_|
|_INT_|
|_BIGINT_|
|_DECIMAL_|_ (5,0) _
|_DEC_|_ (integer) _
|_NUMERIC_|_ (integer) _
|_DECFLOAT_|_ (34) _
|_FLOAT_|_ (16) _
|_REAL_|_ (53) _
|_DOUBLE_|_ (integer) _
|_PRECISION_|_ (1) _
|_CHARACTER_|_ (integer) _
|_CHAR_|_ (integer) _
|_CHARACTER VARYING_|_ (integer) _
|_VCHAR_|_
|_VARCHAR_|_
|_CHARACTER LARGE OBJECT_|_ (1M) _
|_CHAR_|_ (integer) _
|_CLOB_|_ (integer) _
|_FOR_SBCS_DATA_|_
|_MIXED_|_
|_BIT_|_
|_K_|_
|_M_|_
|_G_|_
|_GRAPHIC_|_ (1) _
|_VARGRAPHIC_|_ (integer) _
|_BINARY_|_ (1) _
|_BINARY VARYING_|_ (integer) _
|_VARBINARY_|_

```

generation-alteration:

```

>> _SET GENERATED_ ALWAYS_>
|_BY DEFAULT_|

```

identity-alteration:

```

<
>> _RESTART_|_>
|_WITH_numeric-constant_|_
|_SET INCREMENT BY_numeric-constant_|_
|_SET NO MINVALUE_|_
|_MINVALUE_numeric-constant_|_
|_SET NO MAXVALUE_|_
|_MAXVALUE_numeric-constant_|_
|_SET NO CYCLE_|_
|_CYCLE_numeric-constant_|_
|_SET NO ORDER_|_
|_ORDER_|_

```

partition-rotation:

AT

```

>> __PARTITION FIRST TO LAST__ENDING__|__|__>
      <_,__>|__INCLUSIVE__
> ____( __constant__|_)_|__RESET__><
      |__MAXVALUE__|
      |__MINVALUE__|

```

materialized-query-definition:

```
>> __(_fullselect_) refreshable-table-options__>
```

refreshable-table-options:

```

>> __DATA INITIALLY DEFERRED__REFRESH DEFERRED__>
      <____>
> ____><
  |__MAINTAINED BY SYSTEM__|
  |_____|
  |__MAINTAINED BY USER__|
  |__ENABLE QUERY OPTIMIZATION__|
  |_____|
  |__DISABLE QUERY OPTIMIZATION__|

```

materialized-query-table-alteration:

```
>> __SET refreshable-table-alterations__>
```

refreshable-table-alteration:

```

>> ____>
      <____>
      |__MAINTAINED BY__SYSTEM__|
      |_____|
      |__ENABLE__QUERY OPTIMIZATION__|
      |_____|
      |__DISABLE__|

```

ALTER TABLESPACE

```

>> __ALTER TABLESPACE__table-space-name__>
      |__database-name.__|
      <____>
> ____><
  |__BUFFERPOOL__bpname__|
  |_____|
  |__LOCKSIZE__ANY__|
  |_____|
  |__TABLESPACE__|
  |__TABLE__|
  |__PAGE__|
  |__ROW__|
  |__LOB__|
  |_____|
  |__LOCKMAX__SYSTEM__|
  |_____|
  |__integer__|
  |_____|
  |__CLOSE__YES__|
  |_____|
  |__NO__|
  |_____|
  |__USING__VCAT__catalog-name__|
  |_____|
  |__STOGROUP__stogroup-name__|
  |_____|
  |__PRIQTY__integer__|
  |_____|
  |__SECQTY__integer__|
  |_____|
  |__ERASE__YES__|
  |_____|
  |__NO__|
  |_____|
  |__FREEPAGE__integer__|
  |_____|
  |__PCTFREE__integer__|
  |_____|
  |__COMPRESS__YES__|
  |_____|

```

```

|_NO_|
|_GBPCACHE_   CHANGED
|_ALL_|
|_SYSTEM_|
|_NONE_|
|_LOCKPART_   YES
|_NO_|
|_MAXROWS_ integer
|_MAXPARTITIONS_ integer
|_TRACKMOD_   YES
|_NO_|
|_LOGGED_
|_NOT LOGGED_|
|_CCSID_ ccsid-value

>> _ALTER PARTITION integer
|_USING_ VCAT catalog-name
|_STOGROUP_ stogroup-name
|_PRIQTY_ integer
|_SECQTY_ integer
|_ERASE_ YES
|_NO_|
|_FREEPAGE_ integer
|_PCTFREE_ integer
|_COMPRESS_ YES
|_NO_|
|_GBPCACHE_   CHANGED
|_ALL_|
|_SYSTEM_|
|_NONE_|
|_TRACKMOD_   YES
|_NO_|

```

ALTER TRUSTED CONTEXT

```

>> _ALTER TRUSTED CONTEXT context-name
<
<
> _ALTER _SYSTEM AUTHID authorization-name | _><
|_NO DEFAULT ROLE_
|_WITHOUT ROLE AS OBJECT OWNER_
|_DEFAULT ROLE role-name_ |_WITH ROLE AS OBJECT OWNER_|
|_ENABLE_
|_DISABLE_|
|_NO DEFAULT SECURITY LABEL_
|_ATTRIBUTES_ ( _ADDRESS_ address-value | )
|_ | _ENCRYPTION_ encryption-value |
|_ | _SERVAUTH_ servauth-value |
|_ | _JOBNAME_ jobname-value |
|_ADD_ATTRIBUTES_ ( _ADDRESS_ address-value | )
|_ | _SERVAUTH_ servauth-value |
|_ | _JOBNAME_ jobname-value |

```

```

|_DROP_ATTRIBUTES_( <_,'_____'_____|_)_____|
|_|_SERVAUTH_servauth-value_____|
|_|_JOBNAME_jobname-value_____|
|_user-clause_____

```

user-clause:

```

>>__ADD USE FOR _____authorization-name _____|_____><
|_|_user-options_|
|_|_WITHOUT AUTHENTICATION_|
|_|_PUBLIC_____|_|_____
|_|_WITH AUTHENTICATION_____|
|_REPLACE USE FOR _____authorization-name _____|_____
|_|_user-options_|
|_|_WITHOUT AUTHENTICATION_|
|_|_PUBLIC_____|_|_____
|_|_WITH AUTHENTICATION_____|
|_DROP USE FOR _____authorization-name _____|_____
|_|_PUBLIC_____|

```

use-options:

```

>>_____>
|_|_ROLE_role-name_|_|_SECURITY LABEL-seclabel-name_|
|_|_WITHOUT AUTHENTICATION_|
>>_____|_|_____><
|_|_WITH AUTHENTICATION_____|

```

ALTER VIEW

```

>>__ALTER VIEW__view-name____REGENERATE_____>

```

ASSOCIATE LOCATORS

```

>>__ASSOCIATE__|_____|_____LOCATOR_____>
|_|_LOCATORS_|
|_(<_,'_____'_____|_)_____>
|_|_rs-locator-variable_|_|_____>
>__WITH PROCEDURE____procedure-name____><
|_|_host-variable_____|

```

BEGIN DECLARE SECTION

```

>>__BEGIN DECLARE SECTION_____><

```

CALL

```

>>__CALL____procedure-name____>
|_|_host-variable_____|
>_____><
|_|_(<_,'_____'_____|_)_____|

```

<_, _____
expression
NULL
TABLE transition_table_name_
USING DESCRIPTOR descriptor-name_

CLOSE

```
>> __CLOSE__ cursor-name_____ ><
```

COMMENT ON

```
>> __COMMENT ON_____ >
```

```
> __ALIAS__ alias-name_____ IS_string-constant_><
```

__COLUMN__ table-name__ .column-name_____
view-name
__TYPE__ distinct-type-name_____
__FUNCTION__ function-name_____
(<, _____) _)
parameter-type
__SPECIFIC FUNCTION__ specific-name_____
__INDEX__ index-name_____
__PACKAGE__ collection-id.package-name_____
VERSION Ver-id
__PLAN__ plan-name_____
__PROCEDURE__ procedure-name_
__ACTIVE VERSION_____
__SEQUENCE__ sequence-name_____
__TABLE__ table-name_____
view-name
__TRIGGER__ trigger-name_____
(<, _____) _)
__table-name_(__column-name__ IS_string-constant_ _)_____
view-name

```
parameter-type
```

```
>> __data-type_____ ><
```

```
|_AS LOCATOR_____|
```

```
data-type
```

```
>> __built-in-data-type_____ ><
```

```
|_distinct-type-name_|
```

```
built-in-data-type
```

```
> __SMALLINT_____ ><
```

__INTEGER__
__INT__
__BIGINT__
__DECIMAL__ (5,0)
__DEC__ (integer)
__NUMERIC__ integer
__DECFLOAT__ (34)
__FLOAT__ (16)
__REAL__ (53)
__DOUBLE__ (integer)
__PRECISION__
__DOUBLE__

CHARACTER			
_____(1)_____			
	_CHAR_____	_(_integer_)____	
	_CHARACTER VARYING (_integer_)____	_CCSID_ ASCII_	_FOR_ SBCS_ DATA_
	_CHAR_____	_EBCDIC_	_MIXED_
	_VARCHAR_____	_UNICODE_	_BIT_
CHARACTER LARGE OBJECT			
_____(1M)_____			
	_CHAR_____	_(_integer_)____	
	_CLOB_____	_CCSID_ ASCII_	_FOR_ SBCS_ DATA_
		EBCDIC	_MIXED_
		UNICODE	
GRAPHIC			
_____(1)_____			
	_(_integer_)____		_CCSID_ ASCII_
	_VARGRAPHIC (_integer_)____	_EBCDIC_	
	DBCLOB _____	_UNICODE_	
	_(_integer_)____	_integer_	
	K		
	M		
	G		
BINARY			
_____(1)_____			
	_(_integer_)____		
	_BINARY VARYING (_integer_)____		
	_VARBINARY_____		
BINARY LARGE OBJECT			
_____(1M)_____			
	_BLOB_____	_(_integer_)____	
		K	
		M	
		G	
DATE			

TIME			

TIMESTAMP			

ROWID			

COMMIT

```
>>__COMMIT__|_____|_____><
```

CONNECT (Type 1 or Type 2)

```
>>__CONNECT_____><
|_TO_____location-name_____|
|_|_host-variable_|_|_authorization_|
|_RESET_____|
|_|_authorization_____|
authorization
>>__USER__host-variable__USING__host-variable_____><
```

CREATE ALIAS

```
>>__CREATE ALIAS__alias-name__FOR____table-name_____><
|_|_view-name_|
```

CREATE AUXILIARY TABLE

```
>>__CREATE____AUXILIARY____TABLE__aux-table-name__IN_____>
|_|_AUX_____|
>____table-space-name__STORES__table-name_____>
|_|_database-name_|
```

```
> __COLUMN__ column-name _____ ><
|_PART__integer_|
```

CREATE DATABASE

```
>> __CREATE DATABASE__ database-name _____ >
< _____ ><
> _____ ><
|_BUFFERPOOL__bpname_____|
|_INDEXBP__bpname_____|
|_AS__WORKFILE_____|
|_____|_FOR__member-name_| |
|_____|_SYSDEFLT_____|
|_STOGROUP__|_stogroup-name_|_____|
|_CCSID__ASCII_____|
|_____|_EBCDIC_____|
|_____|_UNICODE_____|
```

CREATE FUNCTION (external scalar)

```
>> __CREATE FUNCTION__ function-name__ ( _____ ) _____ >
|_____|
|_____|_parameter-declaration_|_____|
> __RETURNS__ data-type2 _____ option-list _____ ><
|_____|_AS LOCATOR_____|
|_data-type3__CAST FROM__data-type4_____|
|_____|_AS LOCATOR_____|

parameter-declaration:
>> _____ parameter-type _____ ><
|_parameter-name_|

parameter-type:
>> _____ data-type _____ ><
|_____|_AS LOCATOR_____|
|_TABLE LIKE__table-name__AS LOCATOR__|
|_____|_view-name_|

data-type:
>> _____ built-in-data-type _____ ><
|_distinct-type-name_|

built-in-data-type:
> __SMALLINT _____ ><
|_____|
|_INTEGER_|
|_INT_|
|_BIGINT_|
|_____|(5,0)_____|
|_DECIMAL_|
|_DEC_|_(_integer_____)_____| |
|_NUMERIC_|_____|_integer_|
|_____|(34)_____|
|_DECFLOAT_|
|_____|(16)_____|
|_____|(53)_____|
|_FLOAT_|
|_____|_(_integer_)_____|
|_REAL_|
|_____|_PRECISION_____|
|_DOUBLE_|
|_____|(1)_____|
|_CHARACTER_|
|_____|_(_integer_)_____| |
|_____|_CCSID__ASCII_____|_FOR__SBCS__DATA_|
|_____|_CHAR_____|_(_integer_)_____|
|_____|_CHARACTER_VARYING__(_integer_)_____|
|_____|_EBCDIC_____|
|_____|_MIXED_____|
```

	CHAR				_UNICODE_			_BIT_	
			VARCHAR						
			CHARACTER LARGE OBJECT						
			CHAR						
			CLOB						

option-list:

```

>> | _SPECIFIC_specific-name_ | | _PARAMETER CCSID_ ASCII |
| | | _EBCDIC_ |
| | | _UNICODE_ |
| | _VARCHAR_ NULTERM |
| | _STRUCTURE_ |
> _EXTERNAL_ | | LANGUAGE ASSEMBLE |
| _NAME_ 'string' | | _C_ | |
| | _identifier_ | | _COBOL_ |
| | | _JAVA_ |
| | | _PLI_ |
| _PARAMETER STYLE DB2SQL_ | _NOT DETERMINISTIC_ | _FENCED_ |
> | | | |
| _PARAMETER STYLE JAVA_ | | _DETERMINISTIC_ |
| _RETURNS NULL ON NULL INPUT_ | | _READS SQL DATA_ |
> | | | |
| _CALLED ON NULL INPUT_ | | _NO SQL_ |
| | | _MODIFIES SQL DATA_ |
| | | _CONTAINS SQL_ |
| _EXTERNAL ACTION_ | | _NO SCRATCHPAD_ |
> | | | |
| _NO EXTERNAL ACTION_ | | _100_ | | |
| | | _SCRATCHPAD_ |
| | | _length_ |
| _NO FINAL CALL_ | | _ALLOW PARALLEL_ | | _NO DBINFO_ |
> | | | |
| _FINAL CALL_ | | _DISALLOW PARALLEL_ | | _DBINFO_ |
| _NO COLLID_ |

```



```

> _ |_____ | _____>
  |_COLLID_collection-id_| |_WLM ENVIRONMENT_name_|
  |_____ |_(name_)_|
  |_ASUTIME NO LIMIT_| |_STAY RESIDENT NO_|
> _ |_____ | _____>
  |_ASUTIME_LIMIT_integer_| |_STAY RESIDENT YES_|
  |_PROGRAM TYPE SUB_| |_SECURITY DB2_|
> _ |_____ | _____>
  |_PROGRAM TYPE MAIN_| |_SECURITY_USER_|
  |_____ |_DEFINER_|
  |_STOP AFTER SYSTEM DEFAULT FAILURES_|
> _ |_____ | _____>
  |_STOP AFTER integer FAILURES_|
  |_CONTINUE AFTER FAILURE_|
> _ |_____ | _____>
  |_RUN OPTIONS_run-time-options_|
  |_INHERIT SPECIAL REGISTERS_| |_STATIC DISPATCH_|
> _ |_____ | _____><
  |_DEFAULT SPECIAL REGISTERS_|
external-java-routine-name
|_ method-name_| _____ |
|_jar-name:_| |_method-signature_|
jar-name
|_ jar-id_| _____ |
|_schema-name._| _____ |
method-name
< _____ |
|_ package-id_ _ . _ _ |_ class-id_ _ . _ _ method-id_|
|_/__| |_!_|
method-signature
|_ ( _ ( _ ) _ ) _ |
  |_ java-datatype_|

```

CREATE FUNCTION(external table)

```

>> _CREATE FUNCTION_function-name_____>
> _ ( _ ( _ ) _ ) _____>
  |_<_, ______|
  |_parameter-declaration_|
  |_<_, ______|
> _ RETURNS_TABLE_( _column-name data-type_____ |_) _option-list_><
  |_AS LOCATOR_|
parameter-declaration:
>> _ _parameter-name_ _parameter-type_____><
  |_parameter-name_|
parameter-type:
>> _ data-type_____><
  |_AS LOCATOR_|
  |_TABLE LIKE_ _table-name_ _AS LOCATOR_|
  |_view-name_|
data-type:
>> _built-in-data-type_____><

```

|_distinct-type-name_|

built-in-data-type:

```
> SMALLINT ><
|_INTEGER_|
|_INT_|
|_BIGINT_|

|_DECIMAL_| (5,0)
|_DEC_| (integer)
|_NUMERIC_| (integer)

|_DECFLOAT_| (34)
|_FLOAT_| (16)
|_REAL_| (53)
|_DOUBLE_| (integer)
|_PRECISION_|
|_DOUBLE_| (1)

|_CHARACTER_|
|_CHAR_| (integer) | _CCSID_ ASCII | _FOR_ SBCS DATA |
|_CHARACTER_VARYING_| (integer) | _EBCDIC_| _MIXED_|
|_CHAR_| _UNICODE_| _BIT_|
|_VARCHAR_|

|_CHARACTER_LARGE_OBJECT_| (1M)
|_CHAR_| (integer) | _CCSID_ ASCII | _FOR_ SBCS DATA |
|_CLOB_| _EBCDIC_| _MIXED_|
|_CLOB_| _UNICODE_|

|_GRAPHIC_| (1)
|_VARGRAPHIC_| (integer) | _CCSID_ ASCII |
|_DBCLOB_| (1M) | _EBCDIC_|
|_DBCLOB_| (integer) | _UNICODE_|
|_K_|
|_M_|
|_G_|

|_BINARY_| (1)
|_BINARY_VARYING_| (integer)
|_VARBINARY_|

|_BINARY_LARGE_OBJECT_| (1M)
|_BLOB_| (integer) | _K_|
|_BLOB_| _M_|
|_BLOB_| _G_|

|_DATE_|
|_TIME_|
|_TIMESTAMP_|
|_ROWID_|
```

option-list:

```
>> >
|_SPECIFIC_specific-name_| |_PARAMETER_ < CCSID_ ASCII |
|_PARAMETER_ | _EBCDIC_|
|_PARAMETER_ | _UNICODE_|
|_PARAMETER_ | _VARCHAR_ NULTERM |
|_PARAMETER_ | _STRUCTURE_|
|_EXTERNAL_ LANGUAGE ASSEMBLE >
|_NAME_ 'string' |
|_identifier_| |_C_|
|_identifier_| |_COBOL_|
|_identifier_| |_JAVA_|
```

CREATE FUNCTION (sourced)

DB2® 9 for z/OS 67

```

        |_SPECIFIC_ specific-name |
        |_function-name_( |
                        |<_, |
                        |_parameter-type_| |
parameter-declaration:
>> |_parameter-name_|_parameter-type_|><
parameter-type:
>> |_data-type_|><
        |_AS LOCATOR_|
        |_TABLE LIKE_ |_table-name_|_AS LOCATOR_|
        |_view-name_|
data-type:
>> |_built-in-data-type_|><
        |_distinct-type-name_|
built-in-data-type:
> SMALLINT |><
|_INTEGER_|
|_INT_|
|_BIGINT_|
        |_(5,0)|
        |_DECIMAL_|
        |_DEC_| |_(integer)|
        |_NUMERIC_| |_, integer_|
        |_(34)|
        |_DECFLOAT_|
        |_(16)|
        |_(53)|
        |_FLOAT_|
        |_(integer)|
        |_REAL_|
        |_PRECISION_|
        |_DOUBLE_|
        |_(1)|
        |_CHARACTER_|
        |_CHAR_| |_(integer)| |_CCSID_ ASCII_| |_FOR_ SBCS DATA_|
        |_CHARACTER VARYING_(integer)_| |_EBCDIC_| |_MIXED_|
        |_CHAR_| |_UNICODE_| |_BIT_|
        |_VARCHAR_|
        |_(1M)|
        |_CHARACTER LARGE OBJECT_|
        |_CHAR_| |_(integer)| |_CCSID_ ASCII_| |_FOR_ SBCS DATA_|
        |_CLOB_| |_EBCDIC_| |_MIXED_|
        |_UNICODE_|
        |_(1)|
        |_GRAPHIC_|
        |_(integer)| |_CCSID_ ASCII_|
        |_VARGRAPHIC_(integer)_| |_EBCDIC_|
        |_(1M)| |_UNICODE_|
        |_DBCLOB_| |integer_|
        |_K_|
        |_M_|
        |_G_|
        |_(1)|
        |_BINARY_|
        |_(integer)|
        |_BINARY VARYING_(integer)_|
        |_VARBINARY_|
        |_(1M)|
        |_BINARY LARGE OBJECT_|
        |_BLOB_| |_(integer)|
        |_K_|
        |_M_|
        |_G_|
        |_DATE_|
        |_TIME_|

```

	TIMESTAMP	
	ROWID	

CREATE FUNCTION (SQL Scalar)

```

>>_CREATE FUNCTION_function-name_( _ )_>
|<_|_parameter-declaration_|>
>_ RETURNS_data-type2_><
|_option-list_|
|_LANGUAGE SQL_|
>_|_option-list RETURN-statement_|><

```

parameter-declaration:

```
>>_ parameter-name _data-type1_><
```

data-type:

```
>>_built-in-data-type_><
```

```
|_distinct-type-name_|
```

built-in-data-type:

```

>_SMALLINT_><
|_INTEGER_|
|_INT_|
|_BIGINT_|
|_DECIMAL_|_(5,0)| |
|_DEC_|_|_(integer)|
|_NUMERIC_|_|_(integer)|
|_DECFLOAT_|_(34)|
|_|_(16)|
|_|_(53)|
|_FLOAT_|_|_(integer)|
|_REAL_|
|_PRECISION_|
|_DOUBLE_|_|_(1)| | | | | | | | |
|_CHARACTER_|_|_(integer)|
|_|_CHAR_|_|_(integer)|_|_CCSID_|_ASCII_|_|_FOR_|_SBCS_|_DATA_|
|_|_CHARACTER VARYING_|_(integer)|_|_EBCDIC_|_|_MIXED_|
|_|_CHAR_|_|_UNICODE_|_|_BIT_|
|_|_VARCHAR_|
|_|_CHARACTER LARGE OBJECT_|_|_(1M)|
|_|_CHAR_|_|_(integer)|_|_CCSID_|_ASCII_|_|_FOR_|_SBCS_|_DATA_|
|_|_CLOB_|_|_EBCDIC_|_|_MIXED_|
|_|_UNICODE_|
|_GRAPHIC_|_|_(1)|
|_|_(integer)|_|_CCSID_|_ASCII_|
|_|_VARGRAPHIC_|_|_(integer)|_|_EBCDIC_|
|_|_(1M)|_|_UNICODE_|
|_DBCLOB_|_|_(integer)|
|_|_K_|
|_|_M_|
|_|_G_|
|_BINARY_|_|_(1)|
|_|_(integer)|
|_|_BINARY VARYING_|_(integer)|
|_|_VARBINARY_|
|_|_BINARY LARGE OBJECT_|_|_(1M)|
|_|_BLOB_|_|_(integer)|
|_|_K_|

```

```
option-list:
```

```

>> _____>
|_SPECIFIC_____specific-name_|_|_PARAMETER CCSID_ ASCII____| |
|_|_EBCDIC_____|
|_|_UNICODE_____|
|_|_NOT DETERMINISTIC_____|_|_EXTERNAL ACTION_____|
> _____>
|_|_DETERMINISTIC_____|_|_|_NO_EXTERNAL ACTION_____|
|_|_READS_SQL_DATA_____|_|_STATIC DISPATCH_____|
> _____>
|_|_CONTAINS_SQL_____|_|_|_|
|_|_CALLED ON NULL INPUT_____|_|_|_|
> _____>

```

CREATE GLOBAL TEMPORARY TABLE

```

>>__CREATE GLOBAL TEMPORARY TABLE_table-name_(__column-spec_|_)____>
|_LIKE__table-name_|
|_view-name_|
>_____>
|_CCSID_____ASCII_|
|_|_EBCDIC_|
|_|_UNICODE_|

```

column-spec:

```
>>__column-name_data-type_____>
      |__NOT NULL_|
```

data-type:

```
>>_built-in-data-type_>
|_distinct-type_name_|
```

```
built-in-data-type:
```

SMALLINT					
INTEGER					
INT					
BIGINT					
				(5,0)	
DECIMAL					
DEC				(_integer_)	
NUMERIC				_, integer_	
DECFLOAT				_(34)_	
				(16)	
				(53)	
FLOAT				_(integer_)_	
REAL					
				PRECISION	
DOUBLE				_	
				(1)	
CHARACTER					
CHAR				_(integer_)_	
CHARACTER VARYING				_(integer_)_	
CHAR				_FOR_SBCS_DATA_	
				MIXED_	
				BIT	

```

>>_CREATE_____INDEX_index-name_ON_____>
|_UNIQUE_____|
|_WHERE NOT NULL_|
|_ASC_|_DESC_|_RANDOM_|
|_aux-table-name_|
|_XML index-specification_|
|_NOT CLUSTER_|
|_CLUSTER_|_PARTITIONED_| | | | | | | | |
|_NOT PADDED_|_PADDED_|
|_free-block_|_using-block_|
|_gbpcache-block_|_YES_|_NO_|
|_DEFINE_|_YES_|_COMPRESS_|_NO_|
|_PARTITION BY_|_RANGE_|_partition-element_|_using-block_|
|_free-block_|_gbpcache-block_|
|_BUFFERPOOL_bpname_|_YES_|_CLOSE_|_NO_|_DEFER_|_YES_|_NO_|_COPY_|_YES_|_PIECESIZE_integer_K_|

```

M
G

XML-index-specification:

```
>>_GENERATE KEY USING_____XMLPATTERN_xml-pattern-clause_AS_sql-data-type_><
|_GENERATE KEYS USING_|
```

XML-pattern-clause:

```
>>_____ pattern-expression_____><
|_ proglog _|
```

prolog:

```
<_____
>>__declare names NOName = StringLiteral ;_____|_____><
|_declare default element namespace Stringliteral ;_|
```

pattern-expression:

```
>>_____>
|<_____|
|____/____forward-axis_element-name_____|| | |
|_//_|_|_*_____||
|_|_nsprefix:*_____||
|_|_*:NOName_____||
|_*_____||
>>_____>
|____/____@attribute-name_____|| | |
|_//_|_|_attribute::attribute-name_____||
|_|_*_____||
|_|_attribute::*_____||
|_forward axis_text()_____||
```

Forward-axis:

```
_child::_____
>>_____>
|_descendant::_____||
|_self::_____||
|_descendant or self::_____||
```

SQL-data-type:

```
>>_SQL_VARCHAR_( integer
)_____><
|_DECFLOAT_|_(34)_|_____||
```

using-block:

```
>>_USING_____>
>_VCAT_catalog-name_____><
|_STOGROUP_stogroup-name_____||_____|| |
|_|_12_____||
|_|_PRIQTY_|_integer_|_|
|_|_SECQTY_|_integer_|_|
|_|_NO_____||
|_|_ERASE_|_YES_|_____||
```

free-block:

```
<_____
|_0_____||
```



```

>> _____ FREEPAGE _____ | _____ integer _____ | _____ | _____ ><
| _____ 10 _____ |
| _____ PCTFREE _____ | _____ integer _____ | _____ |
gbpcache-block:
| _____ CHANGED _____ |
>> _____ GBPCACHE _____ | _____ ALL _____ | _____ | _____ ><
| _____ NONE _____ | _____ |
partition-element:
>> _____ PARTITION _____ integer _____ ENDING _____ | _____ | _____ AT _____ | _____ | _____ < _____ | _____ | _____ INCLUSIVE _____ | _____ | _____ ><
| _____ MAXVALUE _____ |
| _____ MINVALUE _____ |

```

CREATE PROCEDURE (external)

```

>> _____ CREATE PROCEDURE _____ procedure-name _____ >
| _____ < _____ | _____ |
| _____ > _____ ( _____ | _____ ) _____ option-list _____ ><
| _____ parameter-declaration _____ |
parameter-declaration:
| _____ IN _____ |
> _____ | _____ OUT _____ | _____ parameter-type _____ >
| _____ | _____ | _____ parameter-name _____ |
| _____ INOUT _____ |
parameter-type:
>> _____ data-type _____ ><
| _____ | _____ AS LOCATOR _____ | _____ |
| _____ TABLE LIKE _____ table-name _____ AS LOCATOR _____ |
| _____ | _____ view-name _____ |
data-type:
>> _____ built-in-data-type _____ ><
| _____ distinct-type-name _____ |
built-in-data-type:
> _____ SMALLINT _____ ><
| _____ | _____ INTEGER _____ | |
| _____ | _____ INT _____ |
| _____ | _____ BIGINT _____ |
| _____ | _____ (5,0) _____ |
| _____ DECIMAL _____ | _____ |
| _____ DEC _____ | _____ (integer) _____ | _____ |
| _____ NUMERIC _____ | _____ | _____ integer _____ |
| _____ | _____ (34) _____ |
| _____ DECFLOAT _____ | _____ |
| _____ | _____ (16) _____ |
| _____ | _____ (53) _____ |
| _____ FLOAT _____ | _____ |
| _____ | _____ (integer) _____ |
| _____ REAL _____ |
| _____ PRECISION _____ |
| _____ DOUBLE _____ | _____ | | | | |
| _____ | _____ (1) _____ |
| _____ CHARACTER _____ | _____ |
| _____ | _____ CHAR _____ | _____ (integer) _____ | _____ | _____ CCSID _____ ASCII _____ | _____ FOR _____ SBCS _____ DATA _____ |
| _____ | _____ CHARACTER VARYING _____ (integer) _____ | _____ | _____ EBCDIC _____ | _____ MIXED _____ |
| _____ | _____ CHAR _____ | _____ | _____ UNICODE _____ | _____ BIT _____ |
| _____ | _____ VARCHAR _____ | _____ |
| _____ | _____ (1M) _____ |
| _____ CHARACTER LARGE OBJECT _____ | _____ |
| _____ | _____ CHAR _____ | _____ (integer) _____ | _____ | _____ CCSID _____ ASCII _____ | _____ FOR _____ SBCS _____ DATA _____ |
| _____ | _____ CLOB _____ | _____ | _____ EBCDIC _____ | _____ MIXED _____ |
| _____ | _____ UNICODE _____ | _____ |
| _____ | _____ (1) _____ |
| _____ GRAPHIC _____ | _____ |
| _____ | _____ (integer) _____ | _____ | _____ CCSID _____ ASCII _____ |

```

VARGRAPHIC(_ integer_)_____		_EBCDIC_
_____(1M)_____		_UNICODE_
DBCLOB _____		
_____(integer)_____		
_____		_K_
_____		_M_
_____		_G_
_____(1)_____		
BINARY _____		
_____(integer)_____		
BINARY VARYING (integer)_____		
VARBINARY _____		
_____(1M)_____		
BINARY LARGE OBJECT _____		
BLOB _____		_K_
_____(integer)_____		_M_
_____		_G_
DATE _____		
TIME _____		
TIMESTAMP _____		
ROWID _____		

option-list:

```

_DYNAMIC RESULT SET 0_____
>>|_____|_____>
|_DYNAMIC_RESULT__SET__integer_|_____>
>_____>
|_PARAMETER_____CCSID_____ASCII_____|
|_____|_____|
|_____|_____|
|_____VARCHARNULTERM_____|
|_____STRUCTURE_____|
>_EXTERNAL_____LANGUAGE_____ASSEMBLE_____>
|_NAME_____ 'string' _____|
|_____identifier_____|
|_____C_____|
|_____COBOL_____|
|_____JAVA_____|
|_____PLI_____|
|_____REXX_____|
|_PARAMETER STYLE SQL_____|
>|_____|_____>
|_PARAMETER STYLE_____|
|_____|_____|
|_____GENERAL_____|
|_____GENERAL WITH NULLS_____|
|_____JAVA_____|
|_NOT DETERMINISTIC_____|_FENCED_____|
>|_____|_____|_____>
|_DETERMINISTIC_____|
|_CALLED ON NULL INPUT_____|_MODIFIES SQL DATA_____|
>|_____|_____|_____>
|_____NO SQL_____|
|_____CONTAINS SQL_____|
|_____READS SQL DATA_____|
|_NO PACAKGE PATH_____|
>|_____|_____>
|_PACKAGE PATH package-path_____|
|_NO DBINFO_____|_NO COLLID_____|
>|_____|_____|_____>
|_DBINFO_____|_COLLID_____collection-id_____|

```

```

> _____>
|_WLM ENVIRONMENT____name_____|
|_____|_(_name_,*_)_|
|_ASUTIME NO LIMIT_____|_STAY RESIDENT NO_|
>|_____|_STAY RESIDENT YES_|_____|>
|_ASUTIME__LIMIT__integer_|_PROGRAM TYPE MAIN_|_SECURITY DB2_|
>|_____|_SECURITY USER_|_____|>
|_PROGRAM TYPE SUB_|_SECURITY DEFINER_|
|_STOP AFTER SYSTEM DEFAULT FAILURES_|
>|_____|_____|>
|_STOP AFTER integer FAILURES_|
|_CONTINUE AFTER FAILURE_|
|_____|_COMMIT ON RETURN NO_|_____|><
>|_RUN OPTIONS__run-time-options_|_COMMIT ON RETURN YES_|><
|_INHERIT SPECIAL REGISTERS_|_CALLED ON NULL INPUT_|
>|_____|_____|>
|_DEFAULT SPECIAL REGISTERS_|
>|_____|_____|><
|_DISALLOW DEBUG MODE_|
|_ALLOW DEBUG MODE_|
|_DISABLE DEBUG MODE_|

external-java-routine-name
|______|_method-name_|_____|
|_jar-name:_|_method-signature_|
jar-name
|______|_jar-id_|_____|
|_schema-name._____|
method-name
<_____|
|_____|_class-id_|_method-id_|
|_package-id_|_!_|
|_/__|
method-signature
|_____|
|_(______)_|
|_____|_java-datatype_|

```

CREATE PROCEDURE (SQL - external)

```

>>_CREATE PROCEDURE__procedure-name_____|>
|_____|>
>|_____|_option-list_____|><
|_parameter-declaration_|
parameter-declaration:
|_IN_|
>|_OUT_|_____|parameter-type_____|>
|_____|_parameter-name_|
|_INOUT_|
parameter-type:
>>__built-in data-type_____|><

```

```

      | _AS LOCATOR_ |
      | _TABLE LIKE_ table-name _AS LOCATOR_ |
      | _view-name_ |
built-in-data-type:
> _SMALLINT_ ><
| _INTEGER_ |
| _INT_ |
| _DECIMAL_ | _ (5,0) _
| _DEC_ | _ (integer) _
| _NUMERIC_ | _ (integer) _
| _FLOAT_ |
| _REAL_ |
| _PRECISION_ |
| _DOUBLE_ |
| _CHARACTER_ | _ (1) _
| | _CHAR_ | _ (integer) _ | _CCSID_ _ASCII_ | _FOR_ _SBCS_ _DATA_ |
| | _CHARACTER VARYING_ (integer) _ | _EBCDIC_ | _MIXED_ |
| | _CHAR_ | _UNICODE_ | _BIT_ |
| | _VARCHAR_ |
| _CHARACTER LARGE OBJECT_ | _ (1M) _
| | _CHAR_ | _ (integer) _ | _CCSID_ _ASCII_ | _FOR_ _SBCS_ _DATA_ |
| | _CLOB_ | _EBCDIC_ | _MIXED_ |
| | | _UNICODE_ |
| _GRAPHIC_ | _ (1) _
| | _ (integer) _ | _CCSID_ _ASCII_ | |
| | _VARGRAPHIC_ (integer) _ | _EBCDIC_ |
| | _DBCLOB_ | _ (1M) _ | _UNICODE_ |
| | | _ (integer) _ |
| | | _K_ |
| | | _M_ |
| | | _G_ |
| _BINARY LARGE OBJECT_ | _ (1M) _
| | _BLOB_ | _ (integer) _ |
| | | _K_ |
| | | _M_ |
| | | _G_ |
| _DATE_ |
| _TIME_ |
| _TIMESTAMP_ |

```

option-list:

```

>> _LANGUAGE SQL_ | _FENCED_ |
| _EXTERNAL NAME_ 'string' _
| _identifier_ |
| _DYNAMIC RESULT SET 0_ |
> | _DYNAMIC_RESULT_SET_ integer _ |
> |
| _PARAMETER_ _CCSID_ _ASCII_ |
| _EBCDIC_ |
| _UNICODE_ |
| _NOT DETERMINISTIC_ |
> | _DETERMINISTIC_ |
| _CALLED ON NULL INPUT_ | _MODIFIES SQL DATA_ |
> | _ | _ | _ |

```

```

                                |_NO SQL_____|
                                |_CONTAINS SQL____|
                                |_READS SQL DATA____|
> |_NO DBINFO_| |_NO COLLID_____| _____>
                                |_COLLID_collection-id_|
> _____>
    |_WLM ENVIRONMENT_name_____|
                                |_(_name_,*)__|
    |_ASUTIME NO LIMIT_____| |_STAY RESIDENT NO____|
> |_ASUTIME_LIMIT_integer_| |_STAY RESIDENT YES____|
    |_PROGRAM TYPE MAIN_____| |_SECURITY DB2_____|
> |_PROGRAM TYPE SUB_____| |_SECURITY USER_____|
                                |_SECURITY DEFINER_____|
    |_STOP AFTER SYSTEM DEFAULT FAILURES_____|
> |_STOP AFTER integer FAILURES_____|
    |_CONTINUE AFTER FAILURE_____|
> _____|_COMMIT ON RETURN NO_____|_____>
    |_RUN OPTIONS_run-time-options_| |_COMMIT ON RETURN YES____|
    |_INHERIT SPECIAL REGISTERS_____| |_CALLED ON NULL INPUT____|
> |_DEFAULT SPECIAL REGISTERS_| _____><

```

CREATE PROCEDURE (SQL-native)

```

>> |_CREATE PROCEDURE_procedure-name_____|
                                |_(______)_|
                                |_<_,_____||
                                |_parameter declaration_|
    |_VERSION V1_____| |_LANGUAGE SQL_____|
> |_VERSION routine ver-id_| _____|_SQL-routine-body_|
    |_parameter-declaration:_____|
    |_IN_____|
> |_parameter-name_parameter-type_____|
    |_OUT_____|
    |_INOUT_____|
parameter-type:
>> |_built-in-data-type_____|_____><
    |_TABLE LIKE_table-name_AS LOCATOR_|
built-in-data-type:
> |_SMALLINT_____|_____><
    |_INTEGER_____|
    |_INT_____|
    |_BIGINT_____|
    |_DECIMAL_____| |_(5,0)_____|
    |_DEC_____| |_(_integer_____)_____|
    |_NUMERIC_____| |_, integer_|
    |_DECFLOAT_____| |_(34)_____|
    |_DECFLOAT_____| |_(16)_____|
    |_DECFLOAT_____| |_(53)_____|

```

__FLOAT__	__(_integer_)__	
__REAL__		
__DOUBLE__	__PRECISION__	
	__(1)__	
__CHARACTER__		
__CHAR__	__(_integer_)__	__CCSID__ASCII__
__CHARACTER VARYING__	__(_integer_)__	__EBCDIC__
__CHAR__		__MIXED__
__VARCHAR__		__UNICODE__
		__BIT__
__CHARACTER LARGE OBJECT__	__(1M)__	
__CHAR__	__(_integer_)__	__CCSID__ASCII__
__CLOB__		__EBCDIC__
		__MIXED__
		__UNICODE__
__GRAPHIC__	__(1)__	
__VARGRAPHIC__	__(_integer_)__	__CCSID__ASCII__
	__(1M)__	__EBCDIC__
__DBCLOB__		__UNICODE__
	__(_integer_)__	
	__K__	
	__M__	
	__G__	
__BINARY__	__(1)__	
__BINARY VARYING__	__(_integer_)__	
__VARBINARY__		
__BINARY LARGE OBJECT__	__(1M)__	
__BLOB__	__(_integer_)__	
		__K__
		__M__
		__G__
__DATE__		
__TIME__		
__TIMESTAMP__		

option-list:

```

__NOT DETERMINISTIC__    __MODIFIES SQL DATA__
>> __DETERMINISTIC__    __READS SQL DATA__
    __CONTAINS SQL__
    __CALLED ON NULL INPUT__    __DYNAMIC RESULT SETS 0__
> __DYNAMIC RESULT SETS __integer__
>
    __DISALLOW DEBUG MODE__    __PARAMETER CCSID ASCII__
    __ALLOW DEBUG MODE__    __PARAMETER CCSID EBCDIC__
    __DISABLE DEBUG MODE__    __PARAMETER CCSID UNICODE__
>
    __QUALIFIER__schema_name__
>
    __PACKAGE OWNER__authorization_name__
    __ASUTIME NO LIMIT__    __COMMIT ON RETURN NO__
> __ASUTIME LIMIT __integer__    __COMMIT ON RETURN YES__
    __INHERIT SPECIAL REGISTERS__
> __DEFAULT SPECIAL REGISTERS__
    __STOP AFTER SYSTEM DEFAULT FAILURES__
>

```

```

|_STOP AFTER__integer__FAILURES_____|
|_CONTINUE AFTER FAILURE_____|
>
|_WLM ENVIRONMENT FOR DEBUG MODE_name_|
|_CURRENT DATA NO_____|_DEGREE 1_____|
>
|_DEFER PREPARE_____|_CURRENT DATA YES_____|_DEGREE ANY_____|
|_NODEFER PREPARE_____|
|_DYNAMICRULES RUN_____|
>
|_DYNAMICRULES BIND_____|
|_DYNAMICRULES DEFINEBIND_____|
|_DYNAMICRULES DEFINERUN_____|
|_DYNAMICRULES INVOKEBIND_____|
|_DYNAMICRULES INVOKERUN_____|
>
|_APPLICATION ENCODING SCHEME ASCII_____|
|_APPLICATION ENCODING SCHEME EBCDIC_____|
|_APPLICATION ENCODING SCHEME UNICODE_____|
>
|_WITHOUT EXPLAIN_____|_WITHOUT IMMEDIATE WRITE_____|
>
|_WITH EXPLAIN_____|_WITH IMMEDIATE WRITE_____|
>
|_ISOLATION LEVEL CS_____|_WITHOUT KEEP DYNAMIC_____|
>
|_ISOLATION LEVEL RS_____|_WITH KEEP DYNAMIC_____|
|_ISOLATION LEVEL RR_____|
|_ISOLATION LEVEL UR_____|
|_OPTHINT_____|
>
|_OPTHINT_string_constant_____|
>
|_SQL PATH_schema_name_____|
|_SQL PATH_schema_name_list_____|
|_SQL PATH_SESSION_USER or USER_____|
|_SQL PATH_DEFAULT_____|
>
|_RELEASE AT COMMIT_____|_REOPT NONE_____|
>
|_RELEASE AT DEALLOCATE_____|_REOPT ALWAYS_____|
|_REOPT ONCE_____|
>
|_VALIDATE RUN_____|
>
|_VALIDATE BIND_____|_ROUNDING DEC_ROUND_CEILING_____|
|_ROUNDING DEC_ROUND_DOWN_____|
|_ROUNDING DEC_ROUND_FLOOR_____|
|_ROUNDING DEC_ROUND_HALF_DOWN_____|
|_ROUNDING DEC_ROUND_HALF_EVEN_____|
|_ROUNDING DEC_ROUND_HALF_UP_____|
|_ROUNDING DEC_ROUND_UP_____|
>
|_DATE FORMAT ISO_____|_DECIMAL(15)_____|
|_DATE FORMAT EUR_____|_DECIMAL(31)_____|
|_DATE FORMAT USA_____|_DECIMAL(15,s)_____|

```

```
>>__CREATE ROLE__role-name_____>
```

```

>>_CREATE SEQUENCE_sequence-name
|
|_INTEGER_
|_AS_|_data-type_|
|_START WITH_ numeric-constant
|_INCREMENT BY 1
|
|_INCREMENT BY_ numeric-constant
|_NO MINVALUE
|
|_MINVALUE_ numeric-constant
|_NO MAXVALUE
|
|_MAXVALUE_ numeric-constant
|_NO CYCLE
|
|_CYCLE
|_CACHE 20
|
|_NO CACHE
|_CACHE_ integer-constant
|_NO ORDER
|
|_ORDER
|
|_>>

```

```
>>__built-in-type_____>
|_distinct-type-name_|
```

```

> SMALLINT _____><
| _INTEGER_ |
| _INT_ |
| _BIGINT_ |
| _____(5,0)_____ |
| DECIMAL | _____ | |
| _DEC_ | |_( _integer_ )_|
| _numeric_ | |_,integer_|

```


CREATE SYNONYM

CREATE TABLE

```
column-definition:
```

DB2[®] 9 for z/OS

```

> _____ >>
|_NOT NULL_____
|_____PRIMARY KEY_____
|_CONSTRAINT_constraint-name_|_|_UNIQUE_____|
|_____references-clause_____|
|_____CHECK(check-condition)_____|
|_WITH_____
|_____DEFAULT_____
|_____constant_____
|_____SESSION_USER_____
|_____USER_____
|_____CURRENT SQLID_____
|_____NULL_____
|_____cast-function-name_(constant)_____
|_____SESSION_USER_____
|_____USER_____
|_____CURRENT SQLID_____
|_____NULL_____
|_GENERATED_____ALWAYS_____
|_____BY DEFAULT_____|_____as-identity-clause_____
|_____as-row-change-timestamp-clause_____
|_references-clause_____
|_column-constraint_____
|_FIELDPROC_program-name_____
|_____<_,_____
|_____constant_|_)_____
|_AS SECURITY LABEL_____
|_IMPLICITY HIDDEN_____

```

data-type:

```

>> _____built-in-data-type_____ ><
|_distinct-type-name_|

```

built-in-data-type:

```

> _____ ><
|_SMALLINT_____
|_INTEGER_____
|_INT_____
|_BIGINT_____
|_____ (5,0) _____
|_DECIMAL_____
|_DEC_____ |_(integer)_____
|_NUMERIC_____ |_, integer_|
|_____ (34) _____
|_DECFLOAT_____
|_____ (16) _____
|_____ (53) _____
|_FLOAT_____
|_____ (integer) _____
|_REAL_____
|_____ PRECISION _____
|_DOUBLE_____
|_____ (1) _____
|_CHARACTER_____ |_(integer)_____ |_FOR SBCS DATA_|
|_CHAR_____ |_(integer)_____ |_MIXED_|
|_CHARACTER_VARYING_(integer)_____ |_BIT_|
|_CHAR_____
|_VARCHAR_____
|_____ (1M) _____
|_CHARACTER_LARGE OBJECT_____
|_CHAR_____ |_(integer)_____ |_FOR SBCS DATA_|
|_CLOB_____ |_MIXED_|
|_____K_____
|_____M_____
|_____G_____
|_____ (1) _____

```

GRAPHIC	_(integer)_	
VARGRAPHIC	_(integer)_	
DBCLOB	(1M)	
	(integer)	
		K _M_ _G_
	(1)	
BINARY	_(integer)_	
BINARY VARYING	_(integer)_	
_VARBINARY		
	(1M)	
BINARY LARGE OBJECT		
_BLOB	_(integer)_	
		K _M_ _G_
DATE		
_TIME		
_TIMESTAMP		
ROWID		
XML		

as-identity-clause:

```
>> _AS IDENTITY <_, _____><
      |
      |      <_, _____>
      |      |
      |      |      1
      |      |      | | | | |
      |      |      |      START WITH | numeric-constant | _____ | ) |
      |      |      |
      |      |      |      1
      |      |      |      | | | | | | |
      |      |      |      |      INCREMENT BY | numeric-constant | _____ |
      |      |      |      |      |
      |      |      |      |      |      CACHE 20 _____ |
      |      |      |      |      |      |
      |      |      |      |      |      |      NO CACHE _____ |
      |      |      |      |      |      |      |
      |      |      |      |      |      |      |      CACHE integer |
      |      |      |      |      |      |      |
      |      |      |      |      |      |      |      NO CYCLE _____ |
      |      |      |      |      |      |      |
      |      |      |      |      |      |      |      |      CYCLE _____ |
      |      |      |      |      |      |      |
      |      |      |      |      |      |      |      |      NO MAXVALUE _____ |
      |      |      |      |      |      |      |
      |      |      |      |      |      |      |      |      MAXVALUE numeric-constant | _____ |
      |      |      |      |      |      |      |
      |      |      |      |      |      |      |      |      NO MINVALUE _____ |
      |      |      |      |      |      |      |
      |      |      |      |      |      |      |      |      MINVALUE numeric-constant | _____ |
      |      |      |      |      |      |      |
      |      |      |      |      |      |      |      |      NO ORDER _____ |
      |      |      |      |      |      |      |
      |      |      |      |      |      |      |      |      ORDER _____ |
      |      |      |      |      |      |      |
```

as-row-change-timestamp-clause:

```
>> _FOR EACH ROW _ON UPDATE _AS ROW CHANGE _TIMESTAMP _____><
```

column-constraint:

```
>> _____ PRIMARY KEY _____><
      |_____constraint-name_| |_____UNIQUE_____|
      |_____references clause_____|
      |_____CHECK(_____check-condition_____)|
```

unique-constraint:

```
>> _____ PRIMARY KEY _____<_, _____><
      |_____constraint-name| |_____UNIQUE_____|
```

referential-constraint:

```
>> _____ FOREIGN KEY _____<_, _____><
      |_____column-name_| |_____>
```

```

|_CONSTRAINT_constraint-name_|
>_references-clause_____><

references-clause:
>>_REFERENCES_table-name_____>
|_<_,_____|
|_(_column-name_|_)_|
>_____><
|_ON DELETE_____RESTRICT_____|
|_NO ACTION_|
|_CASCADE_|
|_SET NULL_|
|_ENFORCED_____|_ENABLE QUERY OPTIMIZATION_|
>_____><
|_NOT ENFORCED_|
check-constraint:
>>_____CHECK_(check-condition)_____><
|_CONSTRAINT_constraint-name_|
as-result_table:
>>_____AS_(fullselect)_WITH NO DATA_____><
|_<_,_____|
|_(_column-name_|_)_|

copy-options:
|_COLUMN ATTRIBUTES_|
|_EXCLUDING IDENTITY_|_____>
>>_v_|_____>
|_COLUMN ATTRIBUTES_|
|_INCLUDING IDENTITY_|_____|
|_COLUMN ATTRIBUTES_|
|_EXCLUDING ROW CHANGE TIMESTAMP_|_____|
|_COLUMN ATTRIBUTES_|
|_INCLUDING ROW CHANGE TIMESTAMP_|_____|
|_COLUMN_|
|_EXCLUDING_|_____|_DEFAULTS_|
|_COLUMN_|
|_INCLUDING_|_____|_DEFAULTS_|
|_USING TYPE DEFAULTS_|

partitioning-clause:
|_RANGE_|_<_,_____|
>>_PARTITION BY_|_____|_(_partition-expression_|_)_____>
|_SIZE_|_____|
|_EVERY_ integer-constant_G_|
|_<_,_____|
>_(_partition-element_|_)_____><

partition-expression:
|_NULLS LAST_|_ASC_|
>>_column-name_|_____><
|_DESC_|

partition-element:

```

```

>> _PARTITION_ integer _ENDING_ | _AT_ | < _ , _ | _ ) _ >
| _MAXVALUE_ |
| _MINVALUE_ |

_ INCLUSIVE _
> | _ | ><
materialized-query-definition:
>> _ AS _ (fullselect) _ >
| < _ , _ |
| _ ( _ column-name _ | _ ) _ |
> _ ><
| _ refreshable-table-options _ |

refreshable-table-options:
>> _ DATA INITIALLY DEFERRED _ REFRESH DEFERRED _ >
| < _ |
> _ | ><
| _ MAINTAINED BY SYSTEM _ |
| _ MAINTAINED BY USER _ |
| _ ENABLE QUERY OPTIMIZATION _ |
| _ DISABLE QUERY OPTIMIZATION _ |

CREATE TABLESPACE
>> _ CREATE _ TABLESPACE _ table-space-name _ >
| _ LARGE _ | | _ DSNDB04 _ |
| _ LOB _ | | _ IN _ | _ database-name _ | _ |
| < _ |
> _ | >
| _ using-block _ | | _ DSSIZE _ integer _ G _ |
| _ free-block _ |
| _ gbpcache-block _ |
| _ trackmod-block _ |
| _ YES _ |
| _ DEFINE _ | _ NO _ | _ |
| _ LOGGED _ |
| _ NOT LOGGED _ |
> _ >
| _ MAXPARTITIONS _ integer _ |
| _ MEMBER CLUSTER _ |
| _ NUMPARTS _ integer _ |
| < _ , _ | | _ MEMBER CLUSTER _ | | |
| | < _ |
| | ( _ PARTITION _ integer _ using-block _ | _ ) _ |
| | | _ free-block _ |
| | | _ gbpcache-block _ |
| | | _ trackmod-block _ |
| | | _ NO _ |
| | | _ COMPRESS _ | _ YES _ | _ |
| _ SEGSIZE _ integer _ |
| < _ |
> _ | ><
| _ BUFFERPOOL _ bpname _ |

```

```

      _LOCKSIZE_  _ANY_
      _LOCKSIZE_  _TABLESPACE_
      _LOCKSIZE_  _TABLE_
      _LOCKSIZE_  _PAGE_
      _LOCKSIZE_  _ROW_
      _LOCKSIZE_  _LOB_
      _LOCKMAX_   _SYSTEM_
      _integer_
      _YES_
      _CLOSE_    _NO_
      _CLOSE_    _NO_
      _COMPRESS_ _YES_
      _CCSID_     _ASCII_
      _EBCDIC_
      _UNICODE_
      _MAXROWS_  _integer_

using-block:
>> _USING_
> _VCAT_ catalog-name
|
|_STOGROUP_ stogroup-name
|
|_PRIQTY_ integer
|_SECQTY_ integer
|_NO_
|_ERASE_ _YES_

free-block:
<
>> _FREEPAGE_ _integer_
|_PCTFREE_ _integer_

gbpcache-block:
>> _GBPCACHE_ _CHANGED_
|_ALL_
|_SYSTEM_
|_NONE_

trackmod-block:
>> _TRACKMOD_ _YES_
|_NO_

```

CREATE TRIGGER

```

>> _CREATE TRIGGER_ trigger-name NO CASCADE BEFORE
|_AFTER_
|_INSTEAD OF_
> _INSERT_ ON table-name
|_DELETE_
|_UPDATE_
|_OF_ column-name
>
|_REFERENCING_ OLD _AS_ correlation-name
|_AS_

```


DEC		_ (integer) _		
NUMERIC		_ , integer _		
DECFLOAT		_ (34) _		
		_ (16) _		
		_ (53) _		
FLOAT		_ (integer) _		
REAL		_PRECISION_		
DOUBLE		_ (1) _		
CHARACTER		_ (integer) _	_CCSID_	_ASCII_
		_ (integer) _	_FOR_	_SBCS_
		_ (integer) _	_DATA_	
		_ (integer) _	_EBCDIC_	_MIXED_
		_ (integer) _	_UNICODE_	_BIT_
		_ (integer) _		
CHARACTER LARGE OBJECT		_ (1M) _		
		_ (integer) _	_CCSID_	_ASCII_
		_ (integer) _	_FOR_	_SBCS_
		_ (integer) _	_DATA_	
		_ (integer) _	_EBCDIC_	_MIXED_
		_ (integer) _	_UNICODE_	
		_ (integer) _		
GRAPHIC		_ (integer) _	_CCSID_	_ASCII_
		_ (integer) _	_EBCDIC_	
		_ (1M) _	_UNICODE_	
DBCLOB		_ (integer) _		
		_ (integer) _		
		K		
		M		
		G		
BINARY		_ (integer) _		
		_ (integer) _		
		_ (integer) _		
		_ (integer) _		
		_ (1M) _		
BINARY LARGE OBJECT		_ (integer) _		
		_ (integer) _		
		K		
		M		
		G		
DATE				
TIME				
TIMESTAMP				
ROWID				

CREATE VIEW

```

>> __CREATE VIEW__ view-name _____
      |<_, _____|
      |_( column-name )_|
> _____ AS fullselect _____
      |<_, _____|
      |_WITH common-table-expression_|
> _____><
      |_CASCADED_|
      |_WITH_| _____ |_CHECK OPTION_|
      |_LOCAL_|

```

DECLARE CURSOR

```

>> __DECLARE__ cursor-name _____ |_NO SCROLL_| _____>
      |_ASENSITIVE_|
      | _____ |_SCROLL_|

```


	INSENSITIVE	
		DYNAMIC
	SENSITIVE	
		STATIC

< _____

> _CURSOR _____>

holdability
returnability
rowset-positioning

> _FOR_ _select-statement_><

holdability:

>> _____><

returnability:

>> _____><

rowset-positioning:

>> _____><

DECLARE GLOBAL TEMPORARY TABLE

>> _DECLARE GLOBAL TEMPORARY TABLE_ _table-name_>

< _'_____

> _ (_____)>

LIKE	table-name	
	view-name	copy-options
	as-result-table	

< _____

> _____><

CCSID	ASCII
	EBCDIC
	UNICODE
	DELETE ROWS
ON COMMIT	PRESERVE ROWS
	DROP TABLE

column spec:

>> _column-name_ _data-type_>

< _____

> _____><

NOT NULL
WITH
DEFAULT
constant
SESSION USER
USER
CURRENT SQLID
NULL

```

|_GENERATED_ _ALWAYS_ |
|_BY DEFAULT_ | |_as-identity-clause_ |
data-type:
>>_built-in type_><
|_distinct_type_name_|

built-in-type:
>_SMALLINT_><
|_INTEGER_|
|_INT_|
|_BIGINT_|
|_(5,0)_|
|_DECIMAL_|
|_DEC_| |_(_integer_)_|
|_NUMERIC_| |_ , integer_|
|_(34)_|
|_DECFLOAT_|
|_(16)_|
|_(53)_|
|_FLOAT_|
|_(integer_)_|
|_REAL_|
|_PRECISION_|
|_DOUBLE_|
|_(1)_|
|_CHARACTER_|
| |_CHAR_| |_(_integer_)_| |_FOR_ _SBCS_ _DATA_|
| |_CHARACTER VARYING_(_integer_)_| |_MIXED_|
| |_CHAR_| |_BIT_|
|_VARCHAR_|
|_(1)_|
|_GRAPHIC_|
|_(integer_)_|
|_VARGRAPHIC_(_integer_)_|
|_(1)_|
|_BINARY_|
|_(integer_)_|
|_BINARY VARYING_(_integer_)_|
|_VARBINARY_|
|_DATE_|
|_TIME_|
|_TIMESTAMP_|

as-result-table:
>>_AS_(fullselect)_ _WITH NO DATA_><

copy-options:
|_COLUMN ATTRIBUTES_|
>>|_EXCLUDING IDENTITY_|_>
|_COLUMN ATTRIBUTES_|
|_INCLUDING IDENTITY_|_>
|_COLUMN_|
|_EXCLUDING_|_DEFAULTS_|
>|_><
|_COLUMN_|
|_INCLUDING_|_DEFAULTS_|
|_USING TYPE DEFAULTS_|

as-identity-clause:
>>_AS IDENTITY_><
|<_ , _1_|
|_(_START WITH_ _numeric-constant_|_ )_|
|_1_|

```

INCREMENT BY	numeric-constant
CACHE	20
NO CACHE	
CACHE	integer
NO CYCLE	
CYCLE	
NO MAXVALUE	
MAXVALUE	numeric-constant
NO MINVALUE	
MINVALUE	numeric-constant
NO ORDER	
ORDER	

DECLARE STATEMENT

```
<_,'_____
>>_DECLARE__statement-name_|__STATEMENT_____><
```

DECLARE TABLE

```
>>_DECLARE__table-name_____>
|_view-name_|
<_,'_____
>_TABLE(column-name__built-in-data-type_____|_)><
|_distinct-type-name_|_NOT NULL_____
|_NOT NULL WITH DEFAULT_|
```

DECLARE VARIABLE

```
<_,'_____ _CCSID EBCDIC__
>>_DECLARE__host-variable|_VARIABLE_|_____><
|_CCSID ASCII_|_FOR SBCS DATA_|
|_CCSID UNICODE_|_FOR MIXED DATA_|
|_CCSID integer_____
|_FOR BIT DATA_|
```

DELETE

searched delete:

```
>>_DELETE FROM__table-name_____>
|_view-name_| |_correlation-name_|
>_____>
|_include-column_| |_SET assignment-clause_|
>_____>
|_WHERE__search-condition_| |_isolation-clause_|
|_SKIP LOCKED DATA_|
>_____><
|_QUERYNO__integer_|
```

positioned delete:

```
>>_DELETE FROM__table-name_____WHERE CURRENT OF__cursor-name_____><
|_view-name_|
>_____><
|_FOR ROW__host-variable_____OF ROWSET_|
|_integer-constant_|
```

include-column:

```
>>__INCLUDE__(__column-name__data-type__)><
```

data-type:

```
>>__built-in type__><
|_distinct_type_name_|
```

built-in-type:

```
>_SMALLINT__><
|_INTEGER_|
|_INT_|
|_BIGINT_|
|_____(5,0)_____|
|_DECIMAL_|
|_DEC_||_(integer)_____|
|_NUMERIC_||_, integer_|
|_____(34)_____|
|_DECFLOAT_|
|_____(16)_____|
|_____(53)_____|
|_FLOAT_|
|_____(integer)_____|
|_REAL_|
|____PRECISION_____|
|_DOUBLE_|
|_____(1)_____|
|_CHARACTER_|
|_|_CHAR_||_(integer)_____|
|_|_CHARACTER_VARYING_|_(integer)_____|
|_|_CHAR_|
|_|_VARCHAR_|
|_____(1)_____|
|_GRAPHIC_|
|_____(integer)_____|
|_VARGRAPHIC_|_(integer)_____|
|_____(1)_____|
|_BINARY_|
|_____(integer)_____|
|_BINARY VARYING_|_(integer)_____|
|_VARBINARY_|
|_DATE_|
|_TIME_|
|_TIMESTAMP_|
```

assignment-clause:

```
>>__<_,_____|
column-name__expression_____|><
|_NULL_|
|<_,_____|<_,_____|
|_(column-name)|_(expression)_____|
|_|_NULL_|
|_row-fullselect_|
```

isolation-clause:

```
>>_WITH__RR____><
|_RS_|
|_CS_|
```

DESCRIBE CURSOR

```
>>__DESCRIBE CURSOR__cursor-name__INTO__descriptor-name____><
|_host-variable_|
```

DESCRIBE INPUT

```
>>__DESCRIBE INPUT__statement-name__INTO__descriptor-name____><
```

DESCRIBE PROCEDURE

DESCRIBE TABLE

DROP

DB2[®] 9 for z/OS

INTEGER					
INT					
BIGINT					
	(5,0)				
DECIMAL					
DEC	(integer)				
NUMERIC					
	(34)				
DECFLOAT					
	(16)				
	(53)				
FLOAT					
	(integer)				
REAL					
	PRECISION				
DOUBLE					
	(1)				
CHARACTER					
CHAR	(integer)	CCSID ASCII	FOR SBCS DATA		
CHARACTER VARYING	(integer)	EBCDIC	MIXED		
CHAR		UNICODE	BIT		
VARCHAR					
	(1M)				
CHARACTER LARGE OBJECT					
CHAR	(integer)	CCSID ASCII	FOR SBCS DATA		
CLOB		EBCDIC	MIXED		
		UNICODE			
	(1)				
GRAPHIC					
	(integer)	CCSID ASCII			
VARGRAPHIC	(integer)	EBCDIC			
	(1M)	UNICODE			
DBCLOB					
	(integer)				
		K			
		M			
		G			
	(1)				
BINARY					
	(integer)				
BINARY VARYING	(integer)				
VARBINARY					
	(1M)				
BINARY LARGE OBJECT					
BLOB	(integer)				
		K			
		M			
		G			
DATE					
TIME					
TIMESTAMP					
ROWID					

END DECLARE SECTION

>>_END DECLARE SECTION_____><

EXCHANGE

>>_EXCHANGE DATA BETWEEN TABLE table-name1_AND_table-name2 _____><

EXECUTE

>>_EXECUTE_statement-name_____>

>_____><

<_,_____	
USING host-variable	
DESCRIPTOR descriptor-name	
multiple-row-insert	

multi-row-insert:

```

      <_ ' _____
>> _ USING_ _host-variable-array_ | _____>
      | _host-variable_ |
      | USING DESCRIPTOR _descriptor-name_ |
> _ _____><
      | _FOR_ _host-variable_ _ROWS_ |
      | _integer-constant_ |

```

EXECUTE IMMEDIATE

```

>> _EXECUTE IMMEDIATE_ _string-expression_><
      | _host-variable_ |

```

EXPLAIN

```

>> _EXPLAIN_>
> _ PLAN_ _FOR_sql-statement_><
  | _ALL_ | _SET QUERYNO=integer_ |
  | STMTCACHE ALL |
  | STMTID_ _id-host-variable_ |
  | _integer-constant_ |
  | STMTTOKEN_ _token-host-variable_ |
  | _string-constant_ |
  | _MONITORED_STMTS_ _scope-specification_ |

```

Scope-specification:

```

>> _SCOPE_ _AUTHID_ _authid-str_ _IPADDR_ _ip-address_><
      | _PLAN_ _plan-name_ |
      | _COLLECTION-colctn-name_ _PACKAGE-pckge-name_ |

```

FETCH

```

>> _FETCH_ _fetch-orientation_ | _FROM_ |>
      | _INSENSITIVE_ |
      | _SENSITIVE_ |
> _cursor-name_><
      | _single-row-fetch_ |
      | _multiple-row-fetch_ |

```

fetch-orientation:

```

> _ BEFORE_>
  | AFTER_ |
  | row-positioned_ |
  | rowset-positioned_ |

```

row-positioned:

```

  NEXT
  | _____>
  | PRIOR_ |
  | FIRST_ |
  | LAST_ |
  | CURRENT_ |
  | ABSOLUTE_ _host-variable_ |
  | _integer-constant_ |
  | RELATIVE_ _host-variable_ |
  | _integer-constant_ |

```

```

rowset-positioned:
  _NEXT ROWSET _____>
  |_PRIOR ROWSET _____|
  |_FIRST ROWSET _____|
  |_LAST ROWSET _____|
  |_CURRENT ROWSET _____|
  |_ROWSET STARTING AT _ABSOLUTE_ _host-variable_ _|
  |_RELATIVE_ | _integer-constant_ |
single-row-fetch:
  <_ , _____>
  |_INTO _host-variable_ | _____|
  |_INTO DESCRIPTOR _descriptor-name_ |
multiple-row-fetch:
  | _____>
  |_FOR_ _host-variable_ _ROWS_ |
  |_integer-constant_ |
  > _____>
  <_ , _____>
  |_INTO _host-variable-array_ | _____|
  |_INTO DESCRIPTOR _descriptor-name_ |

```

FREE LOCATOR

```

>> _FREE LOCATOR _host_variable_ | _____><

```

GET DIAGNOSTICS

```

>> _GET DIAGNOSTICS _statement-information _><
  |_condition-information _|
  |_combined-information _|
statement-information:
  <_ , _____>
  > _ _host-variable1_ = _ | statement-information-item-name | _ _>
  |_host-variable1_ = DB2_GET_DIAGNOSTICS_DIAGNOSTICS _____|
statement-information-item-name:
  <_ , _____>
  > _ DB2_LAST_ROW _____ - | _____>
  |_DB2_NUMBER_PARAMETER_MARKERS _____|
  |_DB2_NUMBER_RESULT_SETS _____|
  |_DB2_RETURN_STATUS _____|
  |_DB2_SQL_ATTR_CURSOR_HOLD _____|
  |_DB2_SQL_ATTR_CURSOR_ROWSET _____|
  |_DB2_SQL_ATTR_CURSOR_SCROLLABLE _____|
  |_DB2_SQL_ATTR_CURSOR_SENSITIVITY _____|
  |_DB2_SQL_ATTR_CURSOR_TYPE _____|
  |_MORE _____|
  |_NUMBER _____|
  |_ROW_COUNT _____|
condition-information:
  > _CONDITION _host-variable2_ _____>
  |_integer _____|
  <_ , _____>
  > _host-variable3_ = _ _condition-information-item-name _ - | _>
  |_connection-information-item-name _|

```


condition-information-item-name:

```

> _CATALOG_NAME_____>
|_CONDITION_NUMBER_____|
|_CURSOR_NAME_____|
|_DB2_ERROR_CODE1_____|
|_DB2_ERROR_CODE2_____|
|_DB2_ERROR_CODE3_____|
|_DB2_ERROR_CODE4_____|
|_DB2_INTERNAL_ERROR_POINTER_____|
|_DB2_LINE_NUMBER_____|
|_DB2_MESSAGE_ID_____|
|_DB2_MODULE_DETECTING_ERROR_____|
|_DB2_ORDINAL_TOKEN_n_____|
|_DB2_REASON_CODE_____|
|_DB2_RETURNED_SQLCODE_____|
|_DB2_ROW_NUMBER_____|
|_DB2_SQLERRD_SET_____|
|_DB2_SQLERRD1_____|
|_DB2_SQLERRD2_____|
|_DB2_SQLERRD3_____|
|_DB2_SQLERRD4_____|
|_DB2_SQLERRD5_____|
|_DB2_SQLERRD6_____|
|_DB2_TOKEN_COUNT_____|
|_MESSAGE_TEXT_____|
|_RETURNED_SQLSTATE_____|
|_SERVER_NAME_____|

```

connection-information-item-name:

```

> _DB2_AUTHENTICATION_TYPE_____>
|_DB2_AUTHORIZATION_ID_____|
|_DB2_CONNECTION_STATE_____|
|_DB2_CONNECTION_STATUS_____|
|_DB2_ENCRYPTION_TYPE_____|
|_DB2_SERVER_CLASS_NAME_____|
|_DB2_PRODUCT_ID_____|

```

combined-information:

```

> _host-variable4_ = _ALL_ _STATEMENT_____><
|_CONDITION_____|
|_CONNECTION_| _host-variable5_|
|_integer_|

```

GRANT

```

>> _GRANT_ authorization-specification_____>
|_PUBLIC_____| _WITH GRANT OPTION_|
|_ROLE_role-name_____|

```

GRANT (collection privileges)

```

>> _GRANT_ CREATE_ ON_ COLLECTION_ collection-id_|_>
|_PACKADM_| |_IN_| |_*_|
> _TO_ authorization-name_____><

```

_PUBLIC_____	_WITH GRANT OPTION_
_ROLE_role-name_	

GRANT (database privileges)

```

>>__GRANT_____<_,_____>
      |DBADM_____|_ON DATABASE_____database-name_|_____>
      |_DBCTRL____|
      |_DBMAINT____|
      |_CREATETAB___|
      |_CREATETS____|
      |_DISPLAYDB___|
      |_DROP_______|
      |_IMAGCOPY____|
      |_LOAD_______|
      |_RECOVERDB___|
      |_REORG_______|
      |_REPAIR______|
      |_STARTDB_____|
      |_STATS_______|
      |_STOPDB______|
      |_____|
>__TO_____<_,_____>
      |_authorization-name_|_____><
      |_PUBLIC_____|
      |_ROLE_role-name_|
      |_____|_WITH GRANT OPTION_|

```

GRANT (type or JAR privileges)

```

>>__GRANT_USAGE ON_____DISTINCT TYPE_____<_,_____>
      |_____|
      |_JAR_____jar-name_|_____>
      |_____|
      |_____|
>__TO_____<_,_____>
      |_authorization-name_|_____><
      |_PUBLIC_____|
      |_ROLE_role-name_|
      |_____|_WITH GRANT OPTION_|

```

GRANT (function or procedure privileges)

```

>>__GRANT_EXECUTE ON_____>
>__FUNCTION_____<_,_____>
      |function-name_|_____>
      |_____|
      |_____<_,_____>|
      |_(_parameter-type_)_|_____>
      |_____|
      |_*_____>
      |_____<_,_____>|
      |_SPECIFIC FUNCTION_specific-name_|_____>
      |_____<_,_____>|
      |_PROCEDURE_procedure-name_|_____>
      |_*_____>
      |_____<_,_____>|
>__TO_____<_,_____>
      |_authorization-name_|_____><
      |_PUBLIC_____|
      |_ROLE_role-name_|
      |_____|_WITH GRANT OPTION_|

```

parameter type:

```
>> __data-type_____><
      |__AS LOCATOR____|
```

data type:

```
>> __built-in-data-type_____><
      |__distinct-type-name_|
```

built-in data type:

```
> __SMALLINT_____><
|__INTEGER____|
|__INT____|
|__BIGINT____|
|_____(5,0)____|
|__DECIMAL____|
|__DEC____| |__(integer)____|
|__NUMERIC____| |__, integer_|
|_____(34)____|
|__DECFLOAT____|
|_____(16)____|
|_____(53)____|
|__FLOAT____|
|_____(integer)____|
|__REAL____|
|____PRECISION____|
|__DOUBLE____|
|_____(1)____|
|__CHARACTER____|
| |__CHAR____| |__(integer)____| |__CCSID__ASCII_| |__FOR__SBCS__DATA_|
| |__CHARACTER_VARYING__(integer)____| |__EBCDIC__| |__MIXED__|
| |__CHAR____| |__UNICODE__| |__BIT____|
| |__VARCHAR____|
|_____(1M)____|
|__CHARACTER LARGE OBJECT____| |__(integer)____| |__CCSID__ASCII_| |__FOR__SBCS__DATA_|
| |__CHAR____| |__EBCDIC__| |__MIXED__|
| |__CLOB____| |__UNICODE__|
|_____(1)____|
|__GRAPHIC____|
| |__(integer)____| |__CCSID__ASCII_|
|__VARGRAPHIC__(integer)____| |__EBCDIC__|
|_____(1M)____| |__UNICODE__|
|__DBCLOB____|
| |__(integer)____|
| |__K____|
| |__M____|
| |__G____|
|_____(1)____|
|__BINARY____|
| |__(integer)____|
|__BINARY VARYING__(integer)____|
| |__VARBINARY____|
|_____(1M)____|
|__BINARY LARGE OBJECT____|
| |__BLOB____| |__(integer)____|
| |__K____|
| |__M____|
| |__G____|
|__DATE____|
|__TIME____|
|__TIMESTAMP____|
|__ROWID____|
```

GRANT (package privileges)

```
>> __GRANT__ALL_____ON__PACKAGE_____>
      |<_,_____| |_*_____|
      |__BIND____|
      |__COPY____|
      |__EXECUTE____|
```

```
>>__GRANT____<_,_____<_,_____
|_BIND_|_|_ON PLAN plan-name_|_____>
|_EXECUTE_|

>__TO____<_,_____><
|_authorization-name_|_____>
|_PUBLIC_|_|_WITH GRANT OPTION_|
|_ROLE_role-name_|_|
```

```
>>__GRANT____<_,_____<_,_____
|_ALTERIN_|_|_ON__SCHEMA_____schema-name_|_____>
|_CREATEIN_|
|_DROPIN_|

>__TO____<_,_____
|_authorization-name_|_____><
|_PUBLIC_|_|_WITH GRANT OPTION_|
|_ROLE_role-name_|
```

```
>> __GRANT__      <_ , _____>    <_ , _____>  
        |__ALTER__| |__ON_SEQUENCE__   sequence-name_|____>  
        |__USAGE__| |_____          |_*_____||  
  
        <_ , _____>  
> __TO__         authorization-name_|____><  
        |__PUBLIC__| |_____          |_____  
        |__ROLE_role-name__| |__WITH GRANT OPTION__|
```

```
>>__GRANT_____|_<_,_____|_TO_____|_<_,_____authorization-name_____|____>
      |_BINDADD_____|_|_PUBLIC_____|
      |_BINDAGENT_____|_|_ROLE_role-name_____|
      |_BSDS_____|
      |_CREATEALIAS_____|
      |_CREATEDBA_____|
      |_CREATEDBC_____|
      |_CREATESG_____|
      |_CREATETMTAB_____|
      |_DISPLAY_____|
      |_MONITOR1_____|
```

```

|_MONITOR2_|
|_RECOVER_|
|_STOPALL_|
|_STOSPACE_|
|_SYSADM_|
|_SYSCTRL_|
|_SYSOPR_|
|_TRACE_|
>_____><
|_WITH GRANT OPTION_|

```

GRANT (table or view privileges)

```

>>__GRANT__ALL__|_PRIVILEGES_|_____>
|<_,_____|
|_ALTER_|
|_DELETE_|
|_INDEX_|
|_INSERT_|
|_SELECT_|
|_REFERENCES_|
|_____|
|_____|<_,_____|
|_TRIGGER_|_|(_column-name_|_)_|
|_UPDATE_|
|_____|
|_____|<_,_____|
|_____|_|(_column-name_|_)_|

>__ON__|_____|<_,_____|
|_____|_table-name_|_____>
|_____|_|_view-name_|

>__TO__<_,_____|_authorization-name_|_____><
|_____|_|_PUBLIC_|_|_WITH GRANT OPTION_|
|_____|_|_ROLE_role-name_|

```

GRANT (use privileges)

```

>>__GRANT USE OF_____>
|<_,_____|
>__BUFFERPOOL__bpname|_____>
|_ALL BUFFERPOOLS_|
|_____|<_,_____|
|_STOGROUP__stogroup-name_|_____>
|_____|<_,_____| |
|_TABLESPACE_____table-space-name_|_|
|_____|_|_database-name.__|

>__TO__<_,_____|_authorization-name_|_____><
|_____|_|_PUBLIC_|_|_WITH GRANT OPTION_|
|_____|_|_ROLE_role-name_|

```

HOLD LOCATOR

```

<_,_____

```


		_CHAR_____		_(_integer_)____			_FOR__BIT__DATA_
		_CHARACTER_VARYING_(_integer_)__					
		_CHAR_____					
		_VARCHAR_____					
		_(_1)_____					
		GRAPHIC		_(_integer_)____			
		VARGRAPHIC(_integer_)__					
		_(_1)_____					
		BINARY		_(_integer_)____			
		BINARY VARYING(_integer_)__					
		_VARBINARY_____					
		_DATE_____					
		_TIME_____					
		TIMESTAMP					

multi-row-insert:

```

>>__VALUES__ _expression_____>
          | _host-variable-array_|
          | _NULL_|
          | _DEFAULT_|
          |<_ , _____|
          | _(_expression_____ |_)_|
          | _host-variable-array_|
          | _NULL_|
          | _DEFAULT_|
>_____>
  |_____|
  |_FOR__ _host-variable__ _ROWS__|
  |_integer-constant_|
  |_ATOMIC_____|
>_____|_____><
  |_NOT ATOMIC CONTINUE ON SQLEXCEPTION_____|

```

LABEL ON

```

>>__LABEL ON TABLE table-name_____IS_string-constant_><
          | _view-name_|
          | _ALIAS_alias-name_|
          | _COLUMN table-name.column-name_|
          | _view-name.column-name_|
          |<_ , _____|
          | _table-name_(column-name IS_string-constant_|_)_|
          | _view-name_|

```

LOCK TABLE

```

>>__LOCK TABLE table-name_____>
          |_PARTITION__integer_|
>__IN__ SHARE_____MODE_____><
  |_EXCLUSIVE_|

```

MERGE

```

>>__MERGE INTO table-name_____>
          |_view-name_| | _AS_|
          |_||_/correlation-name_|
>_____>

```

```

|_include-column_|

>_USING_source-table_ON_search-condition_____><
|_<_____
>_WHEN_matching-condition_THEN_modification-operation_|_____>
>_____><
|_NOT ATOMIC CONTINUE ON SQL EXCEPTION_| |_QUERYNO_integer_|

include-column:
|_<_,_____
>>_INCLUDE_( _column-name_ data-type_|_)_____><

data-type:
>>_built-in type_____><
|_distinct_type_name_|

built-in-type:
>_SMALLINT_____><
|_INTEGER_|
|_INT_|
|_BIGINT_|
|_DECIMAL_| |(5,0)|
|_DEC_| |_(integer)|
|_NUMERIC_| |_, integer_|
|_DECFLOAT_| |(34)|
|_FLOAT_| |(16)|
|_REAL_| |(53)|
|_DOUBLE_| |(integer)|
|_PRECISION_|
|_DOUBLE_| |(1)| | |
|_CHARACTER_| |(integer)|
|_CHAR_| |_(integer)| | _FOR_BIT_DATA_|
|_CHARACTER VARYING_| |(integer)|
|_CHAR_|
|_VARCHAR_|
|_GRAPHIC_| |(1)|
|_VARGRAPHIC_| |(integer)|
|_BINARY_| |(integer)|
|_BINARY VARYING_| |(integer)|
|_VARBINARY_|
|_DATE_|
|_TIME_|
|_TIMESTAMP_|

source-table:
>>_(VALUES_values-single-row_)_|_|_AS_|_<_,_____
|_values-multiple-row_|

values-single-row:
>>_expression_____><
|_NULL_|
|_<_,_____
|_(_expression_|_)_|

```


|_NULL_|

values-multiple-row:

```
>>__expression__FOR__host-variable__ROWS__><
|_|_host-variable-array_|_|_|_integer-constant_|
|_|_NULL_|
|_|_<,_<_|
|_|_(_expression_|_)_|
|_|_NULL_|
|_|_host-variable-array_|
```

Matching-condition:

```
>>__MATCHED__><
|_|_NOT_|
```

Modification-operation:

```
>>__UPDATE SET__assignment-clause__><
|_|_insert-operation_|
```

Assignment-clause:

```
>>__column-name__expression__><
|_|_DEFAULT_| | | |
|_|_NULL_|
|_|_<,_<_|
|_|_(_column-name_|_)_|_(_expression_|_)_|
|_|_DEFAULT_|
|_|_NULL_|
```

insert-operation

```
>>__INSERT__VALUES__expression__><
|_|_<,_<_|_|_|_DEFAULT_| |
|_|_(_column-name_|_)_|_|_|_NULL_|
|_|_|_<,_<_|
|_|_|_(_expression_|_)_|
|_|_|_DEFAULT_|
|_|_|_NULL_|
```

OPEN

```
>>__OPEN__cursor-name__><
|_|_<,_<_|
|_|_USING__host-variable_|
|_|_DESCRIPTOR__descriptor-name_|
```

PREPARE

```
>>__PREPARE__statement-name__>
>__>
|_|_INTO__descriptor-name_| |
|_|_|_NAMES_|
|_|_|_USING__LABELS_|
|_|_|_ANY_|
|_|_|_BOTH_|
>__FROM__string-expression__><
|_|_|_FROM__host-variable_|
|_|_|_ATTRIBUTES__attr-host-variable_|
```

attribute-string

```

      <_____
>>__ASENSITIVE_____|_____><
      |__INSENSITIVE_____|
      |__SENSITIVE__STATIC_____|
      |_____|__DYNAMIC_|
      |__NO SCROLL_____|
      |__SCROLL_____|
      |__holdability_____|
      |__returnability_____|
      |__rowset-positioning_____|
      |__fetch-first-clause_____|
      |__read-only-clause_____|
      |__update-clause_____|
      |__optimize-clause_____|
      |__isolation-clause_____|
      |__FOR MULTIPLE ROWS_____|
      |__FOR SINGLE ROW_____|
      |__ATOMIC_____|
      |_____|
      |__NOT ATOMIC CONINUE ON SQLEXCEPTION_____|
      |__SKIP LOCKED DATA_____|

```

holdability :

```

>>_____><
      |__WITHOUT HOLD_____|
      |__WITH HOLD_____|

```

returnability :

```

>>_____><
      |__WITHOUT RETURN_____|
      |_____TO CALLER_____|
      |__WITH RETURN_____|

```

rowset-positioning :

```

>>_____><
      |__WITHOUT ROWSET POSITIONING_____|
      |__WITH ROWSET POSITIONING_____|

```

REFRESH TABLE

```

>>__REFRESH_TABLE table-name_____><
      |__QUERYNO integer_|

```

RELEASE

```

>>__RELEASE__location-name_____><
      |__host-variable_____|
      |__CURRENT_____|
      |_____SQL_____|
      |__ALL_|_____|

```

RELEASE SAVEPOINT

```

      __TO__
>>__RELEASE_____|_____|SAVEPOINT__svpt-name_____><

```

RELEASE (connection)

```
>> _RELEASE_ _location-name_ ><
      | _host-variable_ |
      | _CURRENT_       |
      | _SQL_           |
      | _ALL_ | _      | _
```

RENAME

```
      _TABLE_
>> _RENAME_ | _source-table-name_ TO _new-table-identifier_ ><
      | _INDEX_ _source-index-name_ TO _new-index-identifier_ |
```

REVOKE

```
>> _REVOKE_ _authorization-specification_ >
      <_,'_
> _FROM_ _authorization-name_ | >
      | _PUBLIC_ |
      | _ROLE-role-name_ |
>
      <_,'_ | _RESTRICT_ |
      | _BY_ _authorization-name_ | _ |
      | _ALL_ |
```

REVOKE (collection privileges)

```
>> _REVOKE_ _CREATE_ _IN_ _COLLECTION_ <_,'_ _collection-id_ | _ >
      | _PACKADM_ | | _ON_ | | _*_ |
      <_,'_
> _FROM_ _authorization-name_ | >
      | _PUBLIC_ |
      | _ROLE-role-name_ |
>
      <_,'_ |
      | _BY_ _authorization-name_ | _ |
      | _ALL_ |
```

REVOKE (database privileges)

```
>> _REVOKE_ <_,'_ _DBADM_ | _ON DATABASE_ <_,'_ _database-name_ | _ >
      | _DBCTRL_ |
      | _DBMAINT_ |
      | _CREATETAB_ |
      | _CREATETS_ |
      | _DISPLAYDB_ |
      | _DROP_ |
      | _IMAGCOPY_ |
      | _LOAD_ |
      | _RECOVERDB_ |
      | _REORG_ |
      | _REPAIR_ |
      | _STARTDB_ |
```

```

>>__REVOKE__USAGE ON__DISTINCT TYPE_____distinct-type-name_|____>
                                     <_,_____
                                     |_____
                                     |_JAR_____jar-name_|_____|
                                     <_,_____
>__FROM_____authorization-name_|____>
                                     |_____PUBLIC_____
                                     |_____ROLE-role-name_____
>_____RESTRICT_____><
                                     <_,_____
                                     |_____BY_____authorization-name_|____|
                                     |_____ALL_____

```

```

>>__REVOKE__EXECUTE__ON_____
<_,_____
>__FUNCTION__function-name_|_____
|_|<_,_____
|_|_(_|_|_)_|
|_|parameter-type_|
|_|_*_____
|_|<_,_____
|_|_SPECIFIC FUNCTION__specific-name_|_____
|_|<_,_____
|_|_PROCEDURE__procedure-name_|_____
|_|_*_____
|_|<_,_____
>__FROM__authorization-name_|_____RESTRICT__><
|_|_PUBLIC_|_|<_,_____
|_|_ROLE-role-name_|_|_BY__authorization-name_|_|
|_|_ALL_|_|_ROLE-role-name_|_|
|_|_ALL_|_|
parameter type:
>>__data-type_____><
|_|_AS LOCATOR_____|
data type:
>>__built-in-data-type_____><
|_|_distinct-type-name_|
built-in data type:
>__SMALLINT_____><
|_|_INTEGER_|

```

INT	
BIGINT	
DECIMAL	(5,0)
DEC	(integer)
NUMERIC	(integer)
DECFLOAT	(34)
	(16)
	(53)
FLOAT	(integer)
REAL	
	PRECISION
DOUBLE	
	(1)
CHARACTER	(integer)
CHAR	(integer)
CHARACTER VARYING	(integer)
CHAR	
VARCHAR	
CHARACTER LARGE OBJECT	(1M)
CHAR	(integer)
CLOB	(integer)
	(integer)
GRAPHIC	(integer)
VARGRAPHIC	(integer)
	(1M)
DBCLOB	(integer)
	(integer)
	K
	M
	G
BINARY	(integer)
BINARY VARYING	(integer)
VARBINARY	
BINARY LARGE OBJECT	(1M)
BLOB	(integer)
	K
	M
	G
DATE	
TIME	
TIMESTAMP	
ROWID	

REVOKE (package privileges)

```

>> REVOKE ALL
    < ,
    BIND
    COPY
    EXECUTE
    RUN
    < ,
> ON PACKAGE collection-id. package-id
    PROGRAM
    *
    < ,
> FROM authorization-name
    PUBLIC
    ROLE role-name
>
    < ,

```

```

|_BY_____authorization-name_|____|
|_ALL_____|
|_ROLE_role-name_____|

```

REVOKE (plan privileges)

```

>>__REVOKE_____<_,'_____'_____|_ON PLAN_____plan-name_|_____|
|_EXECUTE_|
>__FROM_____<_,'_____'_____|_____|
|_PUBLIC_____|
|_ROLE_role-name_____|
>_____><
|_BY_____<_,'_____'_____|_____|
|_ALL_____|
|_ROLE_role-name_____|

```

REVOKE (schema privileges)

```

>>__REVOKE_____<_,'_____'_____|_ON SCHEMA_____<_,'_____'_____|_____|
|_CREATEIN_|_ * _____|
|_DROPIN_|
>__FROM_____<_,'_____'_____|_____|
|_PUBLIC_____|
|_ROLE_role-name_____|
>_____><
|_BY_____<_,'_____'_____|_____|
|_ALL_____|
|_ROLE_role-name_____|

```

REVOKE (sequence privileges)

```

>>__REVOKE_____<_,'_____'_____|_ON SEQUENCE_____<_,'_____'_____|_____|
|_USAGE_____|
>__FROM_____<_,'_____'_____|_____|
|_PUBLIC_____|
|_ROLE_role-name_____|_RESTRICT_
>_____><
|_BY_____<_,'_____'_____|_____|
|_ALL_____|
|_ROLE_role-name_____|

```

REVOKE (system privileges)

```

>>__REVOKE_____<_,'_____'_____|_FROM_____<_,'_____'_____|_____|
|_BINDADD_|_PUBLIC_____|
|_BINDAGENT_|_ROLE_role-name_____|

```

```

|_BSDS_|
|_CREATEALIAS_|
|_CREATEDBA_|
|_CREATEDBC_|
|_CREATESG_|
|_CREATETMTAB_|
|_DISPLAY_|
|_MONITOR1_|
|_MONITOR2_|
|_RECOVER_|
|_STOPALL_|
|_STOSPACE_|
|_SYSADM_|
|_SYSCTRL_|
|_SYSOPR_|
|_TRACE_|
>_____><
|_<_,_|
|_BY_|_authorization-name_|
|_ALL_|
|_ROLE_|_role-name_|

```

REVOKE (table or view privileges)

```

|_PRIVILEGES_|
>>_REVOKE_|_ALL_|_____>
|_<_,_|
|_ALTER_|
|_DELETE_|
|_INDEX_|
|_INSERT_|
|_REFERENCES_|
|_SELECT_|
|_TRIGGER_|
|_UPDATE_|
>_TABLE_|_<_,_|
>_ON_|_____|_table-name_|_____>
|_view-name_|
|_<_,_|
>_FROM_|_authorization-name_|_____>
|_PUBLIC_|
|_ROLE_|_role-name_|
>_____><
|_<_,_|
|_BY_|_authorization-name_|
|_ALL_|
|_ROLE_|_role-name_|

```

REVOKE (use privileges)

```

>>_REVOKE USE OF_|_____>
|_<_,_|
>_BUFFERPOOL_|_bpname_|_____>
|_ALL BUFFERPOOLS_|
|_<_,_|
|_STOGROUP_|_stogroup-name_|_____>

```

```

|_TABLESPACE_<_,'_____table-space-name_|_
|_database-name_|_
>_FROM_____authorization-name_|_____>
|_PUBLIC_|
|_ROLE_role-name_|
>_____><
|_BY_____authorization-name_|_
|_ALL_|
|_ROLE_role-name_|

```

ROLLBACK

```

>>_ROLLBACK_|_WORK_|_____><
|_TO SAVEPOINT_|
|_svpt-name_|

```

SAVEPOINT

```

>>_SAVEPOINT_svpt-name_|_____>
|_UNIQUE_|
>_ON ROLLBACK RETAIN CURSORS_|_____>
|_ON ROLLBACK RETAIN LOCKS_|
>_|_|_____><

```

SELECT INTO

```

>>_select-clause_INTOW_____host-variable_|_from-clause_|_____>
|_where-clause_|
>_____>
|_group-by-clause_||_having-clause_||_order-by-clause_|
|_,'_____
>_____><
|_SKIP_LOCKED_DATA_||_QUERYNO_integer_|
|_WITH_____RR_|
|_RS_|
|_CS_|
|_UR_|
>_____><
|_FETCH FIRST_|_1_|_|_ROW_|_ONLY_|
|_ROWS_|

```

SET CONNECTION

```

>>_SET CONNECTION_____location-name_|_____><
|_host-variable_|

```

SET CURRENT APPLICATION ENCODING SCHEME

```

_APPLICATION_|_=_

```

```
>> __SET CURRENT_ | _____ | _ENCODING SCHEME_ | ____ | _____ >
> __string-constant_____ ><
  | _host-variable_____ |
```

SET CURRENT DEBUG MODE

```
>> __SET CURRENT_DEBUG MODE_ | ____ | ____ host-variable_____ ><
                                     | _DISALLOW_____ |
                                     | _ALLOW_____ |
                                     | _DIABLE_____ |
```

SET CURRENT DECFLOAT ROUNDING MODE

```
>> __SET CURRENT DECFLOAT ROUNING MODE_ | ____ | ____ ROUND_CEILING_____ ><
                                     | _ROUND_DOWN_____ |
                                     | _ROUND_FLOOR_____ |
                                     | _ROUND_HALF_DOWN_____ |
                                     | _ROUND_HALF_EVEN_____ |
                                     | _ROUND_HALF_UP_____ |
                                     | _ROUND_UP_____ |
                                     | _string-constant_____ |
                                     | _host-variable_____ |
```

SET CURRENT DEGREE

```
>> __SET CURRENT DEGREE = __string-constant_____ ><
                           | _host-variable_____ |
```

SET CURRENT LOCALE LC_CTYPE

```
>> __SET _____ LC_CTYPE_ | ____ | ____ >
      | | _CURRENT_____ | | |
      | | | _LOCALE_ | |
      | | _CURRENT_LC_CTYPE_____ | |
> __string-constant_____ ><
  | _host-variable_____ |
```

SET CURRENT MAINTAINED TABLE TYPES FOR OPTIMIZATION

```
>> __SET CURRENT MAINTAINED_ | ____ | _TABLE_ | ____ | _FOR OPTIMIZATION_ | ____ | ____ >
> __ALL_____ ><
  | _NONE_____ |
  | _SYSTEM_____ |
  | _SESSION_USER_____ |
  | _USER_____ |
  | _host-variable_ |
```

SET CURRENT OPTIMIZATION HINT

```
>> __SET CURRENT OPTIMIZATION HINT = __string-constant_____ ><
```

```
>>__SET CURRENT PACKAGE PATH_|__|__|_collection-id_|__><
|SESSION_USER_|
|_USER_|
|_CURRENT PACKAGE PATH_|
|_CURRENT PATH_|
|_host-variable_|
|_string-constant_|
```

```
>>__SET CURRENT PACKAGESET =__SESSION USER__>>
      |__USED__|
      |__string-constant__|
      |__host-variable__|
```

```
>>__SET CURRENT PRECISION =__string-constant____><
|_host-variable_|
```

```
>>__SET CURRENT REFRESH AGE__|__=__|__|__numeric-constant__><
|__ANY__
|__host-variable__|
```

```
>>__SET CURRENT RULES =__string-constant____<<
                        |__host-variable__|
```

```
>>__SET CURRENT ROUTINE VERSION_|__|__routine-version-id__><
|__string-constant__|
|__host-variable__|
```

```
>>__SET CURRENT SQLID = __SESSION_USER__><
```

__USER__
<i>__string-constant__</i>
<i>__host-variable__</i>

```
>>__SET ENCRYPTION PASSWORD__|__|__ password-host-variable__>
|__ password-string-const__|
>_____>>
|__|
```

```

>>_SET_ _host-variable=_ _CURRENT SERVER_ ><
|_CURRENT PACKAGESET_|
|_CURRENT PACKAGE PATH_|
<_,_____
|_host-variable=_ _expression_ |
|_NULL_|
|_(_host-variable|_)=(_ _expression_|_)_|
|_NULL_|
|_VALUES_|_expression_|
|_NULL_|
|_(_expression|)|
|_NULL_|

```

```

      _CURRENT_      _=_
>> _SET_ | _CURRENT_ | _PATH_ | _ | _____>
      <_, _____
> _____ _schema-name_____><
|_SYSTEM PATH_____|
|_SESSION_USER_____|
|_|_USER_____|| |
|_|_CURRENT_____||
|_|_____||_PATH_____|
|_CURRENT PACKAGE PATH_____|
|_host-variable_____|
|_string-constant_____|

```

```

>> _SET_|_CURRENT_|_SCHEMA_|_|=|_schema-name_|>
      |_CURRENT_SCHEMA_|_|_|_|_SESSION USER_| |
      |_|_USER_|_|_|_|_host-variable_|
      |_|_string-constant_|_|_|_|_DEFAULT_|

```

```
>>_SET_ _transition-variable=_expression_<<
|_DEFAULT_|
|_NULL_|
<_,_____<_,_____
|_(transition-variable | )=(_expression_|_____|
|_DEFAULT_|
|_NULL_|
|_VALUES_ _ expression_|
```

```

| | _NULL_ | |
| | _DEFAULT_ | |
| | <_ , _ | |
| | ( _expression_ ) | |
| | _DEFAULT_ | |
| | _NULL_ | |

```

transition variable

```

>> _column-name_ ><
|_correlation-name_|

```

SIGNAL SQLSTATE

```

>> _SIGNAL_ SQLSTATE_ | _VALUE_ | _sqlstate-string-constant_ >
| | | | _variable_name_ | |
| | | | _condition-name_ | |
> _diagnostic-string-constant_ ><

```

TRUNCATE

```

>> _TRUNCATE_ | _TABLE_ | _table-name_ | _DROP STORAGE_ >
| | | |
> | _IGNORE DELETE TRIGGERS_ |
| _RESTRICT WHEN DELETE TRIGGERS_ | ><
|_IMMEDIATE_|

```

UPDATE

searched update:

```

>> _UPDATE_ _table-name_ >
|_view-name_| | _correlation-name_ | | _include_column_ |
> _SET_ _assignment-clause_ >
|_WHERE_ _search-condition_ |
> ><
|_SKIP LOCKED DATA_ | | _QUERYNO_ _integer_ |
|_WITH_ _RR_ |
|_RS_ |
|_CS_ |

```

positioned update:

```

>> _UPDATE_ _table-name_ SET _assignment-clause_ >
|_view-name_| | _correlation-name_ |
> _WHERE CURRENT OF_ _cursor-name_ ><
|_FOR ROW_ _host-variable_ OF ROWSET_ |
|_integer-constant_ |

```

include-column:

```

>> _INCLUDE_ ( <_ , _
|_column-name_ | _data-type_ | ) ><

```

data-type:

```

>> _built-in type_ ><
|_distinct_type_name_ |

```

built-in-type:

```

> _SMALLINT_ ><

```

[illegible]

```
assignment clause:
```

```

<_,_____
>> _____column-name=_____expression_____ |____>
|
|          |_____DEFAULT_____|
|          |_____NULL_____|
|          |_____(scalar-fullselect)_____|
|
|          <_,_____
|          |_____column-name_____|_____|_____
|          |_____expression_____|_____)|_____
|          |_____DEFAULT_____|
|          |_____NULL_____|
|          |_____row-fullselect_____|

```

VALUES

```
>>__VALUES__expression__><
|      <_.___      |
|_(__expression_)_|
```

VALUES INTO

```
>>__VALUES__expression__INTO__host-variable_|__><
|_NULL_|
|_CURRENT SERVER_|
|_CURRENT PACKAGESET_|
|_CURRENT PACKAGE PATH_|
|_<_,_|
|_(_expression_|_)_|
```

|_NULL_____|

WHENEVER

```
>>__WHENEVER____NOT FOUND____CONTINUE____><
|_SQLERROR____|   |__GOTO____host-label_|
|_SQLWARNING_|   |_GO TO_|
```

Commands

-ACCESS DATABASE(DB2)

```

>> _ACCESS DATABASE_ ( _<_>_ database-name_ | _>_ ) _>
|
| * _>_
| _dbname1:dbname2_
| _dbname*
| *dbname
| *dbname*
| *dbstring1*dbstring2*_
|
>
| _SPACENAM( _<_>_ space-name_ | _>_ ) _>
|
| * _>_ | | _<_>_
| _spacename1:spacename2_ | | _PART( _>_ integer_ | _>_ )
| _spacename* | | _int1:int2_
| *spacename
| *spacename*
| *spacestring1*spacestring2*_
|
> _MODE( _>_ open_ | _>_ ) _><
| _ngdbdep_

```

-ALTER BUFFERPOOL

```

>> _ALTER BUFFERPOOL_ ( _>_ bpname_ ) _>
| _VPSIZE( integer_ ) _>
>
> _>_
| _VPSEQT( integer_ ) _> | _VPPSEQT( integer_ ) _>
>
> _>_
| _VPXPSEQT( integer_ ) _> | _DWQT( integer_ ) _>
>
> _>_
| _VDWQT( integer1, integer2 ) _>
>
> _>_
| _PGSTEAL_ ( _>_ LRU_ ) _>
| _FIFO_
>
> _>_
| _PGFIX_ ( _>_ NO_ | _>_ YES_ | _>_ ) _> | _>_ NO_ |
| _PGFIX_ ( _>_ YES_ | _>_ ) _> | _AUTOSIZE_ ( _>_ YES_ | _>_ ) _>

```

-ALTER GROUPBUFFERPOOL

```

>> _ALTER GROUPBUFFERPOOL_ ( _>_ gbpname_ ) _>
| _structure-name_
>
> _>_
| _GBPCACHE( _>_ YES_ | _>_ ) _> | _AUTOREC( _>_ YES_ | _>_ ) _>
| _NO_ | _NO_
>
> _>_
| _RATIO( ratio ) _> | _CLASST( integer ) _> | _GBPOOLT( integer ) _>
>
> _>_
| _GBPCHKPT( integer ) _>

```

-ALTER UTILITY

```

>>_ALTER_UTILITY_(utility-id)_REORG_____>
|_REBUILD_|
>_____>
|_DEADLINE(_NONE_)_|_MAXRO(_integer_)_|
|_timestamp_|_DEFER_|
>_____><
|_LONGLOG(_CONTINUE_)_|_DELAY(_integer_)_|
|_TERM_|
|_DRAIN_|

```

-ARCHIVE LOG

```

>>_ARCHIVE LOG_____>
|_SCOPE(MEMBER)_____|
>_____><
|_SCOPE(GROUP)_____|
|_MODE(QUIESCE)_____|
|_TIME(nnn)_|_NO_|
|_WAIT(_YES_)_|
|_CANCEL OFFLOAD_____|

```

-BIND PACKAGE

```

>>_BIND PACKAGE_(collection-id)_____>
|_location-name_|_OWNER(authorization-id)|
>_____enable-block_____>
|_QUALIFIER(qualifier-name)|
>_MEMBER(dbrm-member-name)_____>
|_LIBRARY(dbrm-pds-name)|
|_COPY(collection-id.package-id)_____|
|_COPYVER(version-id)|
>_____>
|_COMPOSITE_|
|_OPTIONS(_COMMAND_)|
>_____>
|_DEFER(PREPARE)_|_ACTION_(REPLACE)_____|
|_NODEFER(PREPARE)_|_REPLVER(version-id)|
|_(ADD)_____|
>_____>
|_NO_|
|_CURRENTDATA(_YES_)|
>_____>
|_DBPROTOCOL(_DRDA_)_|_1_|_DYNAMICRULES(_RUN_)|
|_PRIVATE_|_DEGREE(_ANY_)_|_BIND_|
|_DEFINEBIND_|
|_DEFINERUN_|
|_INVOKEBIND_|
|_INVOKERUN_|
>_____>
|_ENCODING(_ASCII_)_|_NO_|_I_|
|_EBCDIC_|_EXPLAIN(_YES_)_|_FLAG(_W_)|

```



```

      | _UNICODE_ |                                     | _E_ |
      | _ccsid_   |                                     | _C_ |
>----->
      | _IMMEDWRITE_( _NO_ ) | | _ISOLATION( _RR_ ) |
      | _YES_ | | _RS_ |
      | | | _CS_ |
      | | | _UR_ |
      | | | _NC_ |
      | | | _NONE_ |
>----->
      | _KEEPDYNAMIC( _YES_ ) | | _REOPT( _ALWAYS_ ) | | _OPTHINT( 'hint-id' ) |
      | | | _ONCE_ |
      | | | _AUTO_ |
>----->
      | _PATH( <_ , _schema-name_ | ) | | _RELEASE( _COMMIT_ ) |
      | _USER_ | | _DEALLOCATE_ |
>----->
<
      | _NOPACKAGE_ | | _RUN_ |
      | _SQLERROR( _CONTINUE_ ) | | _VALIDATE( _BIND_ ) |
enable-block:
>>-----><
      | _ENABLE( * ) |
      | | | <_ , _ | | <_ |
      | | | _ENABLE_ ( _BATCH_ | ) | |
      | | | _DISABLE_ | | |
      | | | _DLIBATCH_ | | |
      | | | _DB2CALL_ | | |
      | | | _CICS_ | | |
      | | | _IMS_ | | |
      | | | _IMSBMP_ | | |
      | | | _IMSMPP_ | | |
      | | | _REMOTE_ | | |
      | | | _RRSAF_ | | |
      | | | <_ , _connection-name_ | ) |
      | | | <_ , _ |
      | | | _CICS( _applid_ | ) |
      | | | <_ , _ |
      | | | _IMSBMP( _imsid_ | ) |
      | | | <_ , _ |
      | | | _IMSMPP( _imsid_ | ) |
      | | | <_ , _ |
      | | | _REMOTE( _location-name_ | ) |
      | | | _<luname>_ |

```

-BIND PLAN

```

>> _BIND
      | _PLAN( plan-name ) | | _OWNER( authorization-id ) | | _QUALIFIER( qual-name ) |
      | | | _NODEFER( PREPARE ) |
> _enable-block _member-block_ | |
      | | | _DEFER( PREPARE ) | | |
      | | | _USE_ |
      | | | _ACQUIRE( _ALLOCATE_ ) |
>----->
      | | | _(_REPLACE_) _ | | | _CACHESIZE( decimal-value ) |
      | | | _RETAIN_ | | |
      | | | _ACTION_ | ( ADD ) |
>----->
      | | | _NO_ | | | _CURRENTSERVER( location-name ) |
      | | | _CURRENTDATA( _YES_ ) |
>----->
      | _DBPROTOCOL_ ( _DRDA_ ) | | | _1_ |

```

```

      | _PRIVATE_ | | _DEGREE( _ _ _ ) |
> _ |
| _DISCONNECT( _ | _AUTOMATIC_ | _ ) | | _DYNAMICRULES( _ | _BIND_ | _ ) |
| _CONDITIONAL_ |
> _ |
| _ENCODING( _ | _ASCII_ | _ ) | | _EXPLAIN( _ | _YES_ | _ ) | | _FLAG( _ | _I_ | _ ) |
| _EBCDIC_ | | _UNICODE_ | | _ccsid_ | | _C_ |
> _ |
| _IMMEDWRITE( _ | _NO_ | _ ) | | _ISOLATION( _ | _RR_ | _ ) | | _NO_ |
| _YES_ | | _RS_ | | _KEEPDYNAMIC( _ | _YES_ | _ ) |
| _CS_ |
| _UR_ |
> _ |
| _REOPT_ ( | _NONE_ | | | |
| _ALWAYS_ | ) |
| _ONCE_ | | _OPTHINT( _ 'hint-id' _ ) | | < _ , _ |
| _AUTO_ | | _PATH( _ | _schema-name_ | _ ) |
| _USER_ |
> _ |
| _RELEASE( _ | _DEALLOCATE_ | _ ) | | _SQLRULES( _ | _STD_ | _ ) | | _VALIDATE( _ | _BIND_ | _ ) |
> _ |
| _ROUNDING( _ | _CEILING_ | _ ) |
| _DOWN_ |
| _FLOOR_ |
| _HALFDOWN_ |
| _HALFEVEN_ |
| _HALFUP_ |
| _UP_ |
enable-block:
>> _ |
| _ENABLE( * ) |
| _ | < _ , _ | < _ | | |
| _ | _ENABLE_ _ ( _ | _BATCH_ | _ ) |
| _DISABLE_ | | _DLIBATCH_ | | < _ , _ |
| | _DB2CALL_ | | _DLIBATCH( _connection-name_ | _ ) |
| | _CICS_ | | < _ , _ |
| | _IMS_ | | _CICS( _applid_ | _ ) |
| | _IMSBMP_ | | < _ , _ |
| | _IMSMPP_ | | _IMSBMP( _imsid_ | _ ) |
| | _RRSAF_ | | < _ , _ |
| | _IMSMPP( _imsid_ | _ ) |

```

enable-block:

```

>> _ |
| _MEMBER( _ | _dbrm-member-name_ | _ ) | | | |
| | < _ , _ |
| | _LIBRARY( _ | _dbrm-pds-name_ | _ ) |
| | < _ , _ |
| | _PKLIST( _ | _collection-id_ . _package-id_ | _ ) |
| | _location-name_ . _ | | _* _ | | _* _ |

```

member-block:

```

< _
>> _ |
| _MEMBER( _ | _dbrm-member-name_ | _ ) | | | |
| | < _ , _ |
| | _LIBRARY( _ | _dbrm-pds-name_ | _ ) |
| | < _ , _ |
| | _PKLIST( _ | _collection-id_ . _package-id_ | _ ) |
| | _location-name_ . _ | | _* _ | | _* _ |

```

|_* . _____|

-CANCEL THREAD

```
>> _CANCEL_ _THREAD(token) _____><
      | _DDF THREAD(_luwid_)_ | | _DUMP_ | | _NOBACKOUT_ |
      | _token_ |
```

/CHANGE IMS

```
>> _/CHANGE_ _SUBSYS subsystem-name _____>
      | _SUBSYS ALL _____ |
      | _SUBSYS subsystem-name OASN schedule-number_ |
> _RESET _____><
```

DCLGEN

```
>> _DCLGEN TABLE(_ table-name_ )_ _____>
      | _view-name_ | | _OWNER(owner-name)_ |
> _____>
      | _AT(location-name)_ |
> _LIBRARY(library name_ _____>
      | _ (member-name)_ | | _/password_ |
> _____>
      | | _ADD _____ | | _____ |
      | _ACTION(_REPLACE_)_ | | _LANGUAGE( _PLI_ )_ |
      | _____ |
      | | _C _____ |
      | | _IBMCOB_ |
      | | _CPP _____ |
> _____>
      | _NAMES(prefix)_ | | _STRUCTURE(structure-name)_ | | _APOST_ |
      | _____ | | _QUOTE_ |
> _____>
      | | _NO _____ | | _DBCSSYMBOL(_G_)_ |
      | _LABEL_ _YES_ | | | _N_ |
> _____>
      | | _YES_ _____ | | | _NO _____ |
      | _DBCSDDELIM(_NO_)_ | | _COLSUFFIX(_YES_)_ |
> _____><
      | | _NO _____ | | | _STD _____ |
      | _INDVAR(_YES_)_ | | | _RMARGIN(_WIDE_)_ |
```

/DISPLAY IMS

```
>> _/DISPLAY_ _____<_ , _____><
      | _SUBSYS subsystem-name_ | _____>
      | _SUBSYS ALL _____ |
      | _____<_ , _____> |
      | _OASNSUBSYS subsystem-name_ | _____>
      | _OASN SUBSYS ALL _____ |
```



```
>>_DISPLAY DDF_<<
|_DETAIL_|
```

```
>>_DISPLAY FUNCTION SPECIFIC_____>
    _(*.*)_____|_____>
>-|_____>
    <_, _____|_____>
|-(|____schema.specific-function-name__|_)_-|
    |__schema.partial-name*_____||
>_____><
|_____|
|_SCOPE__(-|_____|_-)|
|_____|
|_GROUP__|
```

-DISPLAY GROUP

```
>>_DISPLAY GROUP_<<
      |_DETAIL_|
```

-DISPLAY GROUPBUFFERPOOL

```

>>__DISPLAY GROUPBUFFERPOOL_>
|_(*_)_|
|_<_)_|
|_(_ gbpname _)_|
|_structure-name_|
>_>
|_TYPE_(_|_GCONN_|_)|_MDETAIL_|_INTERVAL_|
|_|_MCONN_|_|_(_|_)_|
|_|_NOCACHE_|_|_*_|_|
>_><
|_GDETAIL_|_NO_| | | | |
|_|_INTERVAL_|_|_CONNLIST_(_|_YES_|_)|
|_|_(_|_)_|
|_|_*_|_|

```

-DISPLAY LOCATION

```
>>__DISPLAY LOCATION_ |_(*)_____|_____|>  
                        |<_, _____|  
                        |_( _____ -|_)_|  
                          |partial-location*_|  
                          |<luname> _____|  
                          |ipaddr _____|  
  
> _ _____><  
    |_DETAIL_|
```

-DISPLAY LOG

```
>>__DISPLAY LOG_____><
```

-DISPLAY PROCEDURE

[illegible]

-DISPLAY PROFILE

```
>>__DISPLAY PROFILE_____><
```

-DISPLAY RLIMIT

```
>>__DISPLAY RLIMIT_____><
```

-DISPLAY THREAD

```
>>__DISPLAY THREAD_____>
      <_,'_____
      |(_'__connection-name__|_)_|
      |__partial-connection*__|
      |(_'__*)_____
      |_____
>_ |_____ |_____ |_____ |_____
   |__SCOPE__(_|_____|_)_| |__TYPE__(_|_____|_)_|
   |_____|__GROUP_____| |_____|
   |_____|
   |_____|__ACTIVE_____|
   |_____|__INDOUBT_____|
   |_____|__*_____|
   |_____|__INACTIVE_____|
   |_____|__POSTPONED_____|
   |_____|__PROC_____|
   |_____|__SYSTEM_____|
>_ |_____ |_____ |_____ |_____
   |_____ <_,'_____ |__DETAIL_| |
   |__LOCATION__(_|_____|_)_|
   |_____|__location-name_____|
   |_____|__partial-location*_____|
   |_____|__*_____|
   |_____
   |_____ <_,'_____
   |__LUWID__(_|_____|_)_|
   |_____|__luwid_____|
   |_____|__partial-luwid*_____|
   |_____|__token_____|
>_ |_____ |_____ |_____ |_____
   |_____ <_,'_____ |_____ |_____
   |__RRSURID__(_|_____|_)_| |__LIMIT__(_|_____|_)_|
   |_____|__rrs-urid_____| |_____|__512_____|
   |_____|__*_____| |_____|__integer_____|
   |_____|__*_____| |_____|__*_____|
```

-DISPLAY TRACE

```
>>__DISPLAY TRACE_____>
      |_____ |_____ |_____
      |(_'__*)_____ |_____ |_____
      |_____|__PERFM_____| |_____ |_____
      |_____|__ACCTG_____| |__SCOPE__(_|_____|_)_|
      |_____|__STAT_____| |_____|__LOCAL_____|
      |_____|__AUDIT_____| |_____|__GROUP_____|
      |_____|__MONITOR_____|
>_ |_____ |_____ |_____
   |__destination block_| |__constraint block_|
>_ |_____ |_____ |_____
   |__DETAIL(output-type)_____| |__COMMENT(string)_____| |__RMID_____|
```

destination block:

```
>_ |_____ <_,'_____
   |__DEST__(_|_____|_)_|
   |_____|__GTF_____|
   |_____|__SMF_____|
```

```

      |__SRV_|
      |__OPn_|

constraint block:

      *
      |<_,_____|
      |__plan-name_|_|_|__PKGLOC(|<_,_____|
      |__pacakge-location_|_|_|>
      |__partial-package-location_|

      *
      |<_,_____|
      |__auth-id_|_|_|>
      |__partial-userid_|

      *
      |<_,_____|
      |__integer_|_|_|__TNO(|<_,_____|
      |__integer_|_|_|>

      *
      |<_,_____|
      |__location-name_|_|_|>
      |<luname>
      |__partial-element_|
      |__ipaddr_|
      |__partial-ipaddr_|

      *
      |<_,_____|
      |__user-id_|_|_|>
      |__partial-userid_|

      *
      |<_,_____|
      |__application-name_|_|_|>
      |__partial-application-name_|

      *
      |<_,_____|
      |__workstation-name_|_|_|>
      |__partial-workstation-name_|

      *
      |<_,_____|
      |__connection-role-id_|_|_|>
      |__partial-connection-name_|

      *
      |<_,_____|
      |__correlation-role-id_|_|_|>
      |__partial-correlation-name_|

      *
      |<_,_____|
      |__correlation-role_|_|_|>
      |__partial-correlation-role-id_| |__constraint block 2_|

constraint block 2:

      <_,_____|
      <_,_____|

```



```

> __XPLAN(____plan-name_|____) __XPKGLOC(____package-location_|____) __>
|_partial-plan-name_| |_partial-pkge-location_|
<_,____
> __XPKGCOL(____package-collection-id ____|____)____>
|_partial-package-collection-id_|
<_,____
> __XPKGPROG(____package-program-name____|____)____>
|_partial-package-program-name_|
<_,____
> __XAUTHID(____authorization-id____|____)____>
|_partial-authorization-id____|
<_,____
> __XLOC(____location-name_|____) __XUSERID(____userid_|____) __>
|_partial-location-name_| |_partial-userid_|
|_<luname>_|
|_partial <luname>_|
|_ipaddr_|
|_partial-ipaddr_|
<_,____
> __XAPPNAME(____application-name_|____)____>
|_partial-application-name_|
<_,____
> __XWRKSTN(____workstation-name_|____)____>
|_partial-workstation-name_|
<_,____
> __XCONNID(____connection-role-id_|____)____>
|_partial-connection-name_|
<_,____
> __XCORRID(____correlation-role-id_|____)____>
|_partial-correlation-name_|
<_,____
> __XROLE(____correlation-role____|____)____>
|_partial-correlation-role-id_|

```

-DISPLAY UTILITY

```

>> __DISPLAY UTILITY__( _utility-id _ )____>
|_partial-utility-id*_|
|_*_|
> _____><
|_MEMBER(____member-name_|_)_|

```

DSN TSO

```

>> __DSN_____>
|_DSN_|
|_SYSTEM(____subsystem-name____|_)_|
|_group-attachment-name_|
> _____>
|_0_| |_TEST(integer)_|
|_RETRY(____integer_|_)_|
> _____><
|_YES_| |_ASUSER(userid)_|
|_GROUP(____NO____|_)_|

```



```

|_*_____|
>_____><
|_I_|
|_FLAG(_|_W_|_)_|
|_E_|
|_C_|

```

FREE PLAN

```

<_,_____
>>__FREE PLAN__(_|_plan-name_|_)_|_*_____|_I_|_><
|_*_____|_FLAG(_|_W_|_)_|
|_E_|
|_C_|

```

MODIFY admtproc, APPL=SHUTDOWN

```

>>__MODIFY__admtproc,APPL_____><
|_,SHUTDOWN_|

```

MODIFY admtproc, APPL=SHUTDOWN

```

>>__MODIFY__admtproc,APPL_____><
|_,TRACE_ON_____|
|_OFF_|

```

MODIFY IRLMPROC, ABEND

```

|_,DUMP_____|
>>__MODIFY__irlmproc,ABEND_|_____><
|_,NODUMP_|

```

MODIFY IRLMPROC, DIAG

```

>>__MODIFY__irlmproc,DIAG_|_,DELAY_____|_____><
|_,PLOCK_|
|_,ALL_____|
|_,NONE_____|
|_,HANG_____|

```

MODIFY IRLMPROC, PURGE

```

>>__MODIFY__irlmproc,PURGE,db2name_____><

```

MODIFY IRLMPROC, SET

```

>>__MODIFY__irlmproc,SET_|_,DEADLOCK=nnnn_____><
|_,LTE=nnnn_____|
|_,PVT=nnnn_____|
|_,MVT=nnnnnnU_____|
|_,TIMEOUT=nnnn,subsystem-name_|
|_,TRACE=|_10_____|
|_,TRACE=|_nnn_|_____|

```

MODIFY IRLMPROC, STATUS

```

|_,irlmx_____|
>>__MODIFY__irlmproc,STATUS_|_____><

```

```

|_,ALLD_|
|_,ALLI_|
|_,MAINT_|
|_,STOR_|
|_,TRACE_|

```

-MODIFY TRACE (DB2)

```

>>__MODIFY TRACE__( _PERFM_ ) __CLASS__( _integer_ | _ ) >
|_ACCTG_|
|_STAT_|
|_AUDIT_|
|_MONITOR_|
|_*_|
|_<_|_|
>__TNO(integer) __IFCID( _ ifcid_nbr_ | _ ) >
>__COMMENT(string)_|
>__constraint-block-2_|
|_*_|
|_<_|_|
|_ROLE( _ connection-role_ | _ )_|

```

constraint block 2:

```

>__XPLAN( _plan-name_| _ ) __XPKGLOC( _package-location_| _ ) >
|_partial-plan-name_| |_partial-pkge-location_|
|_*_|
>__XPKGCOL( _package-collection-id_| _ ) >
|_partial-package-collection-id_|
|_*_|
>__XPKGPROG( _package-program-name_| _ ) >
|_partial-package-program-name_|
|_*_|
>__XAUTHID( _authorization-id_| _ ) >
|_partial-authorization-id_|
|_*_|
>__XLOC( _location-name_| _ ) __XUSERID( _userid_| _ ) >
|_partial-location-name_| |_partial-userid_|
|_<luname>_|
|_partial <luname>_|
|_ipaddr_|
|_partial-ipaddr_|
|_*_|
>__XAPPNAME( _application-name_| _ ) >
|_partial-application-name_|
|_*_|
>__XWRKSTN( _workstation-name_| _ ) >
|_partial-workstation-name_|
|_*_|
>__XCONNID( _connection-role-id_| _ ) >
|_partial-connection-name_|
|_*_|

```

```

> __XCORRID(____correlation-role-id____)____>
|_partial-correlation-name_|
<_,____
> __XROLE(____correlation-role____)____>
|_partial-correlation-role-id_|

```

REBIND PACKAGE

```

>> __REBIND PACKAGE____>
>>_(____collection-id____.package-id____>
|_location-name._| |_*_____| |_*_____| |_. (____version-id____)_| |
|_*_____| |_*_____| |_*_____| |_*_____| |_*_____| |_*_____|
>
|_OWNER(auth-id)_| |_QUALIFIER(qualifier-name)_| |_CURRENTDATA(_YES_)_|
|_NO_|
>
|_DBPROTOCOL_(____DRDA____)_| |_DEFER(PREPARE)____| |_DEGREE(____1____)_|
|_PRIVATE_| |_NODEFER(PREPARE)_| |_ANY_|
>
|_DYNAMICRULES(____RUN____)_|
|_BIND____|
|_DEFINE____|
|_INVOKE____|
>
|_ENCODING(____ASCII____)_| |_NO____| |_I____|
|_EBCDIC____| |_EXPLAIN(____YES____)_| |_FLAG(____W____)_|
|_UNICODE____| |_E____|
|_ccsid____| |_C____|
>
|_IMMEDWRITE(____NO____)_| |_ISOLATION(____RR____)_|
|_YES____| |_RS____|
|_CS____|
|_UR____|
|_NC____|
>
|_NO____| |_NONE____| |_OPTHINT(____'hint-id'____)_|
|_KEEPDYNAMIC(____YES____)_| |_REOPT(____ALWAYS____)_|
|_ONCE____|
|_AUTO____|
>
|_PATH(____schema-name____)_| |_PATHDEFAULT_| |_RELEASE(____COMMIT____)_|
|_USER_____| |_DEALLOCATE_|
>
|_RUN____|
|_VALIDATE(____BIND____)_|

```

REBIND PLAN

```

>> __REBIND PLAN(____plan-name____)_>
|_*_____| |_OWNER(authorization-id)_|
>

```

```

|_QUALIFIER(qualifier-name)_|
>
|_PKLIST(<_,_____|_collection-id_|_package-id_|_)_|
|_location-name_|_|_*_____|_|_*_____|
|_*_____|
|_NOPKLIST_|
>
|_NODEFER(PREPARE)_|_|_ACQUIRE(_USE_____)||_CACHESIZE(decimal-value)_|
|_DEFER(PREPARE)_____|_|_ALLOCATE_|
>
|_CURRENTDATA(_NO__ _)|_|_CURRENTSERVER(location-name)_|
|_YES_|
>
|_DBPROTOCOL(_DRDA____ _)|_|_DEGREE(_1____ _)|
|_PRIVATE_|_|_ANY_|
>
|_DISCONNECT(_EXPLICIT____ _)|_|_DYNAMICRULES(_RUN____ _)|
|_AUTOMATIC_____|_|_BIND_|
|_CONDITIONAL_|
>
|_ENCODING(_ASCII____ _)|_|_EXPLAIN(_NO__ _)|_|_I_| |
|_EBCDIC_|_|_YES_|_|_FLAG(_W_|_)_|
|_UNICODE_|_|_E_|
|_ccsid_____|_|_C_|
>
|_IMMEDWRITE(_NO__ _)|_|_ISOLATION(_RR____ _)|_|_NO_| |
|_PH1_|_|_RS_|_|_KEEPDYNAMIC(_YES_|_)_|
|_YES_|_|_CS_|
|_UR_|
>
|_NONE_____|_|_OPHTINT(_hint-id_|_)_|_|_<_,_____|_|
|_REOPT(_ALWAYS_|_)_|_|_PATH(_schema-name_|_)_|
|_ONCE_____|_|_USER_____|
|_AUTO_____|
>
|_|_|_RELEASE(_COMMIT____ _)|_|_SQLRULES(_DB2__ _)|
|_PATHDEFAULT_|_|_DEALLOCATE_|_|_STD_|
>
|_VALIDATE(_RUN____ _)|
|_BIND_|

```

enable-block

```

>>
|_ENABLE(*)_____|
|_|_<_,_____|_|_<_____|_| | |
|_|_ENABLE_____(_____BATCH_|_)_|_|_<_____|_|
|_|_DISABLE_|_|_DLIBATCH_|_|_DLIBATCH(connection-name_|_)_|
|_|_|_DB2CALL_|_|_<_,_____|_|
|_|_|_CICS_____|_|_CICS(applid_|_)_|
|_|_|_IMS_____|_|_<_,_____|_|
|_|_|_IMSBMP_|_|_IMSBMP(imsid_|_)_|
|_|_|_IMSMPP_|_|_<_,_____|_|
|_|_|_RRSAF_____|_|_<_,_____|_|

```

```

>>>_REBIND TRIGGER PACKAGE(____collection-id_.package-id_)>
|_location-name_| |_*_____| |_*_____|
>
|_CURRENTDATA(_YES_)_| |_ENCODING(_ASCII_)_| |_EXPLAIN(_YES_)_|
|_NO_| |_EBCDIC_| |_NO_|
|_UNICODE_|
|_ccsid_____|
>
|_I_|
|_FLAG(_W_)_|
|_E_|
|_C_|
>
|_IMMEDWRITE(_NO_)_| |_ISOLATION(_RR_)_| |_RELEASE(_COMMIT_)_|
|_YES_| |_RS_| |_DEALLOCATE_|
- |_CS_|
|_UR_|
|_NC_|

```

```
>>__RECOVER BSDS_____><
```

```

>>_RECOVER INDOUBT_<_ACTION(_COMMIT_)>
|_(connection-name)|_|_ABORT_|
<_,_____>
>_ID(_correlation-id_|_)<
|_*_|
|<_,_____>|
|_NID(_network-id_|_)|
|<_,_____>|
|_LUWID(_luwid_|_)|
|_|_token_|

```

```
>>__RECOVER POSTPONED__<<
      |__CANCEL__|
```

```
>>__REFRESH DB2, EARLY_____><
```

```
>>__RESET GENERICLU__(          <_,_____  
                    |_(_luname_)_|_)____><  
                    |_netid.luname_|  
                    |_(*)_____|
```

-RESET INDOUBT

```

>>__RESET INDOUBT_____>
      <_,_____
>__ _LUNAME( _ luname_ | _ )_ _FORCE_ _____><
      |_*_____||_FORCE_|
      <_,_____
      |LOCATION( _ location-name_ | _ )_____
      <_,_____
      |IPADDR( _ ipaddr..port_ | _ )_ _FORCE_ _
      |_*_____||_FORCE_|
      <_,_____
      |LUWID( _ luwid_ | _ )_ _____
      |_token_| |LOCATION( location-name )_|

```

RUN

```

>>__RUN__ _PROGRAM( program-name )_ _____>
      |_____||_PLAN( plan-name )_|
      |__CP__PLAN( plan-name )_____||
>__ _LIBRARY( library-name )_ | _PARMS( parameter-string )_><

```

-SET ARCHIVE

```

>>__SET ARCHIVE_____><
      | _COUNT__( _integer_ )_ | _TIME( _minutes_ _ )_ | |
      |_____||_seconds_|
      |_____||_seconds_|
      |_____||1440|
      |_____||NOLIMIT|
      | _DEFAULT_____||

```

-SET LOG

```

>>__SET LOG__ _LOGLOAD( integer )_____>
      | _CHKTIME( integer )_ |
      | _SUSPEND_____ |
      | _RESUME_____ |

```

-SET SYSPARM

```

>>__SET SYSPARM__ _LOAD( _ DSNZPARM_____ )_ _____><
      |_____||_load-module-name_|
      | _RELOAD_____ |
      | _STARTUP_____ |

```

SPUFI

```

>>__SPUFI_____><

```


/SSR

```
>> __/SSR__subsystem-command_____><
```

/START IMS

```
>> __/START_____><
|
|      <_,_____
|      |
|_SUBSYS __subsystem-name_|_
|_SUBSYS __ALL_____
```

-START DATABASE

```
>> __START DATABASE__( _<_,_____
|      database-name_|_____ )_____>
|      *
|      dbname1:dbname2_____
|      dbname*
|      *dbname
|      *dbname*
|      *dbstring1*dbstring2*_|
> _____>
|      <_,_____
|_SPACENAM( _space-name_|_____ )_____
|      *
|      spacename1:spacename2_____
|      spacename*
|      *spacename
|      *spacename*
|      *spacestring1*spacestring2*_|
> _____>
|      <_,_____ | _CLONE_|
|_PART( _integer_|_____ )_|
|      integer1:integer2_|
|      RW
> __ACCESS( _RO_|_____ )_____><
|      UT
|      FORCE_
```

-START DB2

```
>> __START DB2_____>
|      DSNZPARM
|_PARM( _module name_|_____ )_|
> _____>
|      *
|_ACCESS( _MAINT_|_____ )_| | _NO_|
|      LIGHT( _YES_|_____ )_|
> _____>
|_MSTR(jcl-substitution)|_ |_DBM1(jcl-substitution)|_
> _____><
|_DIST(jcl-substitution)|_
```

-START DDF

```
>>__START DDF_____><
```

-START FUNCTION SPECIFIC

```
>>__START FUNCTION SPECIFIC_____>
  _(*.*)_____
>_|_____|_____>
  |<_,_____||
  |_(______schema.specific-function-name_ _|_)_|
  |_____schema.partial-name*_____||
>_|_____><
  |_____LOCAL_____|
  |_SCOPE_( _|_____|_)_|
  |_____GROUP_____|
```

-START admtproc

```
>>__START_irlmproc,____><
                        |_TRACE=_ON_|
                        |_____OFF_|
```

-START irlmproc

```
>>__START_irlmproc,____<_,_____><
                        |_DEADLOK='iiii,kkkk'|_____><
                        |_IRLMGRP='irlm-group-name_|_____
                        |_IRLMID=n_____
                        |_IRLMNM=irlmname_____
                        |_LOCKTABL=irlmltnm_____
                        |_MAXCSA=nnn_____
                        |_MAXUSRS=nnn_____
                        |_PC=_YES_|_____
                        |_____NO_|_____
                        |_PGPROT=_YES_|_____
                        |_____NO_|_____
                        |_SCOPE=_LOCAL_|_____
                        |_____GLOBAL_|_____
                        |_____NODISCON_|_____
                        |_TRACE=_NO_|_____
                        |_____YES_|_____
```

-START PROCEDURE

```
>>__START PROCEDURE_____(*)_____>
                        |_____>
                        |<_,_____||
                        |_(______schema.procedure-name_ _|_)_|
                        |_____schema.partial-name*_____|
                        |_____procedure-name_____|
                        |_____partial-name*_____||
>_|_____><
  |_____LOCAL_____|
```

```
>> START PROFILE ><
```

```
>>__START RLIMIT_<_ID=id_><
```

```
>> _START TRACE_ ( _PERFM_ ) _>  
| _ACCTG_ | | _LOCAL_ |>  
| _STAT_ | | _SCOPE_ ( _ | _GROUP_ | ) _>  
| _AUDIT_ | |>  
| _MONITOR_ |>  
  
> _>  
| _destination block_ | | _constraint block_ | | _RMID_ |>  
  
> _><  
| _COMMENT(string)_ |
```

```
> __DEST( ( __GTF | __SMF | __SRV | __OPn | __OPX ) )
```

```

      *
      |<_, _____|
>__PLAN(_____|_plan-name_|_____|_)__PKGLOC(_____|_package-location_|_____|_)__>
      |_____|_partial-plan-name_|_____|_partial-package-location_|
      *
      |<_, _____|
>__PKGCOL(_____|_package-collection-id_|_____|_)_____|_
      |_____|_partial-package-collection-id_|
      *
      |<_, _____|
>__PKGPROG(_____|_package-program-name_|_____|_)_____|_
      |_____|_partial-package-program-name_|
      *
      |<_, _____|
>__AUTHID(_____|_auth-id_|_____|_)_____|_
      |_____|_partial-authid_|
      *
      |<_, _____|
>__CLASS(_____|_integer_|_____|_)__TNO(_____|_integer_|_____|_)_____|_
      |_____|_partial-integer_|_____|_partial-integer_|

```

```

      *
      |<_,_____||
>__LOCATION(____location-name_|_____)_____>
      |<luname>|
      |partial-element|
      |ipaddr|
      |partial-ipaddr|

      *
      |<_,_____||
>__USERID(____user-id_|_____)_____>
      |partial-userid|

      *
      |<_,_____||
>__APPLNAME(____application-name_|_____)_____>
      |partial-application-name_|

      *
      |<_,_____||
>__WRKSTN(____workstation-name_|_____)_____>
      |partial-workstation-name_|

      *
      |<_,_____||
>__CONNID(____connection-role-id_|_____)_____>
      |partial-connection-name_|

      *
      |<_,_____||
>__CORRID(____correlation-role-id_|_____)_____>
      |partial-correlation-name_|

      *
      |<_,_____||
>__ROLE(____correlation-role_|_____)_____>
      |partial-correlation-role-id_| |_filtering block_|

      *
      |<_,_____||
>__IFCID(____ifcid_|_____)_BUFSIZE_(____k_bytes_|_____)_____>
      |_____||
      |<_,_____||
>__TDATA(____CORRELATION_|_____)_____>
      |_TRACE_|
      |_CPU_|
      |_DISTRIBUTED_|

```

filtering block:

```

      <_,_____||
>__XPLAN(____plan-name_|_____)__XPKGLOC(____package-location_|_____)____>
      |_partial-plan-name_| |_partial-pkge-location_|

      <_,_____||
>__XPKGCOL(____package-collection-id_|_____)_____>
      |_partial-package-collection-id_|

      <_,_____||
>__XPKGPROG(____package-program-name_|_____)_____>

```

```

      |__partial-package-program-name__|
      <_,_____>
>__XAUTHID(____authorization-id_____|_____)____>
      |__partial-authorization-id_____|
      <_,_____>
>__XLOC(____location-name_|_____)XUSERID(____userid_|_____)____>
      |__partial-location-name_|_____|__partial-userid_|_____|
      |__<luname>_____|
      |__partial <luname>_____|
      |__ipaddr_____|
      |__partial-ipaddr_____|
      <_,_____>
>__XAPPNAME(____application-name_|_____)____>
      |__partial-application-name_|_____|
      <_,_____>
>__XWRKSTN(____workstation-name_|_____)____>
      |__partial-workstation-name_|_____|
      <_,_____>
>__XCONNID(____connection-role-id_|_____)____>
      |__partial-connection-name_|_____|
      <_,_____>
>__XCORRID(____correlation-role-id_|_____)____>
      |__partial-correlation-name_|_____|
      <_,_____>
>__XROLE(____correlation-role_____|_____)____>
      |__partial-correlation-role-id_|_____|

```

STOP

```

      <_,_____>
>>__/STOP__SUBSYS____subsystem-name_|____><
      |__SUBSYS__ALL_____|

```

STOP admtproc

```

>>__STOP____admtproc____><

```

-STOP DATABASE

```

      <_,_____>
>>__STOP DATABASE_(____database-name_|_____)____>
      |__*_____|
      |__dbname1:dbname2_____|
      |__dbname*_____|
      |__*dbname_____|
      |__*dbname*_____|
      |__*dbstring1*dbstring2*_____|
>_____>
      |__SPACENAM(____space-name_|_____)_____|
      |__*_____|
      |__spacename1:spacename2_____|
      |__spacename*_____|
      |__*spacename_____|
      |__*spacename*_____|
      |__PART(____integer_____|_____)_____|
      |__int1:int2_____|

```

```

> _____|_ *spacestring1*spacestring2*_|
> _____><
|_CLONE_| |_AT(COMMIT)_|

```

-STOP DB2

```

>>__STOP DB2__|_MODE(QUIESCE)_|_CASTOUT(YES)_|_____><
|_MODE(FORCE)_||_CASTOUT(NO)_|

```

-STOP DDF

```

>>__STOP DDF__|_MODE(QUIESCE)_____><
|_MODE(FORCE)_____|
|_MODE(SUSPEND)_ _CANCEL(n)_ _||
|_WAIT(n)_||

```

-STOP FUNCTION SPECIFIC

```

>>__STOP FUNCTION SPECIFIC_____>
|_(*.*)_____|
>_|_____>
|_<_,_____||
|_(_ _schema.specific-function-name_ _)_||
|_schema.partial-name*_____||
>_|_____><
|_ACTION_(_|_QUEUE_|_)|_|_SCOPE_(_|_LOCAL_|_)|
|_REJECT_|_)|_GROUP_|

```

STOP irlmproc

```

>>__STOP__irlmproc_____>

```

-STOP PROCEDURE

```

>>__STOP PROCEDURE__|_(*.*)_____>
|_<_,_____||
|_(_ _schema.procedure-name_ _)_||
|_schema.partial-name*_____||
|_procedure-name_____||
|_partial-name*_____||
>_|_____><
|_ACTION_(_|_QUEUE_|_)|_|_SCOPE_(_|_LOCAL_|_)|
|_REJECT_|_)|_GROUP_|

```

-STOP PROFILE

```

>>__STOP PROFILE_____><

```

-STOP RLIMIT

```
>>__STOP RLIMIT_____><
```

-STOP TRACE

```
>>__STOP TRACE__( _PERFM_ )_____>
      | _ACCTG_ | | | _LOCAL_ | |
      | _STAT_  | | | _SCOPE_( _ | _ ) |
      | _AUDIT_  | | | _GROUP_ |
      | _MONITOR_|
      | _*_____ |
> _ | _destination block_ | | _constraint block_ | | |
> _____>
<
  | _RMID_ | | _COMMENT(string)_ |
```

destination block:

```
>__DEST( _<_, _____> | _ ) _____>
      | _GTF_____ |
      | _SMF_____ |
      | _SRV_____ |
      | _OPn_____ |
```

constraint block:

```
>__PLAN( _<_, _____> | _ ) _PKGLOC( _<_, _____> | _ ) _>
      | _plan-name_ | | | _package-location_ |
      | _partial-plan-name_ | | | _partial-package-location_ |
>__PKGCOL( _<_, _____> | _ ) _____>
      | _package-collection-id_ |
      | _partial-package-collection-id_ |
>__PKGPROG( _<_, _____> | _ ) _____>
      | _package-program-name_ |
      | _partial-package-program-name_ |
>__AUTHID( _<_, _____> | _ ) _____>
      | _auth-id_ |
      | _partial-authid_ |
>__CLASS( _<_, _____> | _ ) _TNO( _<_, _____> | _ ) _____>
      | _integer_ |
      | _integer_ |
>__LOCATION( _<_, _____> | _ ) _____>
      | _location-name_ |
      | _<luname>_____ |
      | _partial-element_ |
      | _ipaddr_____ |
      | _partial-ipaddr_ |
      | _*_____ |
```

```

>__XPLAN(____<_,____>____<_,____>____>
|_partial-plan-name_|_____|_partial-pkge-location_|____>
____<_,____>____<_,____>____>
>__XPKGCOL(____package-collection-id_____|____>
|_partial-package-collection-id_|____>
____<_,____>____<_,____>____>
>__XPKGPROG(____package-program-name_____|____>
|_partial-package-program-name_|____>
____<_,____>____<_,____>____>
>__XAUTHID(____authorization-id_____|____>
|_partial-authorization-id_|____>
____<_,____>____<_,____>____>
>__XLOC(____location-name_|____)XUSERID_(____userid_|____)____>
|_partial-location-name_|_____|_partial-userid_|____>
|_<luname>_|____>
|_partial <luname>_|____>
|_ipaddr_|____>
|_partial-ipaddr_|____>
____<_,____>____<_,____>____>
>__XAPPNAME(____application-name_|____)____>
|_partial-application-name_|____>
____<_,____>____<_,____>____>
>__XWRKSTN(____workstation-name_|____)____>

```



```
>>__TERM UTILITY__(utility-id_____)_____  
|partial-utility-id*|  
|*_____||
```

```
>>__/TRACE__SET__ON_____|_OFF_|_____ALL____|>  
      |TABLE|SUBS|_|  
>____NOLOG_____|<  
    |_OPTION_|LOG_____|
```

```
>>__TRACE CT,__WTRSTART=parmlibmem_|____|____><  
                                     |__,NOWRAP_|  
__WTRSTOP=jobname_____  
__ON,__COMP=iirlmmn_____|_____  
                                |__,SUB=( __DBM__ )_|  
                                |_____|  
                                |__EXP_|  
                                |__INT_|  
                                |__SLM_|  
                                |__XCF_|  
                                |__XIT_|  
__OFF_____
```

SQL Control Statements

SQL Control Statement

```
>> __assignment-statement__ ><
|_CALL statement_|
|_CASE statement_|
|_compund-statement_|
|_GET DIAGNOSTICS stmt_|
|_case-statement_|
|_compound-statement_|
|_if-statement_|
|_loop-statement_|
|_repeat-statement_|
|_while-statement_|
```

Assignment

```
>> __SET__ __SQL-parameter-name__ = __expression__ ><
|_label:_| |__SQL-variable-name__| |__NULL__|
```

CALL

```
>> __CALL__ __procedure-name__ >
> __ ><
|_ ( __ ) _|
|
| < _ , __ |
| __SQL-variable-name__ | _|
|
| __SQL-parameter-name__ |
| __constant__ |
| __NULL__ |
| __special-register__ |
| __TABLE__ __transition-table-name__ |
```

CASE

```
> __CASE__ __searched-case-statement-when-clause__ >
| __simple-case-statement-when-clause__ |
> __END CASE__ >
|
| < __ |
| __ELSE__ __SQL-procedure-statement__ ; _| |
searched-case-statement-when-clause:
<
|
| < __ |
> __WHEN__ __search-condition__ THEN __SQL-procedure-statement__ ; _| | >
simple-case-statement-when-clause:
> __expression__ >
<
|
| < __ |
> __WHEN__ __expression__ THEN __SQL-procedure-statement__ ; _| | >
```

Compound

```
>> __NOT ATOMIC__
>> __BEGIN__ | __ | >
|_label:_|
> >
```

```

| <_____ |
| _____SQL-variable-declaration_____;_|_ |
| _____condition-declaration_____|
>_____>

| <_____ |
| _____DECLARE-CURSOR-statement_____;_|_ |
| _____SQL-procedure-statement_____;_|_ |
| <_____ |
| _____handler-declaration_____;_|_ |
>_END_____><
|_label_|

SQL-variable-declaration:
>>_DECLARE_____>
|_<_,_____ |_DEFAULT NULL_____ |
>_SQL-variable-name_|_data-type_|______><
|_ |_DEFAULT_constant_|
|_RESULT_SET_LOCATOR VARYING_____ |
|_TABLE LIKE_table-name_AS_LOCATOR_____ |
condition-declaration:
>>_DECLARE_condition-name_CONDITION_FOR_string-constant_____><
|_SQLSTATE_____ |
|_VALUE_|

return-codes-declaration:
|_DEFAULT '00000'_____ |
>>_DECLARE_SQLSTATE_CHAR(5)_|_ |_____><
|_ |_DEFAULT_constant_|
|_DEFAULT 0_____ |
|_SQLCODE_INTEGER_|_ |_____ |
|_DEFAULT_constant_____ |

handler-declaration:
>>_DECLARE_CONTINUE_HANDLER_FOR_____>
|_EXIT_____ |
>_specific-condition-value_____SQL-procedure-statement_____><
|_general-condition-value_|
specific-condition-value:
|_<_,_____ |
|_VALUE_|
>>_SQLSTATE_|_ |_string_|_____><
|_condition-name_|
general-condition-value:
>>_SQLEXCEPTION_____><
|_SQLWARNING_____ |
|_NOT FOUND_____ |

IF
|_<_____ |
>>_IF_search-condition_THEN_____SQL-procedure-statement_____;_|_>
|_<_____ |
>_____ |_____>
|_ |_<_____ |
|_ELSEIF_search-condition_THEN_____SQL-procedure-statement_____;_|_ |
>_____END IF_____><
|_<_____ |

```

```
|_ELSE____SQL-procedure-statement____;_|_|
```

GET DIAGNOSTICS

```
>>__GET DIAGNOSTICS__SQL-variable-name__=__ROW_COUNT____><
```

GOTO

```
>>__GOTO__label____><
```

LEAVE

```
>>__LEAVE__label____><
```

LOOP

```
<_____  
>>____LOOP____SQL-procedure-statement____;_|__END LOOP____>  
|_label:_|  
>_____  
|_label_|><
```

REPEAT

```
<_____  
>>____REPEAT____SQL-procedure-statement____;_|____>  
|_label:_|  
>__UNTIL__search-condition__END REPEAT____><  
|_label_|
```

WHILE

```
>>____WHILE__search-condition__DO____>  
|_label:_|  
  
<_____  
>____SQL-procedure-statement____;_|__END WHILE____><  
|_label_|
```

SQL Procedure statement

```
>>__assignment-statement____><  
|_case-statement_____|  
|_get-diagnostics-statement_____|  
|_goto-statement_____|  
|_if-statement_____|  
|_leave-statement_____|  
|_loop-statement_____|  
|_repeat-statement_____|  
|_while-statement_____|  
|_nested-SQL-statement_____|
```

Plan Table

Contains information about access paths for queries that were explained or hints.

Column name	Description
QUERYNO	<p>A number intended to identify the statement being explained. For a row produced by an EXPLAIN statement, specify the number in the QUERYNO clause. For a row produced by non-EXPLAIN statements, specify the number using the QUERYNO clause, which is an optional part of the SELECT, INSERT, UPDATE, and DELETE statement syntax. Otherwise, DB2 assigns a number based on the line number of the SQL statement in the source program.</p> <p>FETCH statements do not each have an individual QUERYNO assigned to them. Instead, DB2 uses the QUERYNO of the DECLARE CURSOR statement for all corresponding FETCH statements for that cursor.</p> <p>When the values of QUERYNO are based on the statement number in the source program, values greater than 32,767 are reported as 0. Hence, in a very long program, the value is not guaranteed to be unique. If QUERYNO is not unique, use the value of TIMESTAMP, which is always unique.</p>
QBLOCKNO	A number that identifies each query block within a query. The value of the numbers are not in any particular order, nor are they necessarily consecutive.
APPLNAME	The name of the application plan for the row. Applies only to embedded EXPLAIN statements executed from a plan or to statements explained when binding a plan. Blank if not applicable.
PROGNAME	The name of the program or package containing the statement being explained. For statements explained dynamically, such as with QMF or SPUFI, the associated plan/package is listed. Blank if not applicable.
PLANNO	The number of the step in which the query indicated in QBLOCKNO was processed. This column indicates the order in which the steps were executed.
METHOD	<p>A number (0, 1, 2, 3, or 4) that indicates the join method used for the step:</p> <p>0 = First table accessed, continuation of previous table accessed, or not used.</p> <p>1 = Nested loop join. For each row of the present composite table, matching rows of a new table are found and joined.</p> <p>2 = Merge scan join. The present composite table and the new tables are scanned in the order of the join columns, and matching rows are joined.</p> <p>3 = Sorts needed by ORDER BY, GROUP BY, SELECT DISTINCT, UNION, a quantified predicate, or an IN predicate. This step does not access a new table.</p> <p>4 = Hybrid join. The current composite table is scanned in the order of the join-column rows of the new table. The new table is accessed using list prefetch.</p>
CREATOR	The creator of the new table accessed in this step; blank if METHOD is 3.

TNAME	The name of a table, materialized query table, created or declared temporary table, materialized view, or materialized table expression. The value is blank if METHOD is 3. The column can also contain the name of a table in the form DSNWFQB(<i>qblockno</i>). DSNWFQB(<i>qblockno</i>) is used to represent the intermediate result of a UNION ALL, an INTERSECT ALL, an EXCEPT ALL, or an outer join that is materialized. If a view is merged, the name of the view does not appear. UDSN_BIM_TBL(<i>qblockno</i>) is used to represent the work file of a star join dimension table.
TABNO	IBM use only.
ACCESSTYPE	The method of accessing the new table: DI = By an intersection of multiple DOCID lists to return the final DOCID list. DU = By a union of multiple DOCID lists to return the final DOCID list. DX = By an XML index scan of the index named in ACCESSNAME to return a DOCID list. E = By direct row using a row change timestamp column. I = By an index (identified in ACCESSCREATOR and ACCESSNAME). I1 = By a one-fetch index scan. M = By a multiple index scan (followed by MX, MI, or MU). MX = By an index scan on the index named in ACCESSNAME. When the access method MX follows the access method DX, DI, or DU, the table is accessed by the DOCID index using the DOCID list returned by DX, DI, or DU. MI = By an intersection of multiple indexes. MU = By a union of multiple indexes. N = By an index scan when the matching predicate contains the IN keyword. P = By a dynamic index ANDing scan. R = By a table space scan. RW = By a work file scan of the result of a materialized user-defined table function. V = By buffers for an INSERT statement within a SELECT. Blank = Not applicable to the current row.
MATCHCOLS	For ACCESSTYPE I, I1, N, MX, or DX, the number of index keys used in an index scan; otherwise, 0.
ACCESSCREATOR	For ACCESSTYPE I, I1, N, MX, or DX, the creator of the index; otherwise, blank.
ACCESSNAME	For ACCESSTYPE I, I1, N, MX, or DX, the name of the index; for ACCESSTYPE P, DSNPJW(<i>mixopseqno</i>) is the starting pair-wise join leg in MIXOPSEQNO; otherwise, blank.
INDEXONLY	Whether access to an index alone is enough to carry out the step, or whether data, too, must be accessed. Y = Yes; N = No.
SORTN_UNIQ	Whether the new table is sorted to remove duplicate rows. Y = Yes; N = No.
SORTN_JOIN	Whether the new table is sorted for join method 2 or 4. Y = Yes; N = No.
SORTN_ORDERBY	Whether the new table is sorted for ORDER BY. Y = Yes; N = No.
SORTN_GROUPBY	Whether the new table is sorted for GROUP BY. Y = Yes; N = No.
SORTC_UNIQ	Whether the composite table is sorted to remove duplicate rows. Y = Yes; N = No.

SORTC_JOIN	Whether the composite table is sorted for join method 1, 2, or 4. Y = Yes; N = No.
SORTC_ORDERBY	Whether the composite table is sorted for an ORDER BY clause or a quantified predicate. Y = Yes; N = No.
SORTC_GROUPBY	Whether the composite table is sorted for a GROUP BY clause. Y = Yes; N = No.
TSLOCKMODE	<p>An indication of the mode of lock to be acquired on the new table or its table space or table space partitions. If the isolation can be determined at bind time, the values are:</p> <p>IS = Intent share lock IX = Intent exclusive lock S = Share lock U = Update lock X = Exclusive lock SIX = Share with intent exclusive lock N = UR isolation; no lock</p> <p>If the isolation cannot be determined at bind time, the lock mode determined by the isolation at runtime is shown by the following values.</p> <p>NS = For UR isolation, no lock; for CS, RS, or RR, an S lock. NIS = For UR isolation, no lock; for CS, RS, or RR, an IS lock. NSS = For UR isolation, no lock; for CS or RS, an IS lock; for RR, an S lock. SS = For UR, CS, or RS isolation, an IS lock; for RR, an S lock.</p> <p>The data in this column is right-justified. For example, IX appears as a blank followed by I followed by X. If the column contains a blank, no lock is acquired.</p> <p>If the access method in the ACESSTYPE column is DX, DI, or DU, no latches are acquired on the XML index page, and no lock is acquired on the new base table data page or row, nor on the XML table and the corresponding table spaces. The value of TSLOCKMODE is blank in this case.</p>
TIMESTAMP	Usually, the time at which the row is processed, to the last 0.01 second. If necessary, DB2 adds 0.01 second to the value to ensure that rows for two successive queries have different values.
REMARKS	A field into which you can insert any character string of 254 or fewer characters.
PREFETCH	<p>Whether data pages are to be read in advance by prefetch:</p> <p>D = Optimizer expects dynamic prefetch S = Pure sequential prefetch L = Prefetch through a page list Blank = Unknown at bind time or no prefetch</p>
COLUMN_FN_EVAL	<p>When a SQL aggregate function is evaluated:</p> <p>R = While the data is being read from the table or index S = While performing a sort to satisfy a GROUP BY clause Blank = After data retrieval after any sorts</p>
MIXOPSEQ	<p>The sequence number of a step in a multiple index operation:</p> <p>1, 2, . . . n = For the steps of the multiple index procedure (ACESSTYPE is MX, MI, MU, DX, DI, or DU) 0 = For any other rows</p>

VERSION	The version identifier for the package. Applies only to an embedded EXPLAIN statement executed from a package or to a statement that is explained when binding a package. Blank if not applicable.
COLLID	The collection ID for the package. Applies only to an embedded EXPLAIN statement executed from a package or to a statement that is explained when binding a package. Blank if not applicable. The value DSDYNAMICSQLCACHE indicates that the row is for a cached statement.
ACCESS_DEGREE	The number of parallel tasks or operations activated by a query. This value is determined at bind time; the actual number of parallel operations used at execution time could differ. The column contains 0 if there is a host variable.
ACCESS_PGROUP_ID	The identifier of the parallel group for accessing the new table. A parallel group is a set of consecutive operations, executed in parallel, that have the same number of parallel tasks. This value is determined at bind time; it could change at execution time.
JOIN_DEGREE	The number of parallel operations or tasks used in joining the composite table with the new table. This value is determined at bind time and can be 0 if there is a host variable. The actual number of parallel operations or tasks used at execution time could be different.
JOIN_PGROUP_ID	The identifier of the parallel group for joining the composite table with the new table. This value is determined at bind time; it could change at execution time.
SORTC_PGROUP_ID	The parallel group identifier for the parallel sort of the composite table.
SORTN_PGROUP_ID	The parallel group identifier for the parallel sort of the new table.
PARALLELISM_MODE	The kind of parallelism, if any, that is used at bind time: I = Query I/O parallelism C = Query CP parallelism X = Sysplex query parallelism
MERGE_JOIN_COLS	The number of columns that are joined during a merge scan join (Method = 2).
CORRELATION_NAME	The correlation name of a table or view that is specified in the statement. If there is no correlation name, the column is blank.
PAGE_RANGE	Whether the table qualifies for page range screening, so that plans scan only the partitions that are needed. Y = Yes; blank = No.
JOIN_TYPE	The type of an outer join: F = Full outer join L = Left outer join S = Star join Blank = Inner join or no join RIGHT OUTER JOIN converts to a LEFT OUTER JOIN when you use it, so that JOIN_TYPE contains L.
GROUP_MEMBER	The member name of the DB2 that executed EXPLAIN. The column is blank if the DB2 subsystem was not in a data sharing environment when EXPLAIN was executed.
IBM_SERVICE_DATA	IBM use only.

WHEN_OPTIMIZE	<p>When the access path was determined:</p> <p>blank = At bind time, using a default filter factor for any host variables, parameter markers, or special registers.</p> <p>B = At bind time, using a default filter factor for any host variables, parameter markers, or special registers; however, the statement is reoptimized at runtime using input variable values for input host variables, parameter markers, or special registers. The bind option REOPT(ALWYAS), REOPT(ONCE), or REOPT(AUTO), must be specified for reoptimization to occur.</p> <p>R = At runtime, using input variables for any host variables, parameter markers, or special registers. The bind option REOPT(ALWAYS), REOPT(ONCE), or REOPT(AUTO) must be specified for this to occur.</p>
QBLOCK_TYPE	<p>For each query block, the type of SQL operation performed. For the outermost query, the column identifies the statement type.</p> <p>Possible values:</p> <p>SELECT = SELECT</p> <p>INSERT = INSERT</p> <p>UPDATE = UPDATE</p> <p>DELETE = DELETE</p> <p>SELUPD = SELECT with FOR UPDATE OF</p> <p>DELCUR = DELETE WHERE CURRENT OF CURSOR</p> <p>UPDCUR = UPDATE WHERE CURRENT OF CURSOR</p> <p>CORSUB = Correlated subquery</p> <p>NCOSUB = Noncorrelated subquery</p> <p>TABLEX = Table expression</p> <p>TRIGGR = WHEN clause on CREATE TRIGGER</p> <p>UNION = UNION</p> <p>UNIONA = UNION ALL</p> <p>INTERS = INTERSECT</p> <p>INTERA = INTERSECT ALL</p> <p>EXCEPT = EXCEPT</p> <p>EXCEPTA = EXCEPT ALL</p>
BIND_TIME	<p>For non-cached static SQL statements, the time at which the plan or package for the statement or query block was bound. For cached static and dynamic statements, the time at which the statement entered the cache. For non-cached static, cached static, and cached dynamic statements, this is a full-precision timestamp value. For non-cached dynamic SQL statements, this is the value contained in the TIMESTAMP column of PLAN_TABLE appended by four zeroes.</p>
OPTHINT	<p>A string that you use to identify this row as an optimization hint for DB2. DB2 uses this row as input when choosing an access path.</p>
HINT_USED	<p>If DB2 used one of your optimization hints, it puts the identifier for that hint (the value in OPTHINT) in this column.</p>
PRIMARY_ACCESSTYPE	<p>Indicates whether direct row access will be attempted first:</p> <p>D = DB2 will try to use direct row access. If it cannot use direct row access at runtime, it uses the access path described in the ACCESSTYPE column of PLAN_TABLE.</p> <p>T = The base table or result file is materialized into a work file, and the work file is accessed via sparse index access. If a base table is involved, ACCESSTYPE indicates how the base table is accessed.</p> <p>Blank = DB2 will not try to use direct row access.</p>

PARENT_QBLOCK	Number that indicates the QBLOCKNO of the parent query.
TABLE_TYPE	<p>The type of new table:</p> <p>B = Buffers for SELECT from INSERT, SELECT from UPDATE, SELECT from MERGE, or SELECT from DELETE statement.</p> <p>C = Common table expression</p> <p>F = Table function</p> <p>M = Materialized query table</p> <p>Q = Temporary intermediate result table (not materialized). For the name of the view or nested table expression, a value of Q indicates that the materialization was virtual and not actual. Materialization can be virtual when the view or nested table expression definition contains a UNION ALL that is not distributed.</p> <p>R = Recursive common table expression</p> <p>S = Subquery (correlated or non-correlated)</p> <p>T = Table</p> <p>W = Work file</p> <p>The value of the column is null if the query uses GROUP BY, ORDER BY, or DISTINCT, which requires an implicit sort.</p>
TABLE_ENCODE	<p>The encoding scheme of the table. If the table has a single CCSID set, possible values are:</p> <p>A = ASCII</p> <p>E = EBCDIC</p> <p>U = Unicode</p> <p>M = The table contains multiple CCSID sets.</p>
TABLE_SCCSID	The SBCS CCSID value of the table. If column TABLE_ENCODE is M, the value is 0.
TABLE_MCCSID	The mixed CCSID value of the table. If column TABLE_ENCODE is M, the value is 0.
TABLE_DCCSID	The DBCS CCSID value of the table. If column TABLE_ENCODE is M, the value is 0.
ROUTINE_ID	IBM use only.
CTREF	If the referenced table is a common table expression, the value is the top-level query block number.
STMTTOKEN	A user-specified statement token.
PARENT_PLANNO	Corresponds to the plan number in the parent query block where a correlated subquery is involved. Or, for non-correlated subqueries, corresponds to the plan number in the parent query block that represents the work file for the subquery.

DSN_PREDICAT_TABLE

Contains information about all the predicates in a query.

Column name	Description
QUERYNO	A number used to help identify the query being explained. It is not a unique identifier. Using a negative number will cause problems. The possible sources are: <ul style="list-style-type: none"> • The statement line number in the program • The QUERYNO clause • The EXPLAIN statement • The EDM unique token in the statement cache
QBLOCKNO	A number used to identify each query block within a query.
APPLNAME	The application plan name.
PROGNAME	The program name (binding an application) or the package name (binding a package).
PREDNO	A number used to identify a predicate within a query.
TYPE	A string used to indicate the type or the operation of the predicate. The possible values are: AND OR EQUAL RANGE BETWEEN IN LIKE NOT LIKE EXISTS NOTEXIST SUBQUERY HAVING OTHERS
LEFT_HAND_SIDE	If the left-hand side (LHS) of the predicate is a table column (LHS_TABNO > 0, this column indicates the column name. Other possible values are: VALUE COLEXP NONCOLEXP CORSUB NONCORSUB SUBQUERY EXPRESSION Blanks
LEFT_HAND_PNO	
LHS_TABNO	If the LHS of the predicate is a table column, this column indicates a number that uniquely identifies the corresponding table reference within a query.
LHS_QBNO	If the LHS of the predicate is a table column, this column indicates a number that uniquely identifies the corresponding table reference within a query.
RIGHT_HAND_SIDE	If the right-hand side (RHS) of the predicate is a table column

	(RHS_TABNO > 0), this column indicates the column name. Other possible values are: VALUE COLEXP NONCOLEXP CORSUB NONCORSUB SUBQUERY EXPRESSION Blanks
RIGHT_HAND_PNO	If the predicate is a compound predicate (AND/OR), this column indicates the second child predicate. However, this column is not reliable when the predicate tree consolidation happens.
RHS_TABNO	If the RHS of the predicate is a table column, this column indicates a number that uniquely identifies the corresponding table reference within a query.
RHS_QBNO	If the RHS of the predicate is a subquery, this column indicates a number that uniquely identifies the corresponding query block within a query.
FILTER_FACTOR	The estimated filter factor.
BOOLEAN_TERM	Whether this predicate can be used to determine the truth value of the whole WHERE clause.
SEARCHARG	Whether this predicate can be processed by data manager (DM) stage 1. If it cannot, the relational data service (RDS) stage 2 needs to be used to take care of it, which is more costly.
AFTER_JOIN	Indicates the predicate evaluation phase: A = After join D = During join Blank = Not applicable
ADDED_PRED	Whether the predicate is generated by transitive closure, which means DB2 can generate additional predicates to provide more information for access path selection, when the set of predicates that belong to a query logically imply other predicates.
REDUNDANT_PRED	Whether the predicate is a redundant predicate, which means evaluation of other predicates in the query already determines the result that the predicate provides.
DIRECT_ACCESS	Whether the predicate is direct access, which means one can navigate directly to the row through ROWID.
KEYFIELD	Whether the predicate includes the index key column of the involved table.
EXPLAIN_TIME	The EXPLAIN timestamp.
CATEGORY	IBM internal use only.
CATEGORY_B	IBM internal use only.
PRED_ENCODE	IBM internal use only.
PRED_CCSID	IBM internal use only.
PRED_MCCSID	IBM internal use only.
MARKER	Whether the predicate includes host variables, parameter markers, or special registers.
PARENT_PNO	The parent predicate number. If this predicate is a root predicate within a query block, this column is 0.
NEGATION	Whether the predicate is negated via NOT.
LITERALS	The literal value or literal values separated by colon symbols.
CLAUSE	The clause where the predicate exists:

	HAVING = HAVING clause ON = ON clause WHERE = WHERE clause
GROUP_MEMBER	The member name of the DB2 that executed EXPLAIN. The column is blank if the DB2 subsystem was not in a data sharing environment when EXPLAIN was executed.

DSN_STRUCT_TABLE

Contains information about the query blocks in a query.

Column name	Description
QUERYNO	A number used to help identify the query being explained. It is not a unique identifier. Using a negative number will cause problems. The possible sources are: <ul style="list-style-type: none"> • The statement line number in the program • The QUERYNO clause • The EXPLAIN statement • The EDM unique token in the statement cache
QBLOCKNO	A number used to identify each query block within a query.
APPLNAME	The application plan name.
PROGNAME	The program name (binding an application) or the package name (binding a package).
PARENT	The parent query block number of the current query block in the structure of SQL text; this is the same as the PARENT_QBLOCKNO in the PLAN_TABLE.
ROWCOUNT	The estimated number of rows returned by RDS (query cardinality).
ATOPEN	Whether the query block is moved up for do-at-open processing. The value is Y if done-at-open or N otherwise.
CONTEXT	This column indicates the context of the current query block. The possible values are: TOP LEVEL UNION UNION ALL PREDICATE TABLE EXP UNKNOWN
ORDERNO	This column is currently not used.
DOATOPEN_PARENT	The parent query block number of the current query block. Do-at-open parent if the query block is done-at-open, this value may differ from the PARENT_QBLOCKNO in the PLAN_TABLE.
QBLOCK_TYPE	The type of the current query block: SELECT INSERT UPDATE DELETE SELUPD DELCUR UPDCUR CORSUB NCOSUB TABLEX TRIGGR

	UNION UNIONA CTE This column is equivalent to the QBLOCK_TYPE column in PLAN_TABLE, except for CTE.
EXPLAIN_TIME	The EXPLAIN timestamp.
QUERY_STAGE	IBM internal use only.
GROUP_MEMBER	The member name of the DB2 subsystem that executed EXPLAIN. The column is blank if the DB2 subsystem was not in a data sharing environment when EXPLAIN was executed.

DSN_PGROUP_TABLE

Contains information about the parallel groups in a query.

Column name	Description
QUERYNO	A number used to help identify the query being explained. It is not a unique identifier. Using a negative number will cause problems. The possible sources are: <ul style="list-style-type: none"> • The statement line number in the program • The QUERYNO clause • The EXPLAIN statement • The EDM unique token in the statement cache
QBLOCKNO	A number used to identify each query block within a query.
PLANNAME	The application plan name.
COLLID	The collection ID for the package.
PROGNAME	The program name (binding an application) or the package name (binding a package).
EXPLAIN_TIME	The explain timestamp.
VERSION	The version identifier for the package.
GROUPID	The parallel group identifier within the current query block.
FIRSTPLAN	The plan number of the first contributing mini-plan associated within this parallel group.
LASTPLAN	The plan number of the last mini-plan associated with this parallel group.
CPUCOST	The estimated CPU cost of this parallel group in milliseconds.
IO COST	The estimated total I/O cost of this parallel group in milliseconds.
BESTTIME	The estimated elapsed time for each parallel task for this parallel group.
DEGREE	The degree of parallelism for this parallel group determined at bind time. The maximum parallelism degree if the table space is large is 255; otherwise, 64.
MODE	The parallel mode: I = I/O parallelism C = CPU parallelism X = Multiple CPU Sysplex parallelism (highest level) N = No parallelism
REASON	The reason for downgrading parallelism mode.
LOCALCPU	The number of CPUs currently online when preparing the query.
TOTALCPU	The total number of CPUs in Sysplex. LOCALCPU and TOTALCPU are different only for the DB2 coordinator in a Sysplex.
FIRSTBASE	The table number of the table that on which partitioning is performed.
LARGETS	Value is Y if the table space is large in this group.

PARTKIND	The partitioning type: L = Logical partitioning P = Physical partitioning
GROUPTYPE	Indicates what operations this parallel group contains: table access, join, or sort (A, AJ, or AJS).
ORDER	The ordering requirement of this parallel group: N = No order. Results need no ordering. T = Natural order. Ordering is required but results already ordered if accessed via index. K = Key order. Ordering achieved by sort. Results ordered by sort key. This value applies only to parallel sort.
STYLE	The input/output format style of this parallel group. Blank for I/O parallelism. For other modes: RIRO = Records IN, Records OUT WIRO = Work file IN, Records OUT WIWO = Work file IN, Work file OUT
RANGEKIND	The range type: K = Key range P = Page range
NKEYCOLS	The number of interesting key columns — that is, the number of columns that will participate in the key operation for this parallel group.
LOWBOUND	The low bound of the parallel group.
HIGHBOUND	The high bound of the parallel group.
LOWKEY	The low key of range if partitioned by key range.
HIGHKEY	The high key of range if partitioned by key range.
FIRSTPAGE	The first page in range if partitioned by page range.
LASTPAGE	The last page in range if partitioned by page range.
GROUP_MEMBER	IBM internal use only.
HOST_REASON	IBM internal use only.
PARA_TYPE	IBM internal use only.
PART_INNER	IBM internal use only.
GRNU_KEYRNG	IBM internal use only.
OPEN_KEYRNG	IBM internal use only.

DSN_PTASK_TABLE

Contains information about the parallel tasks in a query.

Column name	Description
QUERYNO	A number used to help identify the query being explained. It is not a unique identifier. Using a negative number will cause problems. The possible sources are: <ul style="list-style-type: none"> The statement line number in the program The QUERYNO clause The EXPLAIN statement The EDM unique token in the statement cache
QBLOCKNO	A number used to identify each query block within a query.
APPLNAME	The application plan name.
PROGNAME	The program name (binding an application) or the package name (binding a package).
LPTNO	The parallel task number.
KEYCOLID	The key columns ID (KEY range only).
DPSI	Indicates whether a data partition secondary index (DPSI) is used.

LPTLOKEY	The low key value for this key column for this parallel task (KEY range only).
LPTHKEY	The high key value for this key column for this parallel task (KEY range only).
LPTLOPAG	The low page information if partitioned by page range.
LPTLHIPAG	The high page information if partitioned by page range.
LPTLOPG#	The lower bound page number for this parallel task (page range or DPSI enabled only).
LPTHIPG#	The upper bound page number for this parallel task (page range or DPSI enabled only).
LPTLOPT#	The lower bound partition number for this parallel task (page range or DPSI enabled only).
KEYCOLDT	The data type for this key column (KEY range only).
KEYCOLPREC	The precision/length for this key column (KEY range only).
KEYCOLSCAL	The scale for this key column (KEY range with decimal data type only).
EXPLAIN_TIME	The EXPLAIN timestamp.
GROUP_MEMBER	The member name of the DB2 that executed EXPLAIN. The column is blank if the DB2 subsystem was not in a data sharing environment when EXPLAIN was executed.

DSN_FILTER_TABLE

Contains information about how predicates are used during query processing.

Column name	Description
QUERYNO	A number used to help identify the query being explained. It is not a unique identifier. Using a negative number will cause problems. The possible sources are: The statement line number in the program The QUERYNO clause The EXPLAIN statement The EDM unique token in the statement cache
QBLOCKNO	A number used to identify each query block within a query.
PLANNO	A number used to identify each mini-plan within a query block.
APPLNAME	The application plan name.
PROGNAME	The program name (binding an application) or the package name (binding a package).
COLLID	The collection ID for the package.
ORDERNO	The sequence number of evaluation. Indicates the order in which the predicate is applied within each stage.
PREDNO	A number used to identify a predicate within a query.
STAGE	Indicates at which stage the predicate is evaluated. The possible values are: Matching Screening Stage 1 Stage 2
ORDER_CLASS	IBM internal use only.
EXPLAIN_TIME	The EXPLAIN timestamp.
MIXOPSEQ	IBM internal use only.
REEVAL	IBM internal use only.

GROUP_MEMBER	The member name of the DB2 subsystem that executed EXPLAIN. The column is blank if the DB2 subsystem was not in a data sharing environment when EXPLAIN was executed.
--------------	--

DSN_DETCOST_TABLE

Contains information about detailed cost estimation of the mini-plans in a query.

Column name	Description
QUERYNO	A number used to help identify the query being explained. It is not a unique identifier. Using a negative number will cause problems. The possible sources are: The statement line number in the program The QUERYNO clause The EXPLAIN statement The EDM unique token in the statement cache
QBLOCKNO	A number used to identify each query block within a query.
PLANNO	A number used to identify each mini-plan within a query block.
APPLNAME	The application plan name.
PROGNAME	The program name (binding an application) or the package name (binding a package).
OPENIO	The Do-at-open I/O cost for the non-correlated subquery.
OPENCPU	The Do-at-open CPU cost for the non-correlated subquery.
OPENCOST	The Do-at-open total cost for the non-correlated subquery.
DMIO	IBM internal use only.
DMCPU	IBM internal use only.
DMTOT	IBM internal use only.
SUBQIO	IBM internal use only.
SUBQCOST	IBM internal use only.
BASEIO	IBM internal use only.
BASECPU	IBM internal use only.
BASETOT	IBM internal use only.
ONECOMPROWS	The number of rows qualified after applying local predicates.
IMLEAF	IBM internal use only.
IMIO	IBM internal use only.
IMPREFH	IBM internal use only.
IMMPRED	IBM internal use only.
IMFF	The filter factor of matching predicates only.
IMSRPRED	IBM internal use only.
IMFFADJ	The filter factor of matching and screening predicates.
IMSCANCST	IBM internal use only.
IMREDSORT	IBM internal use only.
IMMERGCST	IBM internal use only.
IMCPU	IBM internal use only.
IMTOT	IBM internal use only.
IMSEQNO	IBM internal use only.
DMPEREFH	IBM internal use only.
DMCLUDIO	IBM internal use only.
DMPREDS	IBM internal use only.
DMSROWS	IBM internal use only.
DMSCANCST	IBM internal use only.

DMROWS	The number of data manager rows returned (after all stage 1 predicates are applied).
DMCOLS	The number of data manager columns.
RDSROWCST	IBM internal use only.
DMPAGECST	IBM internal use only.
DMDATAIO	IBM internal use only.
DMDATACPU	IBM internal use only.
RDSROW	The number of RDS rows returned (after all stage 1 and stage 2 predicates are applied).
SNCOLS	The number of columns as sort input for a new table.
SNROWS	The number of rows as sort input for a new table.
SNRUNS	The number of runs generated for a sort of a new table.
SNMERGES	The number of merges needed during a sort.
SNIOCOST	IBM internal use only.
SNCPUCOST	IBM internal use only.
SNCOST	IBM internal use only.
SNCSANIO	IBM internal use only.
SNSCANCPU	IBM internal use only.
SNCCOLS	The number of columns as sort input for a composite table.
SCROWS	The number of rows as sort input for a composite table.
SCRECSZ	The record size for a composite table.
SCPAGES	The page size for a composite table.
SCRUNS	The number of runs generated during the sort of a composite table.
SCMERGES	The number of merges needed during a sort of a composite table.
SCIOCOST	IBM internal use only.
SCCPUCOST	IBM internal use only.
SCCOST	IBM internal use only.
SCSCANIO	IBM internal use only.
SCSCANCPU	IBM internal use only.
SCSCANCOST	IBM internal use only.
COMPCARD	The total composite cardinality.
COMPIOCOST	IBM internal use only.
COMPCPUCOST	IBM internal use only.
COMPCOST	The total cost.
JOINCOLS	IBM internal use only.
EXPLAIN_TIME	The EXPLAIN timestamp.
GROUP_MEMBER	The member name of the DB2 subsystem that executed EXPLAIN. The column is blank if the DB2 subsystem was not in a data sharing environment when EXPLAIN was executed.

DSN_SORT_TABLE

Contains information about sort operations required for a query.

Column name	Description
QUERYNO	A number used to help identify the query being explained. It is not a unique identifier. Using a negative number will cause problems. The possible sources are: The statement line number in the program The QUERYNO clause The EXPLAIN statement

	The EDM unique token in the statement cache
QBLOCKNO	A number used to identify each query block within a query.
PLANNO	A number used to identify each mini-plan within a query block.
APPLNAME	The application plan name.
PROGNAME	The program name (binding an application) or the package name (binding a package).
COLLID	The collection ID for the package.
SORTC	Indicates the reasons for sort of the composite table, using a bitmap of the following values: G = Group By O = Order By J = Join U = Uniqueness
SORTN	Indicates the reasons for sort of the Composite table. Using a bitmap of the following values: G = Group By O = Order By J = Join U = Uniqueness
SORTNO	The sequence of the sort.
KEYSIZE	The sum of the lengths of the sort keys.
ORDERCLASS	IBM internal use only.
EXPLAIN_TIME	The EXPLAIN timestamp.
GROUP_MEMBER	The member name of the DB2 subsystem that executed EXPLAIN. The column is blank if the DB2 subsystem was not in a data sharing environment when EXPLAIN was executed.

DSN_SORTKEY_TABLE

Contains information about sort keys for all the sorts required by a query.

Column name	Description
QUERYNO	A number used to help identify the query being explained. It is not a unique identifier. Using a negative number will cause problems. The possible sources are: <ul style="list-style-type: none"> The statement line number in the program The QUERYNO clause The EXPLAIN statement The EDM unique token in the statement cache
QBLOCKNO	A number used to identify each query block within a query.
PLANNO	A number used to identify each mini-plan within a query block.
APPLNAME	The application plan name.
PROGNAME	The program name (binding an application) or the package name (binding a package).
COLLID	The collection ID for the package.
SORTNO	The sequence number of the sort.
ORDERNO	The sequence of the sort key.
EXPTYPE	The type of the sort key. The possible values are: COL EXP QRY
TEXT	The sort key text; can be a column name, a scalar subquery, or 'Record ID'.

TABNO	A number that uniquely identifies the corresponding table reference within a query.
COLNO	A number that uniquely identifies the corresponding column within a query. Applicable only when the sort key is a column.
DATATYPE	The data type of the sort key. The possible values are: HEXADECIMAL CHARACTER PACKED FIELD FIXED(31) FIXED(15) DATE TIME VARCHAR PACKED FLD FLOAT TIMESTAMP UNKNOWN DATA TYPE
LENGTH	The length of the sort key.
CCSID	IBM internal use only.
ORDERCLASS	IBM internal use only.
EXPLAIN_TIME	The EXPLAIN timestamp.
GROUP_MEMBER	The member name of the DB2 subsystem that executed EXPLAIN. The column is blank if the DB2 subsystem was not in a data sharing environment when EXPLAIN was executed.

DSN_PGRANGE_TABLE

Contains information about qualified partitions for all page range scans in a query. This information is more detailed than the PAGE_RANGE column of the PLAN_TABLE, and it includes information about when partitions are eliminated even when the query is scanning an index.

Column name	Description
QUERYNO	The query number, a number used to help identify the query being explained. It is not a unique identifier. Using a negative number will cause problems. The possible sources are: <ul style="list-style-type: none"> • The statement line number in the program • The QUERYNO clause • The EXPLAIN statement • The EDM unique token in the statement cache
QBLOCKNO	A number used to identify each query block within a query.
RANGE	The sequence number of the current page range.
FIRSTPART	The starting partition in the current page range.
LASTPART	The ending partition in the current page range.
NUMPARTS	The number of partitions in the current page range.
EXPLAIN_TIME	The EXPLAIN timestamp.
GROUP_MEMBER	The member name of the DB2 subsystem that executed EXPLAIN. The column is blank if the DB2 subsystem was not in a data sharing environment when EXPLAIN was executed.

DSN_VIEWREF_TABLE

Contains information about all the views and materialized query tables used to process a query.

Column name	Description
QUERYNO	A number used to help identify the query being explained. It is not a unique identifier. Using a negative number will cause problems. The possible sources are: <ul style="list-style-type: none"> • The statement line number in the program • QUERYNO clause • The EXPLAIN statement • The EDM unique token in the statement cache
APPLNAME	The application plan name.
PROGNAME	The program name (binding an application) or the package name (binding a package).
VERSION	The version identifier for the package. Applies only to an embedded EXPLAIN statement that is executed from a package or to a statement that is explained when binding a package. Blank if not applicable. The value DSN DYNAMIC SQL CACHE indicates that the row is for a cached statement.
CREATOR	Authorization ID of the owner of the object.
NAME	Name of the object.
TYPE	The type of the object: <ul style="list-style-type: none"> • V = View • R = MQT that has been used to replace the base table for rewrite • M = MQT
MQTUSE	IBM internal use only.
EXPLAIN_TIME	The EXPLAIN timestamp.
GROUP_MEMBER	The member name of the DB2 subsystem that executed EXPLAIN. The column is blank if the DB2 subsystem was not in a data sharing environment when EXPLAIN was executed.

DSN_QUERY_TABLE

Contains information about an SQL statement and displays the statement before and after query transformation in XML.

Column name	Description
QUERYNO	A number used to help identify the query being explained. It is not a unique identifier. Using a negative number will cause problems. The possible sources are: <ul style="list-style-type: none"> • The statement line number in the program • QUERYNO clause • The EXPLAIN statement • The EDM unique token in the statement cache
TYPE	The type of the data in the NODE_DATA column.
QUERY_STAGE	The stage during query transformation when this row is populated.
SEQNO	The sequence number for this row if NODE_DATA exceeds the size of its column.
NODE_DATA	The XML data containing the SQL statement and its query block, table, and column information.

EXPLAIN_TIME	The EXPLAIN timestamp.
QUERY_ROWID	The ROWID of the statement.
GROUP_MEMBER	The member name of the DB2 subsystem that executed EXPLAIN. The column is blank if the DB2 subsystem was not in a data sharing environment when EXPLAIN was executed.
HASHKEY	The hash value of the contents in NODE_DATA.
HASH_PRED	When NODE_DATA contains an SQL statement, this column indicates whether the statement contains a parameter marker literal, a non-parameter marker literal, or no predicates.

DSN_STATEMNT_TABLE

Contains information about queries in the dynamic SQL cache.

Column name	Description
QUERYNO	A number intended to identify the statement being explained. If QUERYNO is not unique, the value of EXPLAIN_TIME is unique.
APPLNAME	The name of the application plan for the row, or blank.
PROGNAME	The name of the program or package containing the statement being explained, or blank.
COLLID	The collection ID for the package. Applies only to an embedded EXPLAIN statement executed from a package or to a statement that is being explained when binding a package. Blank is not applicable. The value DSNDYNAMICSQLCACHE indicates that the row is for a cached statement.
GROUP_MEMBER	The member name of the DB2 that executed EXPLAIN, or blank.
EXPLAIN_TIME	The time at which the statement is processed. This time is the same as the BIND_TIME column in PLAN_TABLE.
STMT_TYPE	The type of statement being explained: SELECT = SELECT INSERT = INSERT UPDATE = UPDATE DELETE = DELETE SELUPD = SELECT with FOR UPDATE OF DELCUR = DELETE WHERE CURRENT OF CURSOR UPDCUR = UPDATE WHERE CURRENT OF CURSOR
COST_CATEGORY	Indicates whether DB2 was forced to use default values when making its estimates: A = DB2 had enough information to make a cost estimate without using default values. B = Some condition exists for which DB2 was forced to use default values. See the values in REASON to determine why DB2 was unable to put this estimate in cost category A.
PROCMS	The estimated processor cost in milliseconds for the SQL statement, rounded up to the next integer value. The maximum value for this cost is 2,147,483,647 milliseconds, which is equivalent to approximately 24.8 days. If the estimated value exceeds this maximum, the column reports the maximum value.
PROCSU	The estimated processor cost in service units for the SQL statement, rounded up to the next integer value. The maximum value for this cost is 2,147,483,647 service units. If the estimated value exceeds this maximum, the column reports the maximum value.
REASON	A string that indicates the reasons for putting an estimate into cost category B: HAVING CLAUSE: A subselect in the SQL statement contains a HAVING clause. HOST VARIABLES: The statement uses host variables, parameter markers, or special registers. REFERENTIAL CONSTRAINTS: Referential constraints of the type CASCADE or SET NULL exist on the target table of a

	DELETE statement. TABLE CARDINALITY: The cardinality statistics are missing for one or more of the tables used in the statement. UDF: The statement uses user-defined functions. TRIGGERS: Triggers are defined on the target table of an INSERT, UPDATE, or DELETE statement. MATERIALIZATION: Statistics are missing because the statement uses materialized views or nested table expressions.
STMT_ENCODE	The encoding scheme of the statement. If the statement represents a single CCSID set, possible values are: A = ASCII E = EBCDIC U = Unicode If the statement has multiple CCSID sets, the column value is M.
TOTAL_COST	The overall estimated cost of the statement. This cost should be used only for reference purposes.

DSN_FUNCTION_TABLE

Column Name	Description
QUERYNO	A number intended to identify the statement being explained. If QUERYNO is not unique, the value of EXPLAIN_TIME is unique.
APPLNAME	The name of the application plan for the row, or blank.
PROGNAME	The name of the program or package containing the statement being explained, or blank.
COLLID	The collection ID for the package, or blank.
GROUP_MEMBER	The member name of the DB2 that executed EXPLAIN, or blank.
EXPLAIN_TIME	The time at which the statement is processed. This time is the same as the BIND_TIME column in PLAN_TABLE.
SCHEMA_NAME	The schema name of the function invoked in the explained statement.
FUNCTION_NAME	The name of the function invoked in the explained statement.
SPEC_FUNC_ID	The specific name of the function invoked in the explained statement.
FUNCTION_TYPE	The type of function invoked in the explained statement. Possible values are: SU: Scalar function TU: Table function
VIEW_CREATOR	If the function specified in the FUNCTION_NAME column is referenced in a view definition, the creator of the view. Otherwise, blank.
VIEW_NAME	If the function specified in the FUNCTION_NAME column is referenced in a view definition, the name of the view. Otherwise, blank.
PATH	The value of the SQL path that was used to resolve the schema name of the function.
FUNCTION_TEXT	The text of the function reference (the function name and parameters). If the function reference is over 1500 bytes, this column contains the first 1500 bytes. For functions specified in infix notation, FUNCTION_TEXT contains only the function name. For example, for a function named /, which overloads the SQL divide operator, if the function reference is A/B, FUNCTION_TEXT contains only /, not A/B.

DSN_STATEMENT_CACHE_TABLE

Column name	Description
STMT_ID	An EDM unique token.
STMT_TOKEN	A user-provided identification string.
COLLID	Collection ID; value is DSNDDYNAMICSQLCACHE.
PROGRAM_NAME	Name of package or DBRM that performed the initial PREPARE.
INV_DROPALT	Invalidated by DROP/ALTER.
INV_REVOKE	Invalidated by REVOKE.
INV_LRU	Removed from cache by LRU.
INV_RUNSTATS	Invalidated by RUNSTATS.
CACHED_TS	Timestamp when statement was cached.
USERS	Number of current users of statement. These are the users that have prepared or executed the statement during their current unit of work.
COPIES	Number of copies of statement owned by all threads in the system.
LINES	Precompiler line number from the initial PREPARE.
PRIMAUTH	Primary authorization ID of the user that did the initial PREPARE.
CURSQLID	CURRENT SQLID of the user that did the initial prepare.
BIND_QUALIFIER	Bind object qualifier for unqualified table names.
BIND_ISO	ISOLATION bind option: UR = Uncommitted read CS = Cursor stability RS = Read stability RR =Repeatable read
BIND_C	DATA CURRENTDATA bind option: Y = CURRENTDATA(YES) N = CURRENTDATA(NO)
BIND_DYNRL	DYNAMICRULES bind option: B = DYNAMICRULES(BIND) R = DYNAMICRULES(RUN)
BIND_DEGRE	CURRENT DEGREE value: A = ANY 1 = 1
BIND_SQLRL	CURRENT RULES value: D = DB2 S = SQL
BIND_CHOLD	Cursor WITH HOLD bind option: Y = Initial PREPARE was done for a cursor WITH HOLD N = Initial PREPARE was not done for a cursor WITH HOLD
STAT_TS	Timestamp of stats when IFCID 318 is started.
STAT_EXEC	Number of executions of statement. For a cursor statement, this value is the number of OPENs.
STAT_GPAG	Number of getpage operations performed for statement.
STAT_SYNR	Number of synchronous buffer reads performed for statement.
STAT_WRIT	Number of buffer write operations performed for statement.
STAT_EROW	Number of rows examined for statement.
STAT_PROW	Number of rows processed for statement.
STAT_SORT	Number of sorts performed for statement.

STAT_INDX	Number of index scans performed for statement.
STAT_RSCN	Number of table space scans performed for statement.
STAT_PGRP	Number of parallel groups created for statement.
STAT_ELAP	Accumulated elapsed time used for statement.
STAT_CPU	Accumulated CPU time used for statement.
STAT_SUS_SYNIO	Accumulated wait time for synchronous I/O.
STAT_SUS_LOCK	Accumulated wait time for lock and latch requests.
STAT_SUS_SWIT	Accumulated wait time for synchronous execution unit switch.
STAT_SUS_GLCK	Accumulated wait time for global locks.
STAT_SUS_OTHM	Accumulated wait time for read activity done by another thread.
STAT_SUS_OTHW	Accumulated wait time for write activity done by another thread.
STAT_RIDLMT	Number of times a RID list wasn't used because the number of RIDs would have exceeded one or more DB2 limits.
STAT_RIDSTOR	Number of times a RID list wasn't used because not enough storage was available to hold the list of RIDs.
EXPLAIN_TS	When the statement cache table is populated.
SCHEMA	CURRENT SCHEMA value.
STMT_TEXT	Statement text.
STMT_ROWID	Statement ROWID.
BIND_RA_TOT	The total number of REBIND commands that have been issued for the dynamic statement because of the REOPT(AUTO) option.
BIND_RO_TYPE	The current specification of the REOPT option for the statement: N = REOPT(NONE) 1 = REOPT(ONCE) or its equivalent A = REOPT(AUTO) or its equivalent 0 = The current plan is deemed optimal and there is no need for REOPT(AUTO)

DSNZPARMs

Parameter	Description	Acceptable values (defaults appear in bold)	Updatable online?
ABEXP	EXPLAIN processing	YES , NO	Yes
ABIND	Auto BIND	YES , NO	Yes
ACCUMACC	DDF/RRSAF accumulation data	NO , 2–65535	Yes
ACCUMUID	Aggregation fields	0 –10	Yes
AEXITLIM	Authorization exit limit	0–32676; 10	Yes
AGCCSID	ASCII coded character set (graphic)	0 –65533	—
ALCUNIT	Allocation units	BLK , TRK, CYL	Yes
ALL/dbname	Start names	ALL , spacenames	—
AMCCSID	ASCII coded character set (mixed)	0 –65533	—
APPENSCH	Application encoding	ASCII, EBCDIC , UNICODE, ccsid	—
ARCPFX1	Copy 1 prefix	1–34 char	Yes
ARCPFX2	Copy 2 prefix	1–34 char	Yes
ARCETN	Retention period	0– 9999	Yes
ARCWRTC	WTOR route code	1–16; 1,3,4	Yes
ARCWTOR	Write to operator	NO, YES	Yes
ARC2FRST	Read copy 2 archive	NO , YES	Yes
ASCCSID	ASCII coded character set (single-byte)	0 –65533	—
ASSIST	Assistant	YES , NO	No
AUDITST	Audit trace	NO , YES, list, *	No
AUTH	Use protection	YES , NO	No
AUTHCACH	Plan authorization cache	0–4096; 1024	Yes
BACKODUR	Backout duration	0–255; 5	No
BINDNV	Bind new package	BINDADD , BIND	Yes
BLKSIZE	Block size	8192– 28672	Yes
BMPTOUT	IMS BMP timeout	1–254; 4	Yes
CACHEDYN	Cache dynamic SQL	NO , YES	Yes
CACHEPAC	Package authorization cache	0–2MB; 32K	No
CACHERAC	Routine authorization cache	0–2 MB; 32K	No
CATALOG	Catalog alias	1–8 char; DSNCAT	Yes
CDSSRDEF	Current degree	1 , ANY	Yes
CHARSET	CCSID used	ALPHANUM , KATAKANA (if SCCSID = 930 or 5026)	—
CHKFREQ	Checkpoint frequency	200K–16 MB rec (50K) or 1–60 minutes	Yes
CHGDC	DROP support	1 , 2, 3	Yes
CMTSTAT	DDF threads	ACTIVE , INACTIVE	No

COMPACT	Compact data	NO , YES	Yes
COMPAT	IBM service	OFF	—
CONDBAT	Max remote connected	0–25000; 64	Yes
CONTSTOR	Contract thread storage	NO , YES	Yes
COORDNTR	Coordinator	NO , YES	No
CTHREAD	Max users	1–2000; 70	Yes
DBACRVW	DBADM can create view for other authid	YES, NO	Yes
DBPROTCL	Database protocol	DRDA , PRIVATE	Yes
DATE	Date format	ISO , USA, EUR, JIS, LOCAL	—
DB2SUPLD	Serviceability parameter	—	—
DATELEN	Local date length	0 , 10–254	—
DDF	DDF startup option	NO , AUTO, COMMAND	No
DEALLCT	Deallocate period	0 –1439 min, 0–59 sec, NOLIMIT	Yes
DECARTH	Decimal arithmetic	DEC15, DEC31, 15, 31	—
DECDIV3	Minimum divide scale	NO , YES	No
DECIMAL	Decimal point	, .	—
DEF_DECFLOAT_ROUND_MODE	Decfloat rounding mode	ROUND_CEILING, ROUND_DOWN, ROUND_FLOOR, ROUND_HALF_DOWN, ROUND_HALF_EVEN , ROUND_HALF_UP, ROUND_HALF_EVEN	—
DEFLANG	Language default	ASM, C, CPP, COBOL, COB2, IBMCOB , FORTRAN, PL1	—
DEFLTID	Unknown authid	IBMUSER , authid	No
DELIM	String delimiter	DEFAULT , “, ’	—
DESCSTAT	Describe for static	NO , YES	Yes
DISABSCL	SQLWARN1 and 5 for non-scrollable cursors	NO , YES	—
DLDFREQ	Level ID update frequency	0–32767; 5	Yes
DLITOUT	DL/I batch timeout	1–254; 6	Yes
DSHARE	Data sharing	Yes , No, blank	No
DSMAX	Data set maximum	1–32767; calculated	Yes
DSQLELI	Dist SQL string delimiter	‘, ”	—
DSSTIME	Data set stats time	1–1440; 5	Yes
DSCVI	Vary DS control interval	YES , NO	Yes
DYNRULES	Use for dynamic rules	YES , NO	—
EDMBFIT	Algorithm for free chain search	YES, NO	Yes
EDMDBDC	EDM DBD cache	5000K –2097152K	Yes
EDMPOOL	EDMPOOL storage	1K–2097152K; calculated	Yes

	size		
EDMSTMTC	EDM statement cache size	0–1048576K; 5000	Yes
EDPROP	DROP support	1, 2, 3	Yes
ENSCHHEME	Default encoding scheme	EBCDIC , ASCII	—
EVALUNC	Predicate evaluation with UR and RS	YES, NO	Yes
EXTRAREQ	Extra blocks requestor	0– 100	Yes
EXTRASRV	Extra blocks server	0– 100	Yes
EXTSEC	Extended security	NO , YES	Yes
GCCSID	EBCDIC coded character set (graphic byte)	0–65533	—
GRPNAME	Group name	1–8 char; DSNCAT	No
HOPAUTH	Authorization at hop site	BOTH , RUNNER	No
IDBACK	Max batch connect	1–2000; 40	Yes
IDFORE	Max TSO connect	1–2000; 40	Yes
IDHTOIN	Idle thread timeout	0–9999	Yes
IDXBPOOL	Default buffer pool for user indexes	BP0 –BPx	Yes
IMMEDWRI	Immediate write	NO , YES, PH1	Yes
IMPDB	Create implicit database	YES , NO	Yes
IMPDSDEF	Define datasets	YES, NO	Yes
IMPTSCMP	Use data compression	YES, NO	Yes
IMPTSSEG	Tablespace type	SEGMENTED, PARTITIONED	Yes
INLISTP	IN list elements	1–5000; 50	Yes
IRLMAUT	Auto start	YES , NO	No
IRLMPROC	Proc name	IRLMPROC , IRLM procedure name	No
IRLMRWT	Resource timeout	1–3600; 60	No
IRLMSID	Subsystem name	IRLM , IRLM name	No
IRLMSWT	Time to autostart	1–3600	Yes
IXQTY	Indexspace default size	0 –4194304	Yes
LBACKOUT	Postpone backward log processing	AUTO , YES, NO	No
LC_CTYPE	Locale LC_CTYPE	Valid locale, 0–50 char	—
LEMAX	Maximum LE tokens	0–50; 20	No
LOBVALA	User LOB value storage	1–2097152; 2048	Yes
LOBVALS	User LOB value storage	1–510002; 2048	Yes
LOGAPSTG	Log apply storage	1MB–100MB; 100	No
LRDRTHLD	Long-running reader threshold	0 –1439 minutes	Yes
MAINTYPE	Current maintenance	NONE, SYSTEM , USER,	Yes

	types for MQTs	ALL	
MAXARCH	Recording max	10– 1000	No
MAXDBAT	Max remote active	0–1999; 64	Yes
MAX_NUM_CUR	Max open cursors	0–99999; 500	Yes
MAXOFILR	Max open file references	0–MAXUSERS value; 100	Yes
MAXKEEPD	Max kept dynamic statements	0–65535; 5000	Yes
MAXRBLK	RID pool size	0, 16K–1000000K; calculated	Yes
MAXRTU	Read tape units	1–99; 2	Yes
MAXTEMPS	Max temp/stage agent	0 –214748364	Yes
MAX_ST_PROC	Max number of stored procedures	0–99999; 2000	Yes
MAXTYPE1	Max type 1 inactive	0 –MAX REMOTE CON value	Yes
MCCSID	EBCDIC coded character set (mixed byte)	0 –65533	—
MEMBNAME	Member name	1–8 char; DSN1	No
MGEXTSZ	Optimize extent sizing	YES, NO	Yes
MINDVSCL			
MINRBLK	Number of ridlists for each ridmap	1 , n	
MINSTOR	Thread management	YES, NO	Yes
MIXED	Mixed data	NO , YES	—
MON	Monitor trace	NO , YES	No
MONSIZE	Monitor size	8K to 1MB	No
NEWFUN			—
NPGTHRSH	Use of index after table growth	0 , –1, n	Yes
NUMLKTS	Locks per tablespace	0–50000; 1000	Yes
NUMLKUS	Locks per user	0–100000; 10000	Yes
OFFLOAD	Offload active logs online	NO, YES	•
OJPERFEH	Outer join performance	YES, NO	Yes
OPTPREF		ON , OFF	
OPTHINTS	Optimization hints	NO , YES	Yes
OUTBUFF	Output buffer	40K–400MB; 400K	No
PADIX	Pad index by default	YES, NO	Yes
PADNTSTR	Pad null-terminated strings	YES, NO	Yes
PARAMDEG	Degree of parallelism	0 –no upper limit	Yes
PARTKEYU	Allow partitioning keys to be updated	YES , NO, or SAME	Yes
PCLOSEN	RO switch checkpoints	1–32767; 5	Yes
PCLOSET	RO switch time	1–32767; 10	Yes
POOLINAC	Pool thread timeout	0–9999; 120	Yes
PRIQTY	Primary quantity	Blank , 1–9999999	Yes
PROTECT	Archive logs protected	NO , YES	Yes

	with RACF		
PTASKROL	Include accounting traces for parallel tasks	YES, NO	Yes
QUIESCE	Quiesce period	0–999; 5	Yes
RECALL	Recall database	YES, NO	No
RECALLD	Recall delay	0–32767; 120	Yes
REFSHAGE	Current refresh age	0, ANY	Yes
REOPTTEXT	Reopt automatically	YES, NO	Yes
RESTART/DEFR	Restart or defer	RESTART, DEFER	—
RESTORE_ RECVOER_ FROMDUMP	Recovery/restore	YES, NO	Yes
RESTORE_TAPE UNITS	Maximum tape units	NOLIMIT, 1–255	Yes
RESYNC	Resync interval	1–99; 2	Yes
RETLWAIT	Retained lock timeout	0–254	Yes
RETVLCFK	Varchar from index	NO, YES	Yes
RGFCOLID	Registration owner	1–8 char; DSNRGCOL	No
RGFDBNAM	Registration database	1–8 char; DSNRGFDB	No
RGFDEDPL	Control all applications	NO, YES	No
RGFDEFLT	Unregistered DDL default	APPL, ACCEPT, REJECT	No
RGFESCP	ART/ORT escape character	Non-alphanumeric char	No
RGFFULLQ	Require full names	YES, NO	No
RGFINSTL	Install DD control support	NO, YES	No
RGFNMORT	OBJT registration table	1–17 char; DSN_REGISTER_OBJT	No
RGFNMprt	APPL registration table	1–17 char; DSN_REGISTER_APPL	No
RLF	RLF auto start	NO, YES	No
RLFAUTH	Resource authid	SYSIBM , authid	Yes
RLFERR	RLST access error	NOLIMIT, NORUN , 1–50000000	Yes
RLFERRD	RLST access error	NOLIMIT, NORUN , 1–50000000	Yes
RLFTBL	RLST name suffix	01 , 2 alphanumeric char	Yes
ROUTCDE	WTO route codes	1 , 1–14 route codes	No
RRULOCK	U lock for RR/RS	NO, YES	Yes
SCCSID	EBCDIC coded character set (single-byte)	0-65533	—
SECQTY	Secondary quantity	Blank (clist calculated) , 1–9999999	Yes
SEQCACH	Sequential cache	BYPASS, SEQ	Yes
SEQPRES	Utility cache option	NO, YES	Yes
SITETYP	Site type	LOCALSITE , RECOVERYSITE	No
SJMXPOOL	Star join max pool	0–1024; 20	Yes

SJTABLES	Number of tables in star join	1–255; 10	Yes
SKIPUNCI	Skip uncommitted inserts	YES, NO	Yes
SMF89	Measured usage pricing	YES, NO	Yes
SMFACCT	SMF accounting	NO, YES(1) , list (1–5,7,8), *	No
SMFSTAT	SMF statistics	YES (1,3,4) , NO, list(1–5) , *	No
SMSDCFL	SMS data class for file tablespace	Blank , 1–8 char	Yes
SMSDCIX	SMS data class for index tablespace	Blank , 1–8 char	Yes
SPRMEDX			Yes
SPRMLTD			
SQLDELI	SQL string delimiter	Default , ' , "	—
SRTPOOL	Sort pool size	240K–64000K; 2MB	Yes
SSID	Subsystem name	DSN , <i>SSID</i>	—
STARJOIN	Enabling star join	Disable , enable, 1, 2–32768	Yes
STATHIST	Collect historical statistics	SPACE, NONE , ALL, ACCESSPATH	Yes
STATSINT	Time to write RTS stats	1–1440 min; 30	Yes
STATROLL	Runstats aggregates partition-level statistics	YES, NO	Yes
STATIME	Statistics time	1–1440 min; 30	Yes
STDSQL	Standard SQL language	NO , YES	—
STORMXAB	Max abend count	0 –225	Yes
STORPROC	DB2 procedure name	1–8 char; ssnmSPAS	No
STORTIME	Timeout value	5–1800 sec; 180	Yes
SUPERRS	Suppress Logrec recording during soft errors	YES , NO	Yes
SVOLARC	Single volume	YES, NO	Yes
SYNCVAL	Statistics sync	NO , 0–59	Yes
SYSADM	System admin 1	SYSADM , authid	Yes
SYSADM2	System admin 2	SYSADM , authid	Yes
SYSOPR1	System operator 1	SYSOPR , authid	Yes
SYSOPR2	System operator 2	SYSOPR ; authid	Yes
SYSTEM_LEVEL BACKUPS	System-level backups	YES , NO	Yes
TBSBP8K	Default 8K BP for user data	Any 8K buffer pool; BP8K0	Yes
TBSBP16K	Default 16K BP for user data	Any 16K buffer pool; BP16K0	Yes
TBSBP32K	Default 32K BP for user data	Any 32K buffer pool; BP32K0	Yes
TBSBPOOL	Default buffer pool for	BP0 –BPx	Yes

	user Data		
TCPALVER	TCP/IP already verified	NO , YES	Yes
TCPKPALV	TCP/IP keep alive	ENABLE , DISABLE, 1–65524	Yes
TIME	Time format	ISO , JIS, USA, EUR, LOCAL	—
TIMELN	Local time length	0, 8–254	—
TRACLOC	Size of local trace table	16 (4K bytes)	
TRACSTR	Trace auto start	NO , YES (1–3), list (1–9)	No
TRACTBL	Trace size	4K–396K; 64K	No
TRKRSITE	Remote tracker site usage	NO , YES	No
TSQTY	Default allocation for tablespace	0 –4194304	Yes
TSTAMP	Timestamp archives	NO , YES	Yes
TWOACTV	Number of active copies	2 , 1	No
TWOARCH	Number of archive copies	2 , 1	No
TWOBSDS	Number of BSDSs	YES, NO	No
UGCCSID	Unicode CCSID (graphic)	1208	—
UIFCIDS	Unicode IFCIDS	YES, NO	Yes
UMCCSID	Unicode CCSID (Mixed)	1208	—
UNIT	Device type 1	TAPE , any device	Yes
UNIT2	Device type 2	Device or unit name	Yes
URCHKTH	UR check frequency	0–255	Yes
URLGWITH	UR log write check	0K–1000K	Yes
USCCSID	Unicode CCSID (single-byte)	1208	—
UTILS_DUMP_CLASS_NAME	Dump class name	Blank , valid DFSMS dump class name	
UTIMOUT	Utility timeout	1–254; 6	Yes
VOLTDEVT	Temporary unit name	SYSDA , valid name	Yes
WLMENV	WLM environment	Valid name (1–18 char)	Yes
XLKUPDT	X lock for searched U/D	YES, NO	Yes

Bind Parameters

Option	Valid values	Plan	Package	Trigger
ACQUIRE	USE , ALLOCATE	X		
<i>Determines whether to acquire resources specified in the DBRM at first access or allocation</i>				
ACTION	REPLACE , ADD	X, BO	X, BO	
	REPLACE(RPLVER)		X, BO	
	REPLACE(RETAIN)	X, BO		
<i>Determines whether the object (plan or package) replaces an existing object with same name or is new</i>				
CACHESIZE	Value of PLAN AUTH CACHE; decimal value	X		
<i>Determines the size (in bytes) of the authorization cache acquired in the EDM pool for the plan</i>				
COPY	Collection-id, package-id, COPYVER		X, BO	
<i>Determines that you are copying an existing package and names the package</i>				
CURRENTDATA	YES , NO	X	X	X
<i>Determines whether to require data currency for RO and ambiguous cursors when isolation level is CS</i>				
CURRENTSERVER	Location-name	X		
<i>Determines the location to connect to before running the plan</i>				
DBPROTOCOL	DRDA , PRIVATE	X	X	
<i>Specifies which protocol to use when connecting to a remote site that is identified by a three-part name</i>				
DEFER	DEFER(PREPARE), NODEFER (PREPARE)	X	X	
<i>Determines whether to defer preparation of dynamic SQL statements that refer to remote objects or to prepare them immediately</i>				
DEGREE	1 , ANY	X	X	
<i>Determines whether to attempt to run a query using parallel processing to maximize performance</i>				
DEPLOY	(collection-id.package-id), COPYVER(version-id)		X	
<i>Deploys a native SQL procedure</i>				
DISCONNECT	EXPLICIT , AUTOMATIC, CONDITIONAL	X		
<i>Determines which remote connections to destroy during commit operations</i>				
DYNAMICRULES	RUN , BIND,DEFINEBIND(PKG ONLY), DEFINERUN (PKG ONLY), INVOKEBIND(PKG ONLY), INVOKERUN(PKG ONLY)	X	X	
	DEFINEBIND, DEFINERUN, INVOKEBIND, INVOKERUN		X	
<i>Determines which values apply at runtime for dynamic SQL attributes</i>				
ENABLE/ DISABLE	BATCH, CICS, DB2CALL, DLIBATCH, IMS, IMSBMP, IMSMPP, RRSAF , *	X	X	
	REMOTE		X	
<i>Determines which connections can use the plan or package</i>				

Option	Valid values	Plan	Package	Trigger
ENCODING	ASCII, EBCDIC, UNICODE, <i>ccsid</i>	X	X	
<i>Specifies the application encoding for all static statements in the plan or package (defaults to installed selection)</i>				
EXPLAIN	NO , YES	X	X	X
<i>Determines whether to populate the PLAN_TABLE with information about the SQL statements</i>				
FLAG	I, W, E, C	X	X	X
<i>Determines what messages to display</i>				
IMMEDIATE	NO , YES	X	X	
<i>Determines whether immediate writes will be done for updates made to GBP-dependent page sets/partitions</i>				
ISOLATION	RR , RS, CS, UR, NC	X	X	X
<i>Determines how far to isolate an application from the effects of other running applications</i>				
KEEPDYNAMIC	NO , YES	X	X	
<i>Determines whether DB2 keeps dynamic SQL statements after commit points</i>				
LIBRARY	<i>dbrm-pds-name</i> (can be multiple for PLAN)	X, BO	X, BO	
<i>Determines which partitioned data set to search for DBRMs listed in the member option</i>				
MEMBER	<i>dbrm-member-name</i> (can be multiple for PLAN)	X, BO	X, BO	
<i>Determines what DBRMs to include in the plan or package</i>				
OPTHINT	<i>Hint-id</i>	X	X	
<i>Controls whether query optimization hints are used for static SQL</i>				
OPTIONS	COMPOSITE , COMMAND		X, BC	
<i>Specifies which bind options to use for the new package</i>				
OWNER	<i>Authorization-id</i>	X	X	
<i>Determines the authorization ID or the owner of the object (plan or package)</i>				
PACKAGE	<i>Location-name.collection-id.package-id (version-id)</i>		X	
	(*) – Rebind Only		X, RO	
<i>Determines which package or packages to bind or rebind</i>				
PATH	<i>Schema-name, USER, (schema-name, (USER)...) </i>	X	X	
<i>Determines the SQL path that DB2 uses to resolve unqualified UDTs, functions, and stored procedure names</i>				
PATHDEFAULT	Mutually exclusive with PATH	X	X	
<i>Resets the PATH for a package or plan to "SYSIBM", "SYSFUN", "SYSPROC", or plan/package qualifier</i>				
PKLIST or NOPKLIST	(<i>Location-name.collection-id.package-id...</i>), PKLIST only	X		
<i>Determines which package to include for the package list in the plan</i>				
PLAN	<i>Plan-name</i>	X		
	(*)	X, RO		
<i>Determines which plan or plans to bind or rebind</i>				
QUALIFIER	<i>Qualifier-name</i>	X	X	
<i>Determines the implicit qualifier for unqualified names of objects in the plan or package</i>				
RELEASE	COMMIT , DEALLOCATE	X	X	X
<i>Determines when to release resources that the program uses, either at commit or at termination</i>				
REOPT	ONCE, ALWAYS, AUTO, NONE	X	X	
<i>Specifies whether access path should be determined at runtime with host variables, parameter markers, and special registers</i>				

Option	Valid values	Plan	Package	Trigger
ROUNDING	CEILING, DOWN, FLOOR HALFDOWN, <u>HALFEVEN</u> , HALFUP, UP	X	X	
<i>Specifies the rounding mode at bind time</i>				
SQLERROR	<u>NOPACKAGE</u> , CONTINUE		X	
<i>Determines whether to create a package if the package contains an SQL error</i>				
SQLRULES	<u>DB2</u> , STD	X		
<i>Determines whether a Type 2 connection can be made according to DB2 rules for an existing connection</i>				
VALIDATE	<u>RUN</u> , BIND	X	X	
<i>Determines whether to recheck at runtime “not found” and “not authorized” errors found at bind time</i>				

DB2 Limits

Identifier Length Limits

Item	Limit
External-java-routine-name	1305 bytes
Name of an alias, auxiliary table, collection, clone table, constraint, correlation, cursor (except for DECLARE CURSOR WITH RETURN or the EXEC SQL utility), distinct type (both parts of two-part name), function (both parts of two-part name), host identifier, index, JARs, parameter, procedure, role, schema, sequence, specific, statement, storage group, savepoint, SQL condition, SQL label, SQL parameter, SQL variable, synonym, table, trigger, view, XML attribute name, XML element name	128 bytes
Name of an authorization ID	8 bytes
Routine version number	124 bytes
Name of a column	30 bytes
Name of cursor that is created with DECLARE CURSOR WITH RETURN	30 bytes
Name of cursor that is created with the EXEC SQL utility	8 bytes
Name of a location	16 bytes
Name of buffer pool name, catalog, database, plan, program, table space	8 bytes
Name of package	8 bytes (Only 8 EBCDIC characters are used for packages that are created with the BIND PACKAGE command. 128 bytes can be used for packages that are created as a result of the CREATE TRIGGER statement.)

Numeric Limits

Item	Limit
Smallest SMALLINT value	-32768
Largest SMALLINT value	32767
Smallest INTEGER value	-2147483648
Largest INTEGER value	2147483647
Smallest BIGINT value	-9223372036854775808
Largest BIGINT value	9223372036854775807
Smallest REAL value	About $-7.2 \times 10^{(75)}$
Largest REAL value	About $7.2 \times 10^{(75)}$
Smallest positive REAL value	About $5.4 \times 10^{(-79)}$
Largest negative REAL value	About $-5.4 \times 10^{(-79)}$
Smallest FLOAT value	About $-7.2 \times 10^{(75)}$
Largest FLOAT value	About $7.2 \times 10^{(75)}$
Smallest positive FLOAT value	About $5.4 \times 10^{(-79)}$
Largest negative FLOAT value	About $-5.4 \times 10^{(-79)}$

[illegible]

String Length Limits

Item	Limit
Maximum length of CHAR	255 bytes
Maximum length of GRAPHIC	127 DBCS characters
Maximum length of BINARY	255 bytes
Maximum length of VARCHAR	4046 bytes for 4-KB pages 8128 bytes for 8-KB pages 16320 bytes for 16-KB pages 32704 bytes for 32-KB pages
Maximum length of VARCHAR that can be indexed by an XML index	100 bytes after conversion to UTF-8
Maximum length of VARGRAPHIC	2023 DBCS characters for 4-KB pgs 4064 DBCS characters for 8-KB pgs 8160 DBCS characters for 16-KB pgs 16352 DBCS characters for 32-KB pgs
Maximum length of VARBINARY	32704 bytes
Maximum length of CLOB	2 147 483 647 bytes (2GB - 1 byte)
Maximum length of DBCLOB	1 073 741 824 DBCS characters
Maximum length of BLOB	2 147 483 647 bytes (2GB - 1 byte)
Maximum length of a character constant	32704 UTF-8 bytes
Maximum length of a hexadecimal	32704 hexadecimal digits

Item	Limit
character constant	
Maximum length of a graphic string constant	32704 UTF-8 bytes
Maximum length of a hexadecimal graphic string constant	32704 hexadecimal digits
Maximum length of a text string used for a scalar expression	4000 UTF-8 bytes
Maximum length of a concatenated character string	2 147 483 647 bytes (2GB - 1 byte)
Maximum length of a concatenated graphic string	1 073 741 824 DBCS characters
Maximum length of a concatenated binary string	2 147 483 647 bytes (2GB - 1 byte)
Maximum length of XML pattern text	4000 bytes after conversion to UTF-8
Maximum length of an XML element or attribute name in an XML document	1000 bytes
Maximum length of a namespace uri	1000 bytes
Maximum length of a namespace prefix	998 bytes
Largest depth of an internal XML tree	128 levels

Datetime Limits

Item	Limit
Smallest DATE value (shown in ISO format)	0001-01-01
Largest DATE value (shown in ISO format)	9999-12-31
Smallest TIME value (shown in ISO format)	00.00.00
Largest TIME value (shown in ISO format)	24.00.00
Smallest TIMESTAMP value	0001-01-01-00.00.00.000000
Largest TIMESTAMP value	9999-12-31-24.00.00.000000

DB2 Limits on SQL Statements

Item	Limit
Maximum number of columns in a table or view (the value depends on the complexity of the CREATE VIEW statement) or columns returned by a table function.	750 or fewer (including hidden columns) 749 if the table is a dependent
Maximum number of base tables in a view, SELECT, UPDATE, INSERT, or DELETE	225
Maximum number of rows that can be inserted with a single INSERT or MERGE statement	32767
Maximum row and record sizes for a table	Dependent on type of table created
Maximum number of volume IDs in a storage group	133
Maximum number of partitions in a partitioned tablespace or partitioned index	64 for tablespaces that are not defined with LARGE or a DSSIZE greater than 2GB 4096, depending on what is specified for DSSIZE or LARGE and the page size

Item	Limit
Maximum size of a partition (tablespace or index)	For tablespaces that are not defined with LARGE or a DSSIZE greater than 2GB: 4GB, for 1 to 16 partitions 2GB, for 17 to 32 partitions 1GB, for 33 to 64 partitions For tablespaces that are defined with LARGE: 4GB, for 1 to 4096 partitions For tablespaces that are defined with a DSSIZE greater than 2GB: 64GB, depending on the page size, (1 to 256 partitions for 4KB, 1 to 512 partitions for 16KB, 1 to 1024 partitions for 32KB, and 1 to 2048 for 32KB)
Maximum length of an index key	Partitioning index: 255-n Nonpartitioning index that is padded 2000-n Nonpartitioning index that is not padded 2000-n-2m N=number of columns in the key that allow nulls, and m is the number of varying length columns in the key
Maximum number of expressions in an index key	64
Maximum number of columns in an index key	64
Maximum number of tables in a FROM clause	225 or fewer, depending on the complexity of the statement
Maximum number of subqueries in a statement	224
Maximum total length of host and indicator variables pointed to in an SQLDA	32767 bytes 2 147 483 647 bytes (2GB - 1 byte) for a LOB, subject to the limitations imposed by the application environment and host language
Longest host variable used for insert or update	32704 bytes for a non-LOB 2 147 483 647 bytes (2GB - 1 byte) for a LOB, subject to the limitations imposed by the application environment and host language
Longest SQL statement	2097152 bytes
Maximum number of elements in a select list	750 or fewer, depending on whether the select list is for the result table of a static scrollable cursor
Maximum number of predicates in a WHERE or HAVING clause	Limited by storage
Maximum total length of columns of a query operation requiring a sort key (SELECT DISTINCT, ORDER BY, GROUP BY, UNION, EXCEPT and INTERSECT, without the ALL keyword, and the DISTINCT keyword for aggregate functions)	4000 bytes
Maximum total length of columns of a query operation requiring a sort and evaluating column functions (MULTIPLE DISTINCT and GROUP BY)	32600 bytes
Maximum length of a sort key	16000 bytes
Maximum length of a table check constraint	3800 bytes

Item	Limit
Maximum number of bytes that can be passed in a single parameter of an SQL CALL statement	32765 bytes for a non-LOB 2 147 483 647 bytes (2GB - 1 byte) for a LOB, subject to the limitations imposed by the application environment and host language
Maximum number of stored procedures, triggers, and user-defined functions that an SQL statement can implicitly or explicitly reference	16 nesting levels
Maximum length of the SQL path	2048 bytes
Maximum length of a WLM environment name in a CREATE PROCEDURE, CREATE FUNCTION, ALTER PROCEDURE, or ALTER FUNCTION statement.	32 bytes
Maximum number of XPath level in the XMLPATTERN clause of the CREATE INDEX statement.	50 nesting levels

DB2 System Limits

Item	Limit
Maximum number of concurrent DB2 or application agents	Limited by the EDM pool size, buffer pool size, and the amount of storage used by each DB2 or application agent
Largest non-LOB table or tablespace	128 terabytes
Largest simple or segmented table space	64 GB
Largest log space	2 ⁴⁸
Largest active log data set	4 GB – 1 byte
Largest archive log data set	4 GB – 1 byte
Maximum number of active log copies	2
Maximum number of archive log copies	2
Max number of active log data sets (each copy)	93
Max number of archive log volumes (each copy)	10000
Maximum number of databases accessible to an application or end user	Limited by system storage and EDM pool size
Largest EDM pool	The installation parameter maximum depends on available space
Maximum number of databases	65271
Maximum number of rows per page	255 for all tablespaces except catalog and directory tablespaces, which have a maximum of 127
Maximum number of implicitly created databases	60000
Maximum number of indexes on declared global temporary tables	10000
Maximum simple or segmented data set size	2GB
Maximum partitioned data set size	See "maximum size of a partition"
Maximum LOB data set size	64GB
Maximum number of rows that can be inserted with a single INSERT statement	32767 rows
Maximum number of table spaces that can be defined in a work file database	500
Maximum number of tables and triggers that can be defined in a work file database	11767

SQL Communication Area (SQLCA)

Assembler, COBOL, or PL/I Name	C Name	Data type	Purpose
SQLCAID	sqlcaid	CHAR(8)	An “eye catcher” for storage dumps, containing the text 'SQLCA'. The sixth byte is 'L' if line number information is returned from parsing a dynamic statement or a native SQL procedure. The sixth byte is not set when processing an external SQL procedure.
SQLCABC	sqlcabc	INTEGER	Contains the length of the SQLCA: 136.
SQLCODE	SQLCODE	INTEGER	Contains the SQL return code. 0 = Successful execution (though there might have been warning messages). Positive = Successful execution, but with an exception condition. Negative = Error condition.
SQLERRML	sqlerrml	SMALLINT	Length indicator for SQLERRMC, in the range 0 through 70.0 means that the value of SQLERRMC is not pertinent.
SQLERRMC	sqlerrmc	VARCHAR(70)	Contains one or more tokens, separated by 'X'FF', that are substituted for variables in the descriptions of error conditions. It may contain truncated tokens. A message length of 70 bytes indicates a possible truncation.
SQLERRP	sqlerrp	CHAR(8)	Provides a product signature and, in the case of an error, diagnostic information such as the name of the module that detected the error. In all cases, the first three characters are 'DSN' for DB2 for z/OS.
SQLERRD(1)	sqlerrd[0]	INTEGER	For a sensitive static cursor, contains the number of rows in a result table when the cursor position is after the last row (that is, when SQLCODE is equal to +100). Can also contain an internal error code.
SQLERRD(2)	sqlerrd[1]	INTEGER	For a sensitive static cursor, contains the number of rows in a result table when the cursor position is after the last row (that is, when SQLCODE is equal to +100). Can also contain an internal error code.

Assembler, COBOL, or PL/I Name	C Name	Data type	Purpose
SQLERRD(3)	sqlerrd[2]	INTEGER	Contains the number of rows that qualified to be deleted, inserted, or updated after an INSERT, MERGE, UPDATE, or DELETE statement. The number excludes rows affected by either triggers or referential integrity constraints. For the OPEN of a cursor for a SELECT with a data change statement or for a SELECT INTO, SQLERRD(3) contains the number of rows affected by the embedded data change statement. The value is 0 if the SQL statement fails, indicating that all changes made in executing the statement canceled. For a DELETE statement the value will be -1 if the operation is a mass delete from a table in a segmented table space and the DELETE statement did not include selection criteria. If the delete was against a view, neither the DELETE statement nor the definition of the view included selection criteria. For a TRUNCATE statement, the value will be -1. For a REFRESH TABLE statement, SQLERRD(3) contains the number of rows inserted into the materialized query table. For a rowset-oriented FETCH, contains the number of rows fetched. For SQLCODES -911 and -913, SQLERRD(3) contains the reason code for the timeout or deadlock. When an error is encountered in parsing a dynamic statement, or when parsing, binding, or executing a native SQL procedure, SQLERRD(3) will contain the line number where the error was encountered. The sixth byte of SQLCAID must be 'L' for this to be a valid line number. This value will be meaningful only if the statement source contains new line control characters. This information is not returned for an external SQL procedure.

Assembler, COBOL, or PL/I Name	C Name	Data type	Purpose
SQLERRD(4)	sqlerrd[3]	INTEGER	Generally contains timerons, a short floating-point value that indicates a rough relative estimate of resources required. It does not reflect an estimate of the time required. When preparing a dynamically defined SQL statement, you can use this field as an indicator of the relative cost of the prepared SQL statement. For a particular statement, this number can vary with changes to the statistics in the catalog. It is also subject to change between releases of DB2 for z/OS.
SQLERRD(5)	sqlerrd[4]	INTEGER	Contains the position or column of a syntax error for a PREPARE or EXECUTE IMMEDIATE statement.
SQLERRD(6)	sqlerrd[5]	INTEGER	Contains an internal error code.
SQLWARN0	SQLWARN0	CHAR(1)	Contains a W if at least one other indicator also contains a W; otherwise, contains a blank.
SQLWARN1	SQLWARN1	CHAR(1)	Contains a W if the value of a string column was truncated when assigned to a host variable. Contains an N for non-scrollable cursors and S for scrollable cursors after the OPEN CURSOR or ALLOCATE CURSOR statement. If subsystem parameter DISABSCL is set to YES, the field will not be set to N for non-scrollable cursors.
SQLWARN2	SQLWARN2	CHAR(1)	Contains a W if null values were eliminated from the argument of a column function; not necessarily set to W for the MIN function because its results are not dependent on the elimination of null values.
SQLWARN3	SQLWARN3	CHAR(1)	Contains a W if the number of result columns is larger than the number of host variables. Contains a Z if fewer locators were provided in the ASSOCIATE LOCATORS statement than the stored procedure returned.
SQLWARN4	SQLWARN4	CHAR(1)	Contains a W if a prepared UPDATE or DELETE statement does not include a WHERE clause. For scrollable cursor, contains a D for sensitive dynamic cursors, I for insensitive cursors, and S for sensitive cursors after the OPEN CURSOR or ALLOCATE CURSOR statement; blank if not scrollable. If DSNZPARM DISABSCL is set to YES, it will be set to N for non-scrollable cursors.

Assembler, COBOL, or PL/I Name	C Name	Data type	Purpose
SQLWARN5	SQLWARN5	CHAR(1)	Contains a W if the SQL statement was not executed because it is not a valid SQL statement in DB2 for z/OS. Contains a character value of 1 (read only), 2 (read and delete), or 4 (read, delete, and update) to reflect capability of the cursor after the OPEN CURSOR or ALLOCATE CURSOR statement. If subsystem parameter DISABSCS is set to YES, the field will not be set to N for non-scrollable cursors.
SQLWARN6	SQLWARN6	CHAR(1)	Contains a W if the addition of a month or year duration to a DATE or TIMESTAMP value results in an invalid day (for example, June 31). Indicates that the value of the day was changed to the last day of the month to make the result valid.
SQLWARN7	SQLWARN7	CHAR(1)	Contains a W if one or more nonzero digits were eliminated from the fractional part of a number used as the operand of a decimal multiply or divide operation.
SQLWARN8	SQLWARN8	CHAR(1)	Contains a W if a character that could not be converted was replaced with a substitute character.
SQLWARN9	SQLWARN9	CHAR(1)	Contains a W if arithmetic exceptions were ignored during COUNT or COUNT_BIG processing. Contains a Z if the stored procedure returned multiple result sets.
SQLWARNA	SQLWARNA	CHAR(1)	Contains a W if at least one character field of the SQLCA or the SQLDA names or labels is invalid due to a character conversion error.
SQLSTATE	sqlstate	CHAR(5)	Contains a return code for the outcome of the most recent execution of an SQL statement.

The REXX SQLCA

Variable	Contents
SQLCODE	The SQL return code.
SQLERRMC	One or more tokens, separated by X'FF', that are substituted for variables in the descriptions of error conditions. It may contain truncated tokens. A message length of 70 bytes indicates a possible truncation.
SQLERRP	A product signature and, in the case of an error, diagnostic information such as the name of the module that detected the error. For DB2 for z/OS, the product signature is "DSN".
SQLERRD.1	For a sensitive static cursor, contains the number of rows in a results table when the cursor position is after the last row (that is, when SQLCODE is equal to +100). Can also contain an internal error code.
SQLERRD.2	For a sensitive static cursor, contains the number of rows in a results table when the cursor position is after the last row (that is, when SQLCODE is equal to +100).

Variable	Contents
	Can also contain an internal error code.
SQLERRD.3	Contains the number of rows that qualified for the operation after an SQL data change statement (but not rows deleted as a result of CASCADE delete). For the OPEN of a cursor for a SELECT with an SQL data change statement or for a SELECT INTO, SQLERRD(3) contains the number of rows affected by the embedded data change statement. Set to 0 if the SQL statement fails, indicating that all changes made in executing the statement were canceled. Set to -1 for a mass delete from a table in a segmented table space, for a truncate operation, or a delete from a view when neither the DELETE statement nor the definition of the view included selection criteria. For rowset-oriented FETCH statements, contains the number of rows returned in the rowset. For SQLCODES -911 and -913, SQLERRD(3) contains the reason code for the timeout or deadlock. After successful execution of the REFRESH TABLE statement, SQLERRD(3) contains the number of rows inserted into the materialized query table. When an error is encountered in parsing a dynamic statement, or when parsing, binding, or executing a native SQL procedure, SQLERRD(3) will contain the line number where the error was encountered. The sixth byte of SQLCAID must be 'L' for this to be a valid line number. This value will be meaningful only if the statement source contains new line control characters. This information is not returned for an external SQL procedure.
SQLERRD.4	Generally contains timerons, a short floating-point value that indicates a rough relative estimate of resources required. This value does not reflect an estimate of the time required to execute the SQL statement. After you prepare an SQL statement, you can use this field as an indicator of the relative cost of the prepared SQL statement. For a particular statement, this number can vary with changes to the statistics in the catalog. This value is subject to change between releases of DB2 for z/OS.
SQLERRD.5	The position or column of a syntax error for a PREPARE or EXECUTE IMMEDIATE statement.
SQLERRD.6	An internal error code.
SQLWARN.0	Blank if all other indicators are blank; W if at least one other indicator also contains a W.
SQLWARN.1	W if the value of a string column was truncated when assigned to a host variable.
SQLWARN.2	W if null values were eliminated from the argument of a column function; not necessarily set to W for the MIN function because its results are not dependent on the elimination of null values.
SQLWARN.3	W if the number of result columns is larger than the number of host variables. Z if the ASSOCIATE LOCATORS statement contains fewer locators than the stored procedure returned.
SQLWARN.4	W if a prepared UPDATE or DELETE statement does not include a WHERE clause. For a scrollable cursor, contains a D for sensitive dynamic cursors, I for insensitive cursors, and S for sensitive cursors after the OPEN CURSOR or ALLOCATE CURSOR statement, blank if not scrollable.
SQLWARN.5	Contains a W if the SQL statement was not executed because it is not a valid SQL statement in DB2 for z/OS. Contains a character value of 1 (read only), 2 (read and delete), or 4 (read, delete, and update) to reflect capability of the cursor after the OPEN CURSOR or ALLOCATE CURSOR statement.
SQLWARN.6	W if the addition of a month or year duration to a DATE or TIMESTAMP value results in an invalid day (for example, June 31). Indicates that the value of the day was changed to the last day of the month to make the result valid.
SQLWARN.7	W if one or more nonzero digits were eliminated from the fractional part of a number that was used as the operand of a decimal multiply or divide operation.

Variable	Contents
SQLWARN.8	W if a character that could not be converted was replaced with a substitute character.
SQLWARN.9	W if arithmetic exceptions were ignored during COUNT DISTINCT processing. Z if the stored procedure returned multiple result sets.
SQLWARN.10	W if at least one character field of the SQLCA is invalid due to a character conversion error.
SQLSTATE	A return code for the outcome of the most recent execution of an SQL statement.

GET DIAGNOSTICS

Statement Information

Item	Description	Data type
DB2_GET_DIAGNOSTICS_DIAGNOSTICS	After a GET DIAGNOSTICS statement, if any error or warning occurred, this item contains all of the diagnostics as a single string	VARCHAR(32672)
DB2_LAST_ROW	After a multiple-row FETCH statement, this item contains a value of +100 if the last row in the table is in the rowset that was returned.	INTEGER
DB2_NUMBER_PARAMETER_MARKERS	After a PREPARE statement, this item contains the number of parameter markers in the prepared statement.	INTEGER
DB2_NUMBER_RESULT_SETS	After a CALL statement that invokes a stored procedure, this item contains the number of result sets that are returned by the procedure.	INTEGER
DB2_NUMBER_ROWS	After an OPEN or FETCH statement for which the size of the result table is known, this item contains the number of rows in the result table. After a PREPARE statement, this item contains the estimated number of rows in the result table for the prepared statement. For SENSITIVE DYNAMIC cursors, this item contains the approximate number of rows.	DECIMAL(31,0)
DB2_RETURN_STATUS	After a CALL statement that invokes an SQL procedure, this item contains the return status if the procedure contains a RETURN statement.	INTEGER
DB2_SQL_ATTR_CURSOR_HOLD	After an ALLOCATE or OPEN statement, this item indicates whether the cursor can be held CHAR(1) open across multiple units of work (Y or N).	
DB2_SQL_ATTR_CURSOR_ROWSET	After an ALLOCATE or OPEN statement, this item indicates whether the cursor can use rowset positioning (Y or N).	CHAR(1)
DB2_SQL_ATTR_CURSOR_SCROLLABLE	After an ALLOCATE or OPEN statement, this item indicates whether the cursor is scrollable (Y or N).	CHAR(1)
DB2_SQL_ATTR_CURSOR_SENSITIVITY	After an ALLOCATE or OPEN statement, this item indicates whether the cursor shows updates made by other processes (sensitivity A, I, or S).	CHAR(1)
DB2_SQL_ATTR	After an ALLOCATE or OPEN statement, this	CHAR(1)

Item	Description	Data type
_CURSOR_TYPE	item indicates whether the cursor is declared static (S for INSENSITIVE or SENSITIVE STATIC) or dynamic (D for SENSITIVE DYNAMIC).	
MORE	After any SQL statement, this item indicates whether some conditions items were discarded because of insufficient storage (Y or N).	CHAR(1)
NUMBER	After any SQL statement, this item contains the number of condition items. If no warning or error occurred, or if no previous SQL statement has been executed, the number that is returned is 1.	INTEGER
ROW_COUNT	After DELETE, INSERT, UPDATE, or FETCH, this item contains the number of rows that are deleted, inserted, updated, or fetched. After PREPARE, this item contains the estimated number of result rows in the prepared statement.	DECIMAL(31,0)

Conditional Data Types

Item	Description	Data type
CATALOG_NAME	This item contains the server name of the table that owns a constraint that caused an error, or that caused an access rule or check violation.	VARCHAR(128)
CONDITION_NUMBER	This item contains the number of the condition.	INTEGER
CURSOR_NAME	This item contains the name of a cursor in an invalid cursor state.	VARCHAR(128)
DB2_ERROR_CODE1	This item contains an internal error code	INTEGER
DB2_ERROR_CODE2	This item contains an internal error code	INTEGER
DB2_ERROR_CODE3	This item contains an internal error code.	INTEGER
DB2_ERROR_CODE4	This item contains an internal error code.	INTEGER
DB2_INTERNAL_ERROR_POINTER	For some errors, this item contains a negative value that is an internal error pointer.	INTEGER
DB2_LINE_NUMBER	Line number where an error is encountered in parsing a dynamic statement.	INTEGER
DB2_MESSAGE_ID	This item contains the message ID that corresponds to the message that is contained in the CHAR(10) MESSAGE_TEXT diagnostic item.	INTEGER
DB2_MODULE_DETECTING_ERROR	After any SQL statement, this item indicates which module detected the error	CHAR(8)
DB2_ORDINAL_TOKEN_n	After any SQL statement, this item contains the nth token, where n is a value from 1 to 100.	VARCHAR(515)
DB2_REASON_CODE	After any SQL statement, this item contains the reason code for errors that have a reason code token in the message text.	INTEGER
DB2_RETURNED_SQLCODE	After any SQL statement, this item contains	INTEGER

Item	Description	Data type
	the SQLCODE for the condition.	
DB2_ROW_NUMBER	After any SQL statement that involves multiple rows, this item contains the row number on which DB2 detected the condition.	DECIMAL(31,0)
DB2_TOKEN_COUNT	After any SQL statement, this item contains the number of tokens available for the condition.	INTEGER
MESSAGE_TEXT	After any SQL statement, this item contains the message text associated with the SQLCODE.	VARCHAR(32672)
RETURNED_SQLSTATE	After any SQL statement, this item contains the SQLSTATE for the condition.	CHAR(5)
SERVER_NAME	After a CONNECT, DISCONNECT, or SET CONNECTION statement, this item contains the name of the server specified in the statement.	VARCHAR(128)

Connection Information

Item	Description	Data type
DB2_AUTHENTICATION_TYPE	This item contains the authentication type (S, C, T or blank).	CHAR(1)
DB2_AUTHORIZATION_ID	This item contains the authorization ID that is used by the connected server.	VARCHAR(128)
DB2_CONNECTION_STATE	This item indicates whether the connection is unconnected (-1), local (0), or remote (1).	INTEGER
DB2_CONNECTION_STATUS	This item indicates whether updates can be committed for the current unit of work (1 for Yes, 2 for No).	INTEGER
DB2_ENCRYPTION_TYPE	This item contains one of the following values that indicates the level of encryption for the Connection: A = Only the Authentication tokens (authid and password) are encrypted D = All of the data for the connection is encrypted	CHAR(1)
DB2_SERVER_CLASS_NAME	After a CONNECT or SET CONNECTION statement, this item contains the DB2 server class name.	VARCHAR(128)
DB2_PRODUCT_ID	This item contains the DB2 product signature.	VARCHAR(8)

Predicates

Predicate Type	Indexable	Stage 1
COL = value	Y	Y
COL = noncol expr	Y	Y
COL IS NULL	Y	Y
COL op value	Y	Y
COL op noncol expr	Y	Y
COL BETWEEN value1 AND value2	Y	Y
COL BETWEEN noncol expr1 AND noncol expr2	Y	Y
value BETWEEN COL1 AND COL2	N	N
COL BETWEEN COL1 AND COL2	N	N
COL BETWEEN expression1 AND expression2	Y	Y
COL LIKE 'pattern'	Y	Y
COL IN (list)	Y	Y
COL <> value	N	Y
COL <> noncol expr	N	Y
COL IS NOT NULL	Y	Y
COL NOT BETWEEN value1 AND value2	N	Y
COL NOT BETWEEN noncol expr1 AND noncol expr2	N	Y
value NOT BETWEEN COL1 AND COL2	N	N
COL NOT IN (list)	N	Y
COL NOT LIKE ' char'	N	Y
COL LIKE '%char'	N	Y
COL LIKE ' _char'	N	Y
COL LIKE host variable	Y	Y
T1.COL = T2 col expr	Y	Y
T1.COL op T2 col expr	Y	Y
T1.COL <> T2 col expr	N	Y
T1.COL1 = T1.COL2	N	N
T1.COL1 op T1.COL2	N	N
T1.COL1 <> T1.COL2	N	N
COL=(noncor subq)	Y	Y
COL = ANY (noncor subq)	N	N
COL = ALL (noncor subq)	N	N
COL op (noncor subq)	Y	Y
COL op ANY (noncor subq)	Y	Y
COL op ALL (noncor subq)	Y	Y
COL <> (noncor subq)	N	Y
COL <> ANY (noncor subq)	N	N
COL <> ALL (noncor subq)	N	N
COL IN (noncor subq)	Y	Y
(COL1,...COLn) IN (noncor subq)	Y	Y
COL NOT IN (noncor subq)	N	N
(COL1,...COLn) NOT IN (noncor subq)	N	N
COL = (cor subq)	N	N
COL = ANY (cor subq)	N	N
COL = ALL (cor subq)	N	N
COL op (cor subq)	N	N
COL op ANY (cor subq)	N	N

COL op ALL (cor subq)	N	N
COL <> (cor subq)	N	N
COL <> ANY (cor subq)	N	N
COL <> ALL (cor subq)	N	N
COL IN (cor subq)	N	N
(COL1,...COLn) IN (cor subq)	N	N
COL NOT IN (cor subq)	N	N
(COL1,...COLn) NOT IN (cor subq)	N	N
COL IS DISTINCT FROM value	N	Y
COL IS NOT DISTINCT FROM value	Y	Y
COL IS DISTINCT FROM noncol expr	N	Y
COL IS NOT DISTINCT FROM noncol expr	Y	Y
T1.COL1 IS DISTINCT FROM T2.COL2	N	N
T1.COL1 IS NOT DISTINCT FROM T2.COL2	N	N
T1.COL1 IS DISTINCT FROM T2 col expr	N	Y
T1.COL1 IS NOT DISTINCT FROM T2 col expr	Y	Y
COL IS DISTINCT FROM (noncor subq)	N	Y
COL IS NOT DISTINCT FROM (noncor subq)	Y	Y
COL IS DISTINCT FROM ANY (noncor subq)	N	N
COL IS NOT DISTINCT FROM ANY (noncor subq)	N	N
COL IS DISTINCT FROM ALL (noncor subq)	N	N
COL IS NOT DISTINCT FROM ALL (noncor subq)	N	N
COL IS NOT DISTINCT FROM (cor subq)	N	N
COL IS DISTINCT FROM ANY (cor subq)	N	N
COL IS DISTINCT FROM ANY (cor subq)	N	N
COL IS NOT DISTINCT FROM ANY (cor subq)	N	N
COL IS DISTINCT FROM ALL (cor subq)	N	N
COL IS NOT DISTINCT FROM ALL (cor subq)	N	N
EXISTS (subq)	N	N
NOT EXISTS (subq)	N	N
expression = value	N	N
expression <> value	N	N
expression op value	N	N
expression op (subq)	N	N
XMLEXISTS	Y	N
NOT XMLEXISTS	N	N

IFCIDS

Trace Type	Class	IFCID	Description
ACCOUNTING	1	3	ALL ACCOUNTING
		106	SYSTEM PARAMETERS IN EFFECT
		239	OVERFLOW FOR PACKAGE ACCOUNTING
	2	200	UDF ENTRY/EXIT SIGNAL
		232	DB2 THREAD ENTRY/EXIT SIGNAL
	3	6	BEGINNING OF A READ I/O OPERATION
		7	CC AFTER READ I/O OPERATION
		8	BEGINNING OF SYNCHRONOUS WRITE I/O
		9	CC OF SYNC OR ASYNC WRITE I/O
		32	BEGIN OF WAIT FOR LOG MANAGER
		33	END OF WAIT FOR LOG MANAGER
		44	LOCK SUSPEND OR IDENTIFY CALL IRLM
		45	LOCK RESUME
		51	SHARED LATCH RESUME. SERVICEABILITY
		52	SHARED LATCH WAIT. SERVICEABILITY
		56	EXCL. LATCH WAIT. SERVICEABILITY
		57	EXCL. LATCH RESUME. SERVICEABILITY
		117	BEGIN THREAD WAIT TIME FOR LOG I/O
		118	END THREAD WAIT TIME FOR LOG I/O
		127	AGENT READY TO SUSPEND PAGE WAIT
		128	PAGE REQUESTOR RESUMED BY I/O INIT.
		170	SUSPEND FOR SYNC EXEC.N UNIT SWITCH
		171	RESUME AGENT WAITING DB2 SERV. TASK
		174	BEGIN ARCHIVE LOG MODE (QUIESCE)
		175	END ARCHIVE LOG MODE (QUIESCE)
		213	BEGIN OF WAIT FOR CLAIM REQUEST
		214	END OF WAIT FOR CLAIM REQUEST
		215	BEGIN OF WAIT FOR DRAIN REQUEST
		216	END OF WAIT FOR DRAIN REQUEST
		226	BEGIN OF SUSPEND FOR PAGE LATCH
		227	END OF SUSPEND FOR PAGE LATCH
		242	BEGIN WAIT FOR SCHED. STORED PROC.
		243	END WAIT FOR SCHED. STORED PROC.
		313	MESSAGES FOR LONG-RUNNING URS.

Trace Type	Class	IFCID	Description
	4	151	USER-DEFINED ACCOUNTING TRACE
	5	187	ENTRY TO AND EXIT FROM IFI
	7	232	DB2 THREAD ENTRY/EXIT SIGNAL
		232	FOR PACKAGE/DBRM LEVEL ACCOUNTING
		240	EVENT SIGNAL FOR PACKAGE ACCOUNTING
	8	6	BEGINNING OF A READ I/O OPERATION
		7	CC AFTER READ I/O OPERATION
		8	BEGINNING OF SYNCHRONOUS WRITE I/O
		9	CC OF SYNC OR ASYNC WRITE I/O
		32	BEGIN OF WAIT FOR LOG MANAGER
		33	END OF WAIT FOR LOG MANAGER
		44	LOCK SUSPEND OR IDENTIFY CALL IRLM
		45	LOCK RESUME
		51	SHARED LATCH RESUME. SERVICEABILITY
		52	SHARED LATCH WAIT. SERVICEABILITY
		56	EXCL. LATCH WAIT. SERVICEABILITY
		57	EXCL. LATCH RESUME. SERVICEABILITY
		117	BEGIN THREAD WAIT TIME FOR LOG I/O
		118	END THREAD WAIT TIME FOR LOG I/O
		127	AGENT READY TO SUSPEND PAGE WAIT
		128	PAGE REQUESTOR RESUMED BY I/O INIT.
		170	SUSPEND FOR SYNC EXEC.N UNIT SWITCH
		171	RESUME AGENT WAITING DB2 SERV. TASK
		174	BEGIN ARCHIVE LOG MODE (QUIESCE)
		175	END ARCHIVE LOG MODE (QUIESCE)
		213	BEGIN OF WAIT FOR CLAIM REQUEST
		214	END OF WAIT FOR CLAIM REQUEST
		215	BEGIN OF WAIT FOR DRAIN REQUEST
		216	END OF WAIT FOR DRAIN REQUEST
		226	BEGIN OF SUSPEND FOR PAGE LATCH
		227	END OF SUSPEND FOR PAGE LATCH
		241	BEGIN/END SUSPENSION OF PACK/DBRM
		242	BEGIN WAIT FOR SCHED. STORED PROC.
		243	END WAIT FOR SCHED. STORED PROC.
AUDIT	1	140	AUTHORIZATION FAILURES
	2	141	EXPLICIT GRANT AND REVOKES
	3	142	CREATES, ALTERS, DROPS – AUDIT

Trace Type	Class	IFCID	Description
	4	143	FIRST ATTEMPTED WRITE AUDITED OBJ.
	5	144	FIRST ATTEMPTED READ AUDITED OBJ.
	6	145	AUDIT LOG RECORD OF SOME SQL STMTS
	7	55	ISSUANCE OF SET CURRENT SQLID
		83	END IDENTIFY REQUEST
		87	ENDING OF SIGNON REQUEST
		169	DISTRIBUTED AUTHID TRANSLATION
		312	DCE SECURITY
	8	23	UTILITY START INFORMATION
		24	UTILITY OBJECT OR PHASE CHANGE
		25	UTILITY END INFORMATION
	9	146	USER-DEFINED AUDIT TRACE
MONITOR	1	1	SYSTEM SERVICES
		2	DATABASE SERVICES
		106	SYSTEM PARAMETERS IN EFFECT
		124	CURRENT SQL STATEMENT
		129	VSAM CI'S – DB2 RECOVER LOG
		147	SUMMARY THREAD STATUS RECORD
		148	DETAILED THREAD STATUS RECORD
		149	LOCK INFORMATION FOR A RESOURCE
		150	LOCK INFORMATION FOR AN AGENT IFCID
		202	SYSTEM PARAMETERS
		230	DATA SHARING GLOBAL STATISTICS
		254	GROUP BUFFER POOL USAGE
		306	LOG RECORD RETRIEVAL
		316	PREPARED STMT. CACHE STATISTICS
		317	PREPARED STMT. CACHE STMT. TEXT
	2	232	DB2 THREAD ENTRY EXIT SIGNAL
	3	6	BEGINNING OF A READ I/O OPERATION
		7	CC AFTER READ I/O OPERATION
		8	BEGINNING OF SYNCHRONOUS WRITE I/O
		9	CC OF SYN OR ASYNC WRITE I/O
		32	BEGIN OF WAIT FOR LOG MANAGER
		33	END OF WAIT FOR LOG MANAGER
		44	LOCK SUSPEND OR IDENTIFY CALL IRLM
		45	LOCK RESUME
		51	SHARED LATCH RESUME. SERVICEABILITY

Trace Type	Class	IFCID	Description
		52	SHARED LATCH WAIT. SERVICEABILITY
		56	EXCL. LATCH WAIT. SERVICEABILITY
		57	EXCL. LATCH RESUME. SERVICEABILITY
		117	BEGIN THREAD WAIT TIME FOR LOG I/O
		118	END THREAD WAIT TIME FOR LOG I/O
		127	AGENT READY TO SUSPEND PAGE WAIT
		128	PAGE REQUESTOR RESUMED BY I/O INIT.
		170	SUSPEND FOR SYNC EXEC. UNIT SWITCH
		171	RESUME AGENT WAITING DB2 SERV. TSK
		174	BEGIN ARCHIVE LOG MODE (QUIESCE)
		175	END ARCHIVE LOG MODE (QUIESCE)
		213	BEGIN OF WAIT FOR CLAIM REQUEST
		214	END OF WAIT FOR CLAIM REQUEST
		215	BEGIN OF WAIT FOR DRAIN REQUEST
		216	END OF WAIT FOR DRAIN REQUEST
		226	BEGIN OF SUSPEND FOR PAGE LATCH
		227	END OF SUSPEND FOR PAGE LATCH
		242	BEGIN WAIT FOR SCHED. STORED PROC.
		243	END WAIT FOR SCHED. STORED PROC.
	4	155	USER-DEFINED MONITOR TRACE
	5	187	ENTRY OR EXIT TO IFI
	6	185	DATA CAPTURE INFORMATION
	7	232	DB2 THREAD ENTRY/EXIT SIGNAL
		232	FOR PACKAGE/DBRM-LEVEL ACCOUNTING
		240	EVENT SIGNAL FOR PACKAGE ACCOUNTING
	8	6	BEGINNING OF A READ I/O OPERATION
		7	CC AFTER READ I/O OPERATION
		8	BEGINNING OF SYNCHRONOUS WRITE I/O
		9	CC OF SYN OR ASYNC WRITE I/O
		32	BEGIN OF WAIT FOR LOG MANAGER
		33	END OF WAIT FOR LOG MANAGER
		44	LOCK SUSPEND OR IDENTIFY CALL IRLM
		45	LOCK RESUME
		51	SHARED LATCH RESUME. SERVICEABILITY
		52	SHARED LATCH WAIT. SERVICEABILITY
		56	EXCL. LATCH WAIT. SERVICEABILITY
		57	EXCL. LATCH RESUME. SERVICEABILITY

Trace Type	Class	IFCID	Description
		117	BEGIN THREAD WAIT TIME FOR LOG I/O
		118	END THREAD WAIT TIME FOR LOG I/O
		127	AGENT READY TO SUSPEND PAGE WAIT
		128	PAGE REQUESTOR RESUMED BY I/O INIT.
		170	SUSPEND FOR SYNC EXEC. UNIT SWITCH
		171	RESUME AGENT WAITING DB2 SERV. TSK
		174	BEGIN ARCHIVE LOG MODE (QUIESCE)
		175	END ARCHIVE LOG MODE (QUIESCE)
		213	BEGIN OF WAIT FOR CLAIM REQUEST
		214	END OF WAIT FOR CLAIM REQUEST
		215	BEGIN OF WAIT FOR DRAIN REQUEST
		216	END OF WAIT FOR DRAIN REQUEST
		226	BEGIN OF SUSPEND FOR PAGE LATCH
		227	END OF SUSPEND FOR PAGE LATCH
		241	BEGIN/END SUSPENSION OF PACK/DBRM
		242	BEGIN WAIT FOR SCHED. STORED PROC.
		243	END WAIT FOR SCHED. STORED PROC.
PERFORMANCE	1	1	SYSTEM SERVICES
		2	DATABASE SERVICES
		31	EDM POOL FULL CONDITION
		42	A CHECKPOINT STARTED
		43	A CHECKPOINT ENDED
		76	BEGINNING OF END OF MEMORY REQUEST
		77	ENDING OF AN END OF MEMORY REQUEST
		78	BEGINNING OF AN END OF TASK REQUEST
		79	ENDING OF AN END OF TASK REQUEST
		102	DETECTION OF SHORT ON STORAGE
		103	SETTING OFF OF SHORT ON STORAGE
		105	INTERNAL DBID OBID TO DB/TS
		106	SYSTEM PARAMETERS IN EFFECT
		107	DATA SET OPEN/CLOSE INFORMATION
		153	USER-DEFINED EXCEPT-CONDITION TRACE
	2	3	ALL ACCOUNTING
		68	BEGINNING OF A ROLLBACK REQUEST
		69	ENDING OF A ROLLBACK REQUEST
		70	BEGIN COMMIT PHASE 2 REQUEST
		71	END COMMIT PHASE 2 REQUEST

Trace Type	Class	IFCID	Description
		72	BEGINNING OF CREATE THREAD REQUEST
		73	ENDING OF A CREATE THREAD REQUEST
		74	BEGINNING OF TERM. THREAD REQUEST
		75	ENDING OF A TERM. THREAD REQUEST
		80	BEGINNING OF AN ESTABLISH EXIT REQ.
		81	ENDING OF AN ESTABLISH EXIT REQUEST
		82	BEGIN IDENTIFY REQUEST
		83	END IDENTIFY REQUEST
		84	BEGIN PHASE 1 COMMIT REQUEST
		85	END PHASE 1 COMMIT REQUEST
		86	BEGINNING OF SIGNON REQUEST
		87	ENDING OF SIGNON REQUEST
		88	BEGINNING OF A SYNC REQUEST
		89	ENDING OF A SYNC REQUEST
		106	SYSTEM PARAMETERS IN EFFECT
		174	BEGIN ARCHIVE LOG MODE (QUIESCE)
		175	END ARCHIVE LOG MODE (QUIESCE)
	3	22	MINIPLANS GENERATED
		53	END OF DESCR., COMMIT, RLCK OR ERR
		55	ISSUANCE OF SET CURRENT SQLID
		58	END OF SQL STATEMENT EXECUTION
		59	START OF FETCH SQL STATEMENT EXEC.
		60	START OF SELECT SQL STATEMENT EXEC.
		61	START OF INSERT, UPDATE, DELETE SQL
		62	START OF DDL STATEMENT EXECUTION
		63	SQL STATEMENT TO BE PARSED
		64	START PREPARE SQL STATEMENT EXEC.
		65	START OPEN CURSOR STATIC/DYN SQL
		66	START CLOSE CURSOR STATIC/DYN SQL
		92	START AN ACCESS METHOD SERVICES
		95	SORT STARTED
		96	SORT ENDED
		97	ACCESS METHOD SERVICES CMD COMPL.
		106	SYSTEM PARAMETERS IN EFFECT
		112	ATTRIBUTES PLAN AFTER THREAD ALLOC.
		177	SUCCESSFUL PACKAGE ALLOCATION
		233	START/END CALL TO USER ROUTINE

Trace Type	Class	IFCID	Description
		237	SET CURRENT DEGREE INFORMATION
		272	ASSOCIATE LOCATORS INFORMATION
		273	ALLOCATE CURSOR INFORMATION
		324	FUNCTION RESOLUTION INFORMATION
		325	START/END TRIGGER ACTIVATION
		350	COMPLETE SQL STATEMENT
	4	6	BEGINNING OF A READ I/O OPERATION
		7	COMPLETION CODE AFTER READ I/O
		8	BEGINNING OF SYNCHRONOUS WRITE I/O
		9	CC OF SYN OR ASYNC WRITE I/O
		10	BEGINNING OF ASYNC WRITE I/O
		29	START EDM I/O REQ. LOAD DBD OR CT
		30	END OF EDM I/O REQUEST
		105	INTERNAL DBID OBID TO DB/TS
		106	SYSTEM PARAMETERS IN EFFECT
		107	DATA SET OPEN/CLOSE INFORMATION
		127	AGENT READY TO SUSPEND PAGE WAIT
		128	PAGE REQUESTOR RESUMED BY I/O INIT.
		226	BEGIN OF SUSPEND FOR PAGE LATCH
		227	END OF SUSPEND FOR PAGE LATCH
	5	32	BEGIN OF WAIT FOR LOG MANAGER
		33	END OF WAIT FOR LOG MANAGER
		34	LOG MANAGER WAIT FOR READ I/O BEGIN
		35	LOG MANAGER WAIT FOR READ I/O END
		36	LOG MANAGER WAIT FOR NON-I/O BEGIN
		37	LOG MANAGER WAIT FOR NON-I/O END
		38	LOG MGR WAIT ACT. LOG WRITE BEGIN
		39	LOG MGR WAIT ACT. LOG WRITE I/O END
		40	LOG MANAGER ARCHIVE WRITE I/O BEGIN
		41	LOG MANAGER ARCHIVE WRITE I/O END
		104	LOG DATA SET MAPPING
		106	SYSTEM PARAMETERS IN EFFECT
		114	START ARCHIVE READ I/O WAIT
		115	END READ ARCHIVE I/O WAIT ON DASD
		116	END READ ARCHIVE I/O WAIT ON TAPE
		117	BEGIN ARCHIVE READ
		118	END ARCHIVE READ

Trace Type	Class	IFCID	Description
		119	BSDS WRITE I/O BEGINNING
		120	BSDS WRITE I/O END
		228	START ARCHIVE ALLOCATION WAIT
		229	END ARCHIVE ALLOCATION WAIT
	6	20	LOCKING SUMMARY
		44	LOCK SUSPEND OR AN ID. CALL TO IRLM
		45	LOCK RESUME
		105	INTERNAL DBID OBID TO DB/TS
		106	SYSTEM PARAMETERS IN EFFECT
		107	DATA SET OPEN/CLOSE INFORMATION
		172	UNITS OF WORK INVOLVED IN DEADLOCK
		196	LOCK TIMEOUT DETAILS
		213	BEGINNING OF WAIT FOR DRAIN LOCK
		214	END OF WAIT FOR DRAIN LOCK
		218	SUMMARY OF LOCK AVOIDANCE TECHNIQUE
		337	LOCK ESCALATION OCCURRED
	7	21	DETAIL LOCK REQ.ON RETURN FROM IRLM
		105	INTERNAL DBID OBID TO DB/TS
		106	SYSTEM PARAMETERS IN EFFECT
		107	DATA SET OPEN/CLOSE INFORMATION
		199	BUFFER POOL DATA SET STATISTICS
		223	DETAIL OF LOCK AVOIDANCE TECHNIQUE
	8	13	INPUT TO HASH SCAN
		14	END OF HASH SCAN
		15	INPUT MATCH./NON-MATCH.INDEX SCAN
		16	INPUT TO THE FIRST INSERT
		17	INPUT TO SEQUENTIAL SCAN
		18	END INDEX SCAN, INSERT, SEQ. SCAN
		105	INTERNAL DBID OBID TO DB/TS
		106	SYSTEM PARAMETERS IN EFFECT
		107	DATA SET OPEN/CLOSE INFORMATION
		125	RID LIST PROCESSING USAGE
		221	PARALLEL DEGREE FOR PARALLEL GROUP
		222	PARALLEL GROUP ELAPSED TIME
		231	PARALLEL GROUP COMPLETION
		305	TABLE CHECK CONSTRAINTS
		311	TEMPORARY TABLES

Trace Type	Class	IFCID	Description
	9	26	WORK FILE OBTAINED FOR SORT
		27	NUMBER OF ORDERED RECORDS SORT RUN
		28	DETAILED SORT INFORMATION
		95	SORT STARTED
		96	SORT ENDED
		106	SYSTEM PARAMETERS IN EFFECT
	10	23	UTILITY START INFORMATION
		24	UTILITY OBJECT OR PHASE CHANGE
		25	UTILITY END INFORMATION
		90	COMMAND TEXT OF ENTERED DB2 COMMAND
		91	COMPLETION STATUS OF A DB2 COMMAND
		105	INTERNAL DBID OBID TO DB/TS
		106	SYSTEM PARAMETERS IN EFFECT
		107	DATA SET OPEN/CLOSE INFORMATION
		108	BEGINNING OF BIND/REBIND
		109	END OF BIND/REBIND
		110	BEGINNING OF FREE PLAN
		111	END OF FREE PLAN
		201	STATUS BEF/AFT ALTER BUFFERPOOL
		256	ATTRIBUTES BEF/AFT ALTER BUFFERPOOL
	11	46	AGENT BEGIN EXEC. UNIT SWITCH
		47	NEW SRB EXECUTION UNIT STARTED
		48	NEW SRB EXECUTION UNIT COMPLETED
		49	BEGIN NEW TCB
		50	END NEW TCB
		51	SHARED LATCH RESUME
		52	SHARED LATCH WAIT
		56	EXCLUSIVE LATCH WAIT
		57	EXCLUSIVE LATCH RESUME
		93	SUSPEND WAS CALLED
		94	EVENT RESUMED
		106	SYSTEM PARAMETERS IN EFFECT
		113	ATTRIBUTES PLAN AFTER AGENT ALLOC.
	12	98	BEGIN GETMAIN/FREEMAIN (NONPOOL)
		99	END GETMAIN/FREEMAIN (NONPOOL)
		100	BEGIN GETMAIN/FREEMAIN (POOL)
		101	END GETMAIN/FREEMAIN (POOL)

Trace Type	Class	IFCID	Description
	13	106	SYSTEM PARAMETERS IN EFFECT
		11	RESULTS OF A VALIDATION EXIT CALL
		12	RESULTS EDIT EXIT CALL ENCODE RECRD
		19	RESULTS EDIT EXIT CALL DECODE A ROW
		105	INTERNAL DBID OBID TO DB/TS
		106	SYSTEM PARAMETERS IN EFFECT
		107	DATA SET OPEN/CLOSE INFORMATION
	14	67	START OF ACCOUNTING COLLECTION
		106	SYSTEM PARAMETERS IN EFFECT
		121	ENTRY ALLOCATING DB2 CONNECTION
		122	EXIT ALLOCATING DB2 CONNECTION
	15	154	USER-DEFINED ROUTINE COND. PERF.
	16	157	DRDS INTER. WITH RDS RDI CALL TYPES
		158	DRDS INTER. WITH CONVERSATION MGR
		159	DRDS REQUESTING LOCATION DATA
		160	REQUESTING AGENT DATA
		161	SERVING AGENT DATA
		162	DISTRIB TRANS. MGR REQ. AGENT DATA
		163	DISTRIB TRANS. MGR RESP. AGENT DATA
		167	CONVERSATION ALLOC. REQUEST QUEUED
		183	DRDS RDS/SCC INTERFACE DATA
	17	211	INFORMATION ABOUT CLAIMS
		212	INFORMATION ABOUT DRAINS
		213	BEGINNING OF WAIT FOR DRAIN LOCK
		214	END OF WAIT FOR DRAIN LOCK
		215	BEGIN OF WAIT OF CLAIM COUNT TO 0
		216	END OF CLAIM COUNT TO GO TO 0
	20	249	EDM POOL DBD INVALIDATION
		250	GROUP BUFFER POOL CON/DISCON
		251	P-LOCK OPERATIONS
		256	ALTER BUFFERPOOL COMMAND
		257	DETAILS OF IRLM NOTIFY REQUEST
		261	GROUP BUFFER POOL CHECKPOINT
		262	GBPOOLT CASTOUT THRESHOLD PROCESSIN
		267	BEGIN CF STRUCT REBLD/EXPAND/CONTR
		268	END CF STRUCTURE REBLD/EXPAND/CONTR
	21	255	BUFFER REFRESH DUE TO XI

Trace Type	Class	IFCID	Description
		259	P-LOCK REQUEST/NEGOTIATION REQUEST
		263	PAGE SET AND PARTITION CASTOUT DATA
		314	AUTHORIZATION EXIT PARAMETERS
		327	LANGUAGE ENVIRONMENT RUN-TIME INFO
STATISTICS	1	1	SYSTEM SERVICES
		2	DATABASE SERVICES
		105	INTERNAL DBID OBID TO DB/TS
		106	SYSTEM PARAMETERS IN EFFECT
		202	BUFFER POOL ATTRIBUTES
	2	152	USER-DEFINED STATISTICS TRACE
	3	172	UNITS OF WORK INVOLVED IN DEADLOCK
		196	LOCK TIMEOUT DETAILS
		250	CONNECT/DISCONNECT FROM GBP
		258	DATA SET EXTEND INFORMATION.
		330	ACTIVE LOG SHORTAGE
		337	LOCK ESCALATION OCCURRED
	4	191	DATA CAPTURE FOR DDIS ERRORS
		192	DDM LEVEL 6A HEADER ERRORS
		193	UOW DISPOSITION/SQLCODE MISMATCH
		194	INVALID SNA FMH-5 RECEIVED
		195	FIRST FAILURE DATA CAPTURE FOR DRDS
		203	HEURISTIC DECISION OCCURRED
		204	PARTNER COLD START DETECTED
		205	INCORRECT LOGNAME/SYNC. PARMS
		206	SNA COMPARE STATES PROTOCOL ERROR
		207	HEURISTIC DAMAGE OCCURRED
		208	SNA SYNC POINT PROTOCOL ERROR
		209	SYNC POINT COMMUNICATION FAILURE
		210	LOG NAME CHANGED ON WARM START
		235	CONDITIONAL RESTART DATA LOSS
		236	EXCHANGE LOG NAMES PROTOCOL ERROR
		238	DB2 RESTART ERROR
		267	START OF CF STRUCTURE REBUILD
		268	END OF CF STRUCTURE REBUILD
	5	230	DATA SHARING GLOBAL STATISTICS
	7	326	WLM DELAY MONITOR SUPPORT

Exceptions

Status Code	Status Name	Objects Affected	Corrective Action(s)
ACHKP	Auxiliary CHECK Pending	Base table space, LOB table spaces	1. Update or delete invalid LOB using SQL 2. Run CHECK DATA Utility with the appropriate SCOPE option to verify the validity of LOBs and XML objects and reset status.
AUXW	Auxiliary Warning	Base Table Space	1. Update or delete invalid LOBs and XML objects using SQL. 2. If an orphan LOB exists or a version mismatch exists between the base table and the auxiliary index, use REPAIR to delete the LOB from the LOB table space. 3. Run CHECK DATA utility to verify the validity of LOBs and XML objects and reset AUXW status.
		LOB Table Space	1. Update or delete invalid LOBs and XML objects using SQL. 2. If an orphan LOB exists or a version mismatch exists between the base table and the auxiliary index, use REPAIR to delete the LOB from the LOB table space. 3. Run CHECK LOB utility to verify the validity of LOBs and XML objects and reset AUXW status.
CHECKP	CHECK Pending	Table space, base table space	Check and correct RI constraints using the CHECK DATA utility.
		Partitioning index, non-partitioning index, index on auxiliary table	1. Run CHECK INDEX on index. 2. If errors – run REBUILD INDEX utility
		LOB table space	Use CHECK LOB utility – if errors: 1. Correct defects found in LOB table space with REPAIR utility 2. Run CHECK LOB again
COPY	Copy Pending	Table space, table space partition	*Take an image copy (best action), or use –START DATABASE (db) SPACENAM(ts) ACCESS FORCE or run REPAIR and reset COPY flag.
DBETE		Table space, table space partition, index space, index partition, or logical index partition	Contact IBM Software Support to report the problem. DB2 log records need to be analyzed to diagnose the cause of the problem and determine further actions.
GRECP	GBP Recover Pending	Table space, index space	RECOVER the object, or use START DATABASE command

Status Code	Status Name	Objects Affected	Corrective Action(s)
ICOPY	Informational COPY Pending	Partitioned Index, non-partitioned index, Index on auxiliary table	Copy the affected index
		NOT LOGGED table spaces	Copy the affected table space.
LPL	Logical Page List	Table spaces, index space	<ul style="list-style-type: none"> * START DATABASE ACCESS R/W or R/O * Run RECOVER or REBUILD INDEX utility * Run LOAD REPLACE * DROP the object
RBDP	REBUILD Pending	Physical or logical index partition	Run the REBUILD or RECOVER utility on the affected index partition
RBDP*		Logical Partitions of non-partitioned secondary indexes	Run REBUILD INDEX PART or RECOVER utility on the affected logical partitions
PSRBD		Non-partitioned secondary index, index on the auxiliary table	Run REBUILD INDEX ALL, the RECOVER utility, or run REBUILD INDEX The following actions also reset the REBUILD status: <ul style="list-style-type: none"> * LOAD REPLACE with table space or partition * REPAIR SET INDEX with NORBDPEND on index part – however does not correct inconsistencies . * Start database ACCESS FORCE – however does not correct inconsistencies * Run REORG INDEX SORTDATA on Index
RECP	RECOVER Pending	Table space	Run the RECOVER utility on the affected object
		Table space partition	Recover the logical partition
		Index on the auxiliary table	Run REBUILD INDEX, RECOVER INDEX or REORG SORTDATA
		Index Space	Run one of the following utilities on the affected index space: <ul style="list-style-type: none"> * REBUILD INDEX * RECOVER INDEX * REORG INDEX SORTDATA
		Any	The following actions also reset the RECOVER status: <ul style="list-style-type: none"> * LOAD REPLACE with table space or partition * REPAIR SET TABLESPACE or INDEX with NORCVRPEND on index part – however does not correct inconsistencies . * Start database ACCESS FORCE – however does not correct inconsistencies

Status Code	Status Name	Objects Affected	Corrective Action(s)
REFP	Refresh Pending	Tablespace, or Indexspace	* Run a LOAD REPLACE * Object will also be in RECP or RBDP status – will need appropriate action taken
REORP	REORG Pending	Tablespace	Perform one of the following: * LOAD REPLACE entire tablespace * REORG TABLESPACE SHRLEVEL NONE * REORG PART n:m SHRLEVEL NONE
		Partitioned Table Space	Rows <= 32KB 1. Run REORG TABLESPACE SHRLEVEL NONE SORTDATA Rows > 32KB 1. Run REORG TABLESPACE UNLOAD ONLY 2. Run LOAD TABLESPACE FORMAT UNLOAD
AREO*	Advisory REORG status	Table Space	Run one of the following utilities: * REORG TABLESPACE * LOAD REPLACE * REPAIR TABLESPACE
		Index Space	Run one of the following utilities: * REORG TABLESPACE * LOAD REPLACE * REORG INDEX * REPAIR INDEX
RESTP	Restart Pending	Table space, partitions, index spaces, physical index partitions	Objects are unavailable until back-out work is complete or until restart is canceled and a conditional restart or cold start is performed.
WEPR	Write Error Page Range	Page range in error	Run a RECOVER utility on effected data

Determining Partition From Page Number

Use these charts to determine the partition number from a page number displayed in a console message. You first need to know the type of data sets for the table space (EA or non EA-enabled), along with the page size and DSSIZE (if EA-enabled). Use this information to determine how many leading bits of a RID are used to represent the partition number. Convert the hex representation of leading portion of the page number to binary, and then the appropriate number of bits to decimal. Partition numbers begin with zero.

EA-Enabled Table Spaces (Defined as LARGE or with DSSIZE)

DSSIZE	Page Size	Leading Bits used for Part Number	Example Page Number (First 4 RID bytes)	Example Partition Number in Binary	Partition Number	Part
1GB	4KB	14 bits	X'01000004'	B'000000001000000'	64	65
1GB	8KB	15 bits	X'01000004'	B'0000000010000000'	128	129
1GB	16KB	16 bits	X'01000004'	B'00000000100000000'	256	257
1GB	32KB	17 bits	X'01000004'	B'000000001000000000'	512	513
2GB	4KB	13 bits	X'01000004'	B'00000000100000'	32	33
2GB	8KB	14 bits	X'00040040'	B'000000000000001'	1	2
2GB	16KB	15 bits	X'00040040'	B'0000000000000010'	2	3
2GB	32KB	16 bits	X'00040040'	B'00000000000000100'	4	5
4GB	4KB	12 bits	X'01000004'	B'0000000010000'	16	17
4GB	8KB	13 bits	X'06000007'	B'00000011000000'	192	193
4GB	16KB	14 bits	X'007C0005'	B'00000000011111'	31	32
4GB	32KB	15 bits	X'007C0005'	B'000000000111110'	62	63
8GB	4KB	11 bits	X'3FFFFFFF'	B'00111111111'	511	512
8GB	8KB	12 bits	X'3FFFFFFF'	B'001111111111'	1023	1024
8GB	16KB	13 bits	X'3FFFFFFF'	B'0011111111111'	2047	2048
8GB	32KB	14 bits	X'3FFFFFFF'	B'00111111111111'	4095	4096
16GB	4KB	10 bits	X'3FFFFFFF'	B'0011111111'	255	256
16GB	8KB	11 bits	X'06000007'	B'000000110000'	48	49
16GB	16KB	12 bits	X'3FFFFFFF'	B'001111111111'	1023	1024
16GB	32KB	13 bits	X'06000007'	B'00000011000000'	192	193
32GB	4KB	9 bits	X'06000007'	B'0000001100'	12	13
32GB	8KB	10 bits	X'06000007'	B'00000011000'	24	25
32GB	16KB	11 bits	X'03F00009'	B'00000011111'	31	32
32GB	32KB	12 bits	X'03F00009'	B'000000111111'	63	64
64GB	4KB	8 bits	X'FFFFFFF'	B'11111111'	255	256
64GB	8KB	9 bits	X'FFFFFFF'	B'111111111'	511	512
64GB	16KB	10 bits	X'FFFFFFF'	B'1111111111'	1023	1024
64GB	32KB	11 bits	X'FFFFFFF'	B'11111111111'	2047	2048

Non EA-Enabled Table Spaces

Number of Parts	Page Size	RID Type	Leading Bits used for Part Number	Example Page Number (First 3 or 4 RID bytes)	Example Partition Number in Binary	Partition Number	Part
1 to 16	4KB	4 byte	4 bits	X'000004'	B'0000'	0	1
1 to 16	8KB	4 byte	5 bits	X'E80005'	B'01111'	15	16
1 to 16	16KB	4 byte	6 bits	X'1E0007'	B'000111'	7	8
1 to 16	32KB	4 byte	7 bits	X'1E0007'	B'0001111'	15	16
17 to 32	4KB	4 byte	5 bits	X'1E0007'	B'00011'	3	4
17 to 32	8KB	4 byte	6 bits	X'1E0007'	B'000111'	7	8
17 to 32	16KB	4 byte	7 bits	X'010008'	B'0000000'	0	1
17 to 32	32KB	4 byte	8 bits	X'010008'	B'00000001'	1	2
33 to 64	4KB	4 byte	6 bits	X'1F8009'	B'000111'	7	8
33 to 64	8KB	4 byte	7 bits	X'1F8009'	B'0001111'	15	16
33 to 64	16KB	4 byte	8 bits	X'1F8009'	B'00011111'	31	32
33 to 64	32KB	4 byte	9 bits	X'1F8009'	B'000111111'	63	64
1 to 4096	4KB	5 byte	12 bits	X'00100004'	B'000000000001'	1	2
1 to 4096	8KB	5 byte	13 bits	X'00100004'	B'0000000000010'	2	3
1 to 4096	16KB	5 byte	14 bits	X'1FFE000B'	B'00011111111111'	2047	2048
1 to 4096	32KB	5 byte	15 bits	X'1FFE000B'	B'000111111111111'	4095	4096

Catalog Tables

SYSIBM.IPLIST

Allows multiple IP addresses to be specified for a given LOCATION. Insert rows into this table when you want to define a remote DB2 data sharing group. The same value for the IPADDR column cannot appear in both the SYSIBM.IPNAMES table and the SYSIBM.IPLIST table. Rows in this table can be inserted, updated and deleted.

Column Name	Data Type	Description
LINKNAME	VAHCHAR(24)	This column is associated with the value specified in the LINKNAME column in the SYSIBM.LOCATIONS table and the SYSIBM.IPNAMES table. The values of the other columns in the SYSIBM.IPNAMES table apply to the server identified by the LINKNAME column in this row.
IPADDR	VARCHAR(254)	<ul style="list-style-type: none"> This column contains an IPv4 or IPv6 address, or domain name of a remote TCP/IP host of the server. If WLM Domain Name Server workload balancing is used, this column must contain the member specific domain name. If Dynamic VIPA workload balancing is used, this column must contain the member specific Dynamic VIPA address. The IPADDR column must be specified as follows: An IPv4 address must be left justified and is represented as a dotted decimal address. For example, '123.456.78.912' would be interpreted as an IPv4 address. An IPv6 address must be left justified and is represented as a colon hexadecimal address. An example of an IPv6 address is 2001:0DB8:0000:0000:0008:0800:200C:417A, which can also be expressed in compressed form as 2001:DB8::8:800:200C:417A. A domain name is converted to an IP address by the domain name server where a resulting IPv4 or IPv6 address is determined.
IBMREQD	CHAR(1)	A value of Y means row came from MRM tape.

SYSIBM.IPNAMES

Defines the remote DRDA servers DB2 can access using TCP/IP. Rows in this table can be inserted updated, and deleted.

Column Name	Data Type	Description
LINKNAME	VARCHAR(24)	The value specified in this column must match the value specified in the LINKNAME column of the associated row in SYSIBM.LOCATIONS.
SECURITY_OUT	CHAR(1)	<p>This column defines the DRDA security option that is used when local DB2 SQL applications connect to any remote server associated with this TCP/IP host:</p> <p>A: The option is "already verified". Outbound connection</p>

Column Name	Data Type	Description
		<p>requests contain an authorization ID and no password. The authorization ID used for an outbound request is either the DB2 user's authorization ID or a translated ID, depending upon the value of the USERNAMES column. The authorization ID is not encrypted when it is sent to the partner.</p> <p>D: The option is 'userid and security-sensitive data encryption'. Outbound connection requests contain an authorization ID and no password.</p> <p>E: The option is 'userid, password, and security sensitive data encryption'. Outbound connection requests contain an authorization ID and a password. The password is obtained from SYSIBM.SYSUSERNAMES table. The USERNAMES column must specify 'O'.</p> <p>If the applications connect to any remote server as trusted, the USERNAMES column must specify 'O' or 'S'.</p> <p>R: The option is "RACF PassTicket". Outbound connection requests contain a userid and a RACF PassTicket. The value specified in the LINKNAME column is used as the RACF PassTicket application name for the remote server.</p> <p>The authorization ID used for an outbound request is either the DB2 user's authorization ID or a translated ID, depending upon the value of the USERNAMES column.</p> <p>P: The option is "password". Outbound connection requests contain an authorization ID and a password. The password is obtained from the SYSIBM.USERNAMES table. The USERNAMES column must specify "O".</p> <p>If the applications connect to any remote server as trusted, the USERNAMES column must specify 'O' or 'S'.</p>
USERNAMES	CHAR(1)	<p>This column controls outbound authorization ID translation. Outbound translation is performed when an authorization ID is sent by DB2 to a remote server.</p> <p>O: An outbound ID is subject to translation. Rows in the SYSIBM.USERNAMES table are used to perform ID Translation. No translation or "come from" checking is performed on inbound IDs.</p> <p>S: Row in the SYSIBM.USERNAMES table is used to obtain the system AUTHID used to establish a trusted connection.</p> <p>Blank: No translation occurs.</p>
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape
IPADDR	VARCHAR(254)	<p>This column contains the IP address or domain name of a remote TCP/IP host. The IPADDR column must be specified as follows:</p> <ul style="list-style-type: none"> An IPv4 address must be left justified and is represented as a dotted decimal address. For example, '123.456.78.91' would be interpreted as an IPv4 address. An IPv6 address must be left justified and is represented as a colon hexadecimal address. An example of an IPv6 address is

Column Name	Data Type	Description
		<p>2001:0DB8:0000:0000:0008:0800:200C:417A, which can also be expressed in compressed form as 2001:DB8::8:800:200C:417A.</p> <ul style="list-style-type: none"> A domain name is converted to an IP address by the domain name server where a resulting IPv4 or IPv6 address is determined. call. TCP/IP domain names are not case sensitive.

SYSIBM.LOCATIONS

Contains a row for every accessible remote server. The row associates a LOCATION name with the TCP/IP or SNA network attributes for the remote server. Requesters are not defined in this table. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
LOCATION	VARCHAR(128)	A unique location name for the accessible server. This is the name by which the remote server is known to local DB2 SQL applications.
LINKNAME	VARCHAR(128)	<p>Identifies the VTAM or TCP/IP attributes associated with this location. For any LINKNAME specified, one or both of the following statements must be true:</p> <p>1: A row exists in SYSIBM.LUNAMES whose LUNAME matches the value specified in the SYSIBM.LOCATIONS LINKNAME column. This row specifies the VTAM communication attributes for the remote location.</p> <p>2: A row exists in SYSIBM.IPNAMES whose LINKNAME matches the value specified in the SYSIBM.LOCATIONS LINKNAME column. This row specifies the TCP/IP communication attributes for the remote location.</p>
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.
PORT	VARCHAR(96)	<p>TCP/IP is used for outbound DRDA connections when the following statement is true:</p> <p>A row exists in SYSIBM.IPNAMES, where the LINKNAME column matches the value specified in the SYSIBM.LOCATIONS LINKNAME column.</p> <p>If the above-mentioned row is found, the value of the PORT column is interpreted as follows:</p> <ul style="list-style-type: none"> –If PORT is blank, the default DRDA port (446) is used. –If PORT is nonblank, the value specified for PORT can take one of two forms: <p>1: If the value in PORT is left justified with 1-5 numeric characters, the value is assumed to be the TCP/IP port number of the remote database server.</p> <p>2: Any other value is assumed to be a TCP/IP service name, which can be converted to a TCP/IP port number using the TCP/IP getservbyname socket call. TCP/IP service names are not case sensitive.</p>
TPN	VARCHAR(192)	Used only when the local DB2 begins an SNA conversation with another server. When used, TPN indicates the SNA LU 6.2 transaction program name (TPN) that will allocate the

Column Name	Data Type	Description
		conversation. A length of zero for the column indicates the default TPN. For DRDA conversations, this is the DRDA default, which is X'07F6C4C2'. For DB2 private protocol conversations, this column is not used. For an SQL/DS server, TPN should contain the resource ID of the SQL/DS machine.
DBALIAS	VARCHAR(128)	Database alias. The name associated with the server. This name is used to access a remote database server. If DBALIAS is blank the location name is used to access the remote database server. This column does not change the name of any database objects sent to the remote site that contains the location qualifier.
TRUSTED	CHAR(1)	Indicates whether the connection to the remote server can be trusted. This is restricted to TCP/IP only. This column is ignored for connections using SNA. Y Location is trusted. Access to the remote location requires trusted context defined at the remote location. N Location is not trusted.
SECURE	CHAR(1)	Indicates the use of the Secure Socket Layer (SSL) protocol for outbound DRDA connections when local DB2 applications connect to the remote database server using TCP/IP. Y Indicates a secure connection using SSL is required for the outbound DRDA connection. N Indicates a secure connection is not required for the outbound DRDA connection.

SYSIBM.LULIST

Allows multiple LU names to be specified for a given LOCATION. Insert rows into this table when you want to define a remote DB2 data-sharing group. The same value for LUNAME column cannot appear in both the SYSIBM.LUNAMES table and the SYSIBM.LULIST table. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
LINKNAME	VARCHAR(24)	The value of the LINKNAME column in the SYSIBM.LOCATIONS table with which this row is associated. This is also the value of the LUNAME column in the SYSIBM.LUNAMES table. The values of the other columns in the SYSIBM.LUNAMES row apply to the LU identified by the LUNAME column in this row of SYSIBM.LULIST.
LUNAME	VARCHAR(24)	The VTAM logical unit name (LUNAME) of the remote database system. This LUNAME must not exist in the LUNAME column of SYSIBM.LUNAMES.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.

SYSIBM.LUMODES

Each row of the table provides VTAM with conversation limits for a specific combination of LUNAME and MODENAME. The table is accessed only during the initial conversation limit negotiation between DB2 and a remote LU. This negotiation is called *change-number-of-sessions* (CNOS) processing. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
LUNAME	VARCHAR(24)	LU name of the server involved in the CNOS processing.
MODENAME	VARCHAR(24)	Name of a logon mode description in the VTAM logon mode table.
CONVLIMIT	SMALLINT	Maximum number of active conversations between the local DB2 and the other system for this mode. Used to override the number in the DSESLIM parameter of the VTAMAPPL definition statement for this mode.
IBMREQD	CHAR(1)	A value of Y indicates that the row name from the basic machine-readable material (MRM) tape.

SYSIBM.LUNAMES

The table must contain a row for each remote SNA client or server that communicates with DB2. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
LUNAME	VARCHAR(24)	Name of the LU for one or more accessible systems. A blank string indicates the row applies to clients whose LU name is not specifically defined in this table. All other column values for a given row in this table are for clients and servers associated with the row's LU name.
SYSMODENAME	VARCHAR(24)	Mode used to establish inter-system conversations. A blank indicates the default mode IBMDB2LM (DB2 private protocol access).
SECURITY_IN	CHAR(1)	This column defines the security options that are accepted by this DB2 when an SNA client connects to DB2: V: The option is "verify". An incoming connection request must include one of the following: a userid and password, a userid and RACF PassTicket, or a Kerberos security ticket. A: The option is "already verified". A request does not need a password, although a password is checked if it is sent. With this option, an incoming connection request is accepted if it includes any of the following: a userid, a userid and password, a userid and RACF PassTicket, or a Kerberos security ticket. If the USERNAMES column contains 'I' or 'B', RACF is not invoked to validate incoming connection requests that contain only a userid.
SECURITY_OUT	CHAR(1)	This column defines the security option that is used when local DB2 SQL applications connect to any remote server associated with this LUNAME: A: The option is "already verified". Outbound connection requests contain an authorization ID and no password. The authorization ID used for an outbound request is either the DB2 user's authorization ID or a translated ID, depending upon the value of the USERNAMES column. R: The option is "RACF PassTicket". Outbound connection requests contain a userid and a RACF PassTicket. The server's LU name is used as the RACF PassTicket application name. The authorization ID used for an outbound request is either the DB2 user's authorization ID or a translated ID, depending upon the value of the USERNAMES column. P: The option is "password". Outbound connection requests contain an authorization ID and a password. The password is

Column Name	Data Type	Description
		obtained from the SYSIBM.USERNAMEs table or RACF, depending upon the value specified in the ENCRYPTPWDS column. The USERNAMEs column must specify 'B' or 'O'.
ENCRYPTPWDS	CHAR(1)	This column only applies to DB2 for OS/390 partners. It is provided to support connectivity to prior releases of DB2 that are unable to support RACF PassTickets. For connections between DB2 Version 5 and later, using the SECURITY_OUT='R' option instead of the ENCRYPTPWDS='Y' option is recommended. N : No, passwords are not in internal RACF encrypted format. This is the default. Y : Yes for outbound requests ,the encrypted password is extracted from RACF and sent to the server .For inbound requests ,the password is treated as encrypted.
MODESELECT	CHAR(1)	Whether to use the SYSIBM.MODESELECT table: N : Use default modes:IBMDB2LM (for DB2 private protocol) and IBMRDB (for DRDA). Y : Searches SYSIBM.MODESELECT for appropriate mode name.
USERNAMES	CHAR(1)	This column controls inbound and outbound authorization ID translation, and "come from" checking. Inbound translation and "come from" checking are performed when an authorization ID is received from a remote client. Outbound translation is performed when an authorization ID is sent by DB2 to a remote server. When I,O,or B is specified in this column, rows in the SYSIBM.USERNAMES table are used to perform ID translation. I An inbound ID is subject to translation and "come from " checking. No translation is performed on outbound IDs. O No translation or "come from "checking is performed on inbound IDs. An outbound ID is subject to translation. B An inbound ID is subject to translation and "come from " checking. An outbound ID is subject to translation. blank No translation occurs.
GENERIC	CHAR(1)	Indicates whether DB2 should use its real LU name or generic LU name to identify itself to the partner LU, which is identified by this row. N The real VTAMLU name of this DB2 subsystem Y The VTAM generic LU name of this DB2 subsystem
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM)tape.

SYSIBM.MODESELECT

Associates a mode name with any conversation created to support an outgoing SQL request. Each row represents one or more combinations of LUNAME, authorization ID, and application plan name. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
-------------	-----------	-------------

Column Name	Data Type	Description
AUTHID	VARCHAR(128)	Authorization ID of the SQL request. Blank (the default) indicates that the MODENAME specified for the row is to apply to all authorization IDs.
PLANNAME	VARCHAR(24)	Plan name associated with the SQL request. Blank (the default) indicates that the MODENAME specified for the row is to apply to all plan names.
LUNAME	VARCHAR(24)	LU name associated with the SQL request.
MODENAME	VARCHAR(24)	Name of the logon mode in the VTAM logon mode table to be used in support of the outgoing SQL request. If blank, IBMDB2LM is used for DB2 private protocol connections and IBMRDB is used for DRDA connections.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No; Y=Yes

SYSIBM.SYSAUXRELS

Contains one row for each auxiliary table created for a LOB column. A base tablespace that is partitioned must have one auxiliary table for each partition of each LOB column.

Column Name	Data Type	Description
TBOWNER	VARCHAR(128)	Schema of the base table.
TBNAME	VARCHAR(128)	Name of the base table.
COLNAME	VARCHAR(128)	Name of the LOB column in the base table.
PARTITION	SMALLINT	Partition number if the base tablespace is partitioned. Otherwise, the value is 0.
AUXTBOWNER	VARCHAR(128)	Schema of the owner of the auxiliary table.
AUXTBNAME	VARCHAR(128)	Name of the auxiliary table.
AUXRELOBID	INTEGER	Internal identifier of the relationship between the base table and the auxiliary table.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No; Y=Yes
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object. Blank if created prior to Version 9.

SYSIBM.SYSCHECKDEP

Contains one row for each reference to a column in a table check constraint.

Column Name	Data Type	Description
TBOWNER	VARCHAR(128)	Schema of the owner of the table on which the table check constraint is defined.
TBNAME	VARCHAR(128)	Name of the table on which the check constraint is defined.
CHECKNAME	VARCHAR(128)	Name of the check constraint.
COLNAME	VARCHAR(128)	Name of the column that the table check constraint refers to.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No; Y=Yes

SYSIBM.SYSCHECKS

Contains one row for each table check constraint.

Column Name	Data Type	Description
TBOWNER	VARCHAR(128)	Schema of the owner of the table on which the table check

Column Name	Data Type	Description
		constraint is defined.
CREATOR	VARCHAR(128)	Authorization ID of the creator of the table check constraint.
DBID	SMALLINT	Internal identifier of the database for the table check constraint.
OBID	SMALLINT	Internal identifier of the table check constraint.
TIMESTAMP	TIMESTAMP	Time when the table check constraint was created.
RBA	CHAR(6)	The log RBA when the table check constraint was created.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N =No, Y=Yes
TBNAME	VARCHAR(128)	Name of the table on which the check constraint is defined.
CHECKNAME	VARCHAR(128)	Table check constraint name.
CHECKCONDITION	VARCHAR(7400)	Text of the table check constraint.
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object. Blank if created prior to Version 9.

SYSIBM.SYSCHECKS2

Contains one row for each table check constraint.

Column Name	Data Type	Description
TBOWNER	VARCHAR(128)	Schema of the owner of the table on which the table check constraint is defined.
TBNAME	VARCHAR(128)	Name of the table on which the check constraint is defined.
CHECKNAME	VARCHAR(128)	Table check constraint name.
PATHSCHEMAS	VARCHAR(2048)	SQL path at the time the table check constraint was created. The path is used to resolve unqualified cast function names that are used in the constraint definition.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object. Blank if created prior to Version 9.

SYSIBM.SYSCOLAUTH

Records the UPDATE or REFERENCES privileges that are held by users on individual columns of a table or view.

Column Name	Data Type	Description
GRANTOR	VARCHAR(128)	Authorization ID of the user who granted the privileges. Could also be PUBLIC or PUBLIC followed by an asterisk.
GRANTEE	VARCHAR(128)	Authorization ID of the user who holds the privilege or the name of an application plan or package that uses the privilege. PUBLIC for a grant to PUBLIC. PUBLIC followed by an asterisk for a grant to PUBLIC AT ALL LOCATIONS.
GRANTEETYPE	CHAR(1)	Type of grantee: Blank: An authorization ID L: Role P: An application plan or a package. The grantee is a package if COLLID is not blank.
CREATOR	VARCHAR(128)	Schema of the owner of the table or view on which the update privilege is held.

Column Name	Data Type	Description
TNAME	VARCHAR(18)	Name of the table or view.
	CHAR(12)	Internal use only.
DATEGRANTED	CHAR(6)	Date the privilege was granted, in the form <i>yymmdd</i> .
TIMEGRANTED	CHAR(8)	Time the privilege was granted, in the form <i>hhmmss.th</i> .
COLNAME	VARCHAR(128)	Name of the column to which the UPDATE privilege applies.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No; Y=Yes.
COLLID	CHAR(18)	If GRANTEE is a package, its collection name. Otherwise, the value is blank.
CONTOKEN	CHAR(8)	If GRANTEE is a package, the consistency token of the DBRM from which the package was derived. Otherwise, the value is blank.
PRIVILEGE	CHAR(1)	Indicates which privilege this row describes: R Row pertains to the REFERENCES privilege. Blank Row pertains to the UPDATE privilege.
GRANTEDTS	TIMESTAMP	Time when the GRANT statement was executed.
GRANTORTYPE	CHAR(1)	Indicates the type of grantor L Role Blank Authorisation ID that is not a role

SYSIBM.SYSCOLDIST

Contains one or more rows for the first key column of an index key. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
	SMALLINT	Not used
STATSTIME	TIMESTAMP	If RUNSTATS updated the statistics, the date and time when the last invocation of RUNSTATS updated the statistics.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No; Y=Yes
TBOWNER	VARCHAR(128)	Schema of the owner of the table that contains the column.
TBNAME	VARCHAR(128)	Name of the table that contains the column.
NAME	VARCHAR(128)	Name of the column. If NUMCOLUMNS is greater than 1 this name identifies the first column name of the set of columns associated with the statistics.
COLVALUE	VARCHAR(2000)	Contains the data of a frequently occurring value. FOR BIT DATA the value has a non-character data type, the data might not be printable.
TYPE	CHAR(1)	The type of statistics gathered: C Cardinality F Frequent value H Histogram Statistics N Nonpadded frequent value
CARDF	FLOAT	For TYPE='C', the number of distinct values for the column group. For TYPE='H', the number of distinct values for the column group in a quantile indicated by QUANTILENO.

Column Name	Data Type	Description
COLGROUPCOLNO	VARCHAR(254)	Identifies the set of columns associated with the statistics. If the statistics are only associated with a single column, the field contains a zero length. Otherwise, the field is an array of SMALLINT column numbers with a dimension equal to the value in NUMCOLUMNS. This is an updatable column.
NUMCOLUMNS	SMALLINT	Identifies the number of columns associated with the statistics.
FREQUENCYF	FLOAT	Gives the percentage of rows in the table with the value specified in COLVALUE when the number is multiplied by 100. For example, a value of 1 indicates 100%. A value of .153 indicates 15.3%. When TYPE='H', this is the percentage of rows in table which falls in the quantile indicated by QUANTILENO whose range is limited by [LOWVALUE, HIGHVALUE]. Statistics are not collected for an index on a ROWID column.
QUANTILENO	SMALLINT	Ordinary sequence number of a quantile in the whole consecutive value range, from low to high. This column is not updatable.
LOWVALUE	VARCHAR(2000)	For TYPE='H', this is the lower bound for the quantile indicated by QUANTILENO. Not used if TYPE is not 'H'. This column is not updatable.
HIGHVALUE	VARCHAR(2000)	For TYPE='H' this is the higher bound for the quantile indicated by QUANTILENO. Not used if TYPE is not 'H'. This column is not updatable.

SYSIBM.SYSCOLDIST_HIST

Contains rows from SYSCOLDIST. Whenever rows are added or changed in SYSCOLDIST, the rows are also written to the new history table. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
STATTIME	TIMESTAMP	If RUNSTATS updated the statistics, the date and time when the last invocation of RUNSTATS updated the statistics.
TBOWNER	VARCHAR(128)	Schema of the owner of the table that contains the column.
TBNAME	VARCHAR(128)	Name of the table that contains the column.
NAME	VARCHAR(128)	Name of the column. If NUMCOLUMNS is greater than 1, this name identifies the first column name of the set of columns associated with the statistics.
COLVALUE	VARCHAR(2000)	Contains the data of a frequently occurring value. Statistics are not collected for an index on a ROWID column. If the value has a non-character data type, the data might not be printable.
TYPE	CHAR(1)	The type of statistics gathered: C Cardinality F Frequent value H Histogram Statistics N Nonpadded frequent value

Column Name	Data Type	Description
CARDF	FLOAT(8)	When TYPE='C', this is the number of distinct values for the column group. When TYPE='H', this is the number of distinct values for the column group in a quantile indicated by QUANTILENO. The value is -1 if statistics have not been gathered.
COLGROUPCOLNO	VARCHAR(254)	Identifies the set of columns associated with the statistics. If the statistics are only associated with a single column, the field contains a zero length. Otherwise, the field is an array of SMALLINT column numbers with a dimension equal to the value in NUMCOLUMNS.
NUMCOLUMNS	SMALLINT	Identifies the number of columns associated with the statistics.
FREQUENCYF	FLOAT(8)	Gives the percentage of rows in the table with the value specified in COLVALUE when the number is multiplied by 100. For example, a value of 1 indicates 100%. A value of .153 indicates 15.3%. When TYPE='H', this is the percentage of rows in table which falls in the quantile indicated by QUANTILENO whose range is limited by [LOWVALUE, HIGHVALUE]. Statistics are not collected for an index on a ROWID column. The value is -1 if statistics have not been gathered.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.
QUANTILENO	SMALLINT	Ordinary sequence number of a quantile in the whole consecutive value range, from low to high. This column is not updatable.
LOWVALUE	VARCHAR(2000)	For TYPE='H', this is the lower bound for the quantile indicated by QUANTILENO. Not used if TYPE is not 'H'. This column is not updatable.
HIGHVALUE	VARCHAR(2000)	For TYPE='H' this is the higher bound for the quantile indicated by QUANTILENO. Not used if TYPE is not 'H'. This column is not updatable.

SYSIBM.SYSCOLDISTSTATS

Contains zero or more rows per partition for the first key column of a partitioning index. Rows are inserted when RUNSTATS scans index partitions of the partitioning index. No row is inserted if the index is a non-partitioning index. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
	SMALLINT	Not used
STATSTIME	TIMESTAMP	If RUNSTATS updated the statistics, the date and time when the last invocation of RUNSTATS updated the statistics.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
PARTITION	SMALLINT	Partition number for the tablespace that contains the table in which the column is defined.
TBOWNER	VARCHAR(128)	Schema of the owner of the table that contains the column.

Column Name	Data Type	Description
TBNAME	VARCHAR(128)	Name of the table that contains the column.
NAME	VARCHAR(128)	Name of the column. If NUMCOLUMNS is greater than 1, this name identifies the first column name of the set of columns associated with the statistics.
COLVALUE	VARCHAR(2000)	Contains the data of a frequently occurring value. FOR BIT DATA the value has a non-character data type, the data may not be printable.
TYPE	CHAR(1)	The type of statistics gathered: C Cardinality F Frequent value H Histogram statistics N Non-padded frequent value
CARDF	FLOAT	If TYPE is C, the value is the number of distinct values for the column group. If TYPE is N or TYPE is F, the value is the number of rows or keys in the partition for which the FREQUENCYF value applies. If TYPE is H, the number of distinct values for the column group in a quantile indicated by QUANTILENO.
COLGROUPCOLNO	VARCHAR(254)	Identifies the set of columns associated with the statistics. If the statistics are only associated with a single column, the field contains a zero length. Otherwise, the field is an array of SMALLINT column numbers with a dimension equal to the value in NUMCOLUMNS. This is an updatable column.
NUMCOLUMNS	SMALLINT	Identifies the number of columns associated with the statistics.
FREQUENCYF	FLOAT	Gives the percentage of rows in the table with the value specified in COLVALUE when the number is multiplied by 100. For example, a value of 1 indicates 100%. A value of .153 indicates 15.3%. When TYPE='H', this is the percentage of rows in table which falls in the quantile indicated by QUANTILENO whose range is limited by [LOWVALUE, HIGHVALUE]. Statistics are not collected for an index on a ROWID column.
QUANTILENO	SMALLINT	Ordinary sequence number of a quantile in the whole consecutive value range, from low to high. This column is not updatable.
LOWVALUE	VARCHAR(2000)	For TYPE='H', this is the lower bound for the quantile indicated by QUANTILENO. Not used if TYPE is not 'H'. This column is not updatable.
HIGHVALUE	VARCHAR(2000)	For TYPE='H' this is the higher bound for the quantile indicated by QUANTILENO. Not used if TYPE is not 'H'. This column is not updatable.

SYSIBM.SYSCOLSTATS

Contains partition statistics for selected columns. For each column, a row exists for each partition in the table. Rows are inserted when RUNSTATS collects either indexed column statistics or non-indexed column statistics for a partitioned tablespace. No row is inserted if the tablespace is non-partitioned. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
HIGHKEY	VARCHAR(2000)	Highest value of the column within the partition. Blank if statistics have not been gathered or the column is an indicator column, a node ID column, or a column of an XML table. If the column has a non-character data type, the data might not be printable. If the partition is empty, the value is a string of length 0.
HIGH2KEY	VARCHAR(2000)	Second highest value of the column within the partition. Blank if statistics have not been gathered or the column is an indicator column, a node ID column, or a column of an XML table. If the column has a non-character data type, the data might not be printable. If the partition is empty, the value is a string of length 0.
LOWKEY	VARCHAR(2000)	Lowest value of the column within the partition. Blank if statistics have not been gathered or the column is an indicator column, a node ID column, or a column of an XML table. If the column has a non-character data type, the data might not be printable. If the partition is empty, the value is a string of length 0.
LOW2KEY	VARCHAR(2000)	Second lowest value of the column within the partition. Blank if statistics have not been gathered or the column is an indicator column, a node ID column, or a column of an XML table. If the column has a non-character data type, the data might not be printable. If the partition is empty, the value is a string of length 0.
	INTEGER	Number of distinct column values in the partition.
STATSTIME	TIMESTAMP	If RUNSTATS updated the statistics, the date and time when the last invocation of RUNSTATS updated the statistics.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
PARTITION	SMALLINT	Partition number for the tablespace that contains the table in which the column is defined.
TBOWNER	VARCHAR(128)	Schema of the owner of the table that contains the column.
TBNAME	VARCHAR(128)	Name of the table that contains the column.
NAME	VARCHAR(128)	Name of the column.
COLCARDATA	VARCHAR(1000)	Internal use only.
STATS_FORMAT	CHAR(1)	The type of statistics gathered: Blank Statistics have not been collected or varchar column statistical values are padded N Varchar column statistical values are not padded This is an updatable column

SYSIBM.SYSCOLUMNS

Contains one row for every column of each table and view.

Column Name	Data Type	Description
NAME	VARCHAR(128)	Name of the column.
TBNAME	VARCHAR(128)	Name of the table or view that contains the column.
TBCREATOR	VARCHAR(128)	Schema of the owner of the table or view that contains the column.
COLNO	SMALLINT	Numeric place of the column in the table or view; for example 4 (out of 10). An additional row with column number 0 is inserted into SYSCOLUMNS if the definition of the table is incomplete (all required unique indexes have not been created).
COLTYPE	CHAR(8)	The type of the column specified in the definition of the column: INTEGER Large integer SMALLINT Small integer

Column Name	Data Type	Description
		<p> FLOAT Floating-point CHAR Fixed-length character string VARCHAR Varying-length character string LONGVAR Varying-length character string (prior to V9) DECIMAL Decimal GRAPHIC Fixed-length graphic string VARGRAPHIC Varying-length graphic string LONGVARG Varying-length graphic string (prior to V9) DATE Date TIME Time TIMESTAMP Timestamp BLOB Binary large object CLOB Character large object DBCLOB Double Byte Character Large Objects ROWID ROWID Data Type DISTINCT Distinct Type XML XML data type BIGINT Big integer BINARY Fixed-length binary string VARBIN Varying-length binary string DECFLOAT Decimal floating point </p> <p>Whether a column described as VARCHAR, LONGVAR, CLOB, VARG, LONGVAR, DBCLOB, or BLOB is a long string column depends on its length attribute. A column described as BLOB, CLOB, or DBCLOB is always a long string column.</p>
LENGTH	SMALLINT	<p>Length attribute of the column or, in the case of a decimal column, its precision. The number does not include the internal prefixes that are used to record the actual length and null state, where applicable.</p> <p> INTEGER 4 SMALLINT 2 FLOAT 4 or 8 CHAR Length of string VARCHAR Maximum length of string LONGVAR Maximum length of string (prior to V9) DECIMAL Precision of number GRAPHIC Number of DBCS characters VARGRAPHIC Maximum number of DBCS char.(prior to V9) LONGVARG Maximum number of DBCS characters DATE 4 TIME 3 TIMESTAMP 10 BLOB 4 – The length of the field that is stored in the base table. The maximum length of the LOB column is found in LENGTH2 CLOB 4 – The length of the field that is stored in the base table. The maximum length of the CLOB column is found in LENGTH2 DBCLOB 4 – The length of the field that is stored in the base table. The maximum length of the CLOB column is found in LENGTH2 ROWID 17 – The maximum length of the stored portion </p>

Column Name	Data Type	Description														
		of the identifier DISTINCT The length of the source data type XML 6 BIGINT 8 BINARY Length of String VARBIN Maximum length of string DECFLOAT 8 or 16														
SCALE	SMALLINT	Scale of decimal data. Zero if not a decimal column.														
NULLS	CHAR(1)	Whether the column can contain null values: N = No Y = Yes The value can be N for a view column that is derived from an expression or a function. Nevertheless, such a column allows nulls when an outer select list refers to it.														
	INTEGER	Not used														
HIGH2KEY	VARCHAR(2000)	Second highest value of the column. Blank if statistics have not been gathered, or the column is an indicator column or a column of an auxiliary table. If the column has a non-character data type, the data might not be printable. If the table is empty, the value is a string of length 0. This is an updatable column.														
LOW2KEY	VARCHAR(2000)	Second lowest value of the column. Blank if statistics have not been gathered, or the column is an indicator column or a column of an auxiliary table. If the column has a non-character data type, the data might not be printable. If the table is empty, the value is a string of length 0. This is an updatable column.														
UPDATES	CHAR(1)	Whether the column can be updated: N = No Y = Yes The value is N if the column is: * Derived from a function or expression. * A column that is defined with the AS IDENTITY and GENERATED ALWAYS attributes. The value can be Y for columns of a read-only view.														
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No ,Y=Yes														
REMARKS	VARCHAR(762)	A character string provided by the user with the COMMENT ON statement.														
DEFAULT	CHAR(1)	The contents of this column are meaningful only if the TYPE column for the associated SYSTABLES row indicates that this is for a table(T) or a created temporary table (G). Default indicator: A The column has a row ID data type (COLTYPE='ROWID') and the GENERATED ALWAYS attribute B The column has a default value that depends on the data type of the column. <table><tr><th>Data Type</th><th>Default Value</th></tr><tr><td>Numeric</td><td>0</td></tr><tr><td>Fixed-length char/graphic string</td><td>Blanks</td></tr><tr><td>Fixed-length binary string</td><td>Hexidecimal</td></tr><tr><td>Varying-length string</td><td>A string length of 0</td></tr><tr><td>Date</td><td>The current date</td></tr><tr><td>Time</td><td>The current time</td></tr></table>	Data Type	Default Value	Numeric	0	Fixed-length char/graphic string	Blanks	Fixed-length binary string	Hexidecimal	Varying-length string	A string length of 0	Date	The current date	Time	The current time
Data Type	Default Value															
Numeric	0															
Fixed-length char/graphic string	Blanks															
Fixed-length binary string	Hexidecimal															
Varying-length string	A string length of 0															
Date	The current date															
Time	The current time															

Column Name	Data Type	Description																		
		<div>Timestamp The current timestamp</div> <div>D The column has a row ID data type (COLTYPE='ROWID' and the GENERATED BY DEFAULT attribute.</div> <div>E The column is defined with the FOR EACH ROW ON UPDATE and GENERATED ALWAYS attributes.</div> <div>F The column is defined with the FOR EACH ROW ON UPDATE and GENERATED BY DEFAULT attributes.</div> <div>I The column is defined with the AS IDENTITY and GENERATED ALWAYS attributes.</div> <div>J The column is defined with the AS IDENTITY and GENERATED BY DEFAULT attributes.</div> <div>K The column is defined for the implicit DOCID column for a base table that contains XML data.</div> <div>L The column is defined with the AS SECURITY LABEL attribute</div> <div>N The column has no default value.</div> <div>S The column has a default value that is the value of the SQL authorization ID of the process at the time a default value is used.</div> <div>U The column has a default value that is the value of the SESSION_USER special register at the time a default value is used.</div> <div>Y If the NULLS column is Y, the column has a default value of null. If the NULLS column is N, the default value depends on the data type of the column.</div> <div><table><tr><th>Data Type</th><th>Default Value</th></tr><tr><td>Numeric</td><td>0</td></tr><tr><td>Fixed-length char string</td><td>Blanks</td></tr><tr><td>Fixed length graphic</td><td>Blanks</td></tr><tr><td>Fixed length binary</td><td>Hexadecimal</td></tr><tr><td>Varying-length string</td><td>A string length of 0</td></tr><tr><td>Date</td><td>The current date</td></tr><tr><td>Time</td><td>The current time</td></tr><tr><td>Timestamp</td><td>The current timestamp</td></tr></table></div> <div>1 The column has a default value that is the string constant found in the DEFAULTVALUE column of this table row.</div> <div>2 The column has a default value that is the floating-point constant found in the DEFAULTVALUE column of this table row.</div> <div>3 The column has a default value that is the decimal constant found in the DEFAULTVALUE column of this table row.</div> <div>4 The column has a default value that is the integer constant found in the DEFAULTVALUE column of this table row.</div> <div>5 The column has a default value that is the hexadecimal character string found in the DEFAULTVALUE column of this table row.</div> <div>6 The column has a default value that is the UX string found in the DEFAULTVALUE column of this table row.</div> <div>7 The column has a graphic data type and has a default value that is the character string constant found in the</div>	Data Type	Default Value	Numeric	0	Fixed-length char string	Blanks	Fixed length graphic	Blanks	Fixed length binary	Hexadecimal	Varying-length string	A string length of 0	Date	The current date	Time	The current time	Timestamp	The current timestamp
Data Type	Default Value																			
Numeric	0																			
Fixed-length char string	Blanks																			
Fixed length graphic	Blanks																			
Fixed length binary	Hexadecimal																			
Varying-length string	A string length of 0																			
Date	The current date																			
Time	The current time																			
Timestamp	The current timestamp																			

Column Name	Data Type	Description
		<p>DEFAULTVALUE column of this table row.</p> <p>8 The column has a character data type and has a default value that is the graphic string constant found in the DEFAULTVALUE column of this table row.</p> <p>9 The column has a default value that is the DECFLOAT constant found in the DEFAULTVALUE column of this table row.</p>
KEYSEQ	SMALLINT	The column's numeric position within the table's primary key. The value is 0 if it is not part of a primary key.
FOREIGNKEY	CHAR(1)	<p>Applies to character columns only, where it indicates the subtype of the data. A value of B indicates BIT data, and if value of the field MIXED DATA on installation panel DSNTIPF is:</p> <ul style="list-style-type: none"> * NO, any other value indicates SBCS data * YES, an S indicates SBCS and any other value indicates MIXED. <p>For views defined prior to V7, subtype information is not available and the default (MIXED or SBCS) is used. This is an updatable column.</p>
FLDPROC	CHAR(1)	<p>Whether the column has a field procedure:</p> <p>N No</p> <p>Y Yes</p> <p>Blank The column is for a view defined prior to V7. Views defined after V7 contain Y or N.</p>
LABEL	VARCHAR(90)	The column label provided by the user with a LABEL ON Statement; otherwise it is an empty string.
STATTIME	TIMESTAMP	If RUNSTATS updated the statistics, the date and time when The last invocation of RUNSTATS updated the statistics.
DEFAULTVALUE	VARCHAR(1536)	<p>This field is meaningful only if the column being described is for a table (the TYPE column of the associated SYSTABLES row is T for table or G for created temporary table).</p> <p>When the DEFAULT column is 1, 2, 3, 4, 5, 6, 7, 8, or 9, this field contains the default value of the column.</p> <p>If the default value is a string constant or a hexadecimal constant (DEFAULT is 1, 5, 6, 7, or 8 respectively), the value is stored without delimiters.</p> <p>If the default value is a numeric constant (DEFAULT is 2, 3, 4, or 9), the value is stored as specified by the user, including sign and decimal point representation, or special constant values, as appropriate for the constant.</p> <p>When the DEFAULT column is S or U and the default value was specified when a new column was defined with the ALTER TABLE statement, this field contains the value of the CURRENT SQLID or SESSION_USER special register at the time the ALTER TABLE statement was executed. Remember that this default value applies only to rows that existed before the ALTER TABLE statement was executed.</p> <p>When the DEFAULT column is L and the column was added as a new column with the ALTER TABLE statement, this field contains the security label of the user at the time the ALTER TABLE statement was executed. Remember that this default value applies only to rows that existed before the ALTER TABLE statement was executed.</p>

Column Name	Data Type	Description
COLCARDF	FLOAT	Estimated number of distinct values in the column. For an indicator column, this is the number of LOBs that are not null and have a length greater than zero. The value is -1 if statistics have not been gathered. The value is -2 for the first column of an index of an auxiliary table. This is an updatable column.
COLSTATUS	CHAR(1)	Indicates the status of the definition of a column: I The definition is incomplete because a LOB table space, auxiliary table, or index on an auxiliary table has not been created for the column. Blank The definition is complete.
LENGTH2	INTEGER	Maximum length of the data retrieved from the column. Possible values are: 0 Not a LOB or ROWID column 40 For a ROWID column, the length of the returned value 1 to 2 147 483 647 bytes For a LOB column, the maximum length
DATATYPEID	INTEGER	For a built-in data type, the internal ID of the built-in type. For a distinct type, the internal ID of the distinct type.
SOURCETYPEID	INTEGER	For a built-in data type, 0. For a distinct type, the internal ID of the built-in data type upon which the distinct type is sourced.
TYPESCHEMA	VARCHAR(128)	If COLTYPE is 'DISTINCT', the schema of the distinct type. Otherwise, the value is 'SYSIBM'.
TYPENAME	VARCHAR(128)	If COLTYPE is 'DISTINCT', the name of the distinct type. Otherwise, the value is the same as the value of the COLTYPE column. TYPENAME is set only for columns created in V6 or later. The value for columns created earlier is not filled in.
CREATEDTS	TIMESTAMP	Timestamp when the column was created. The value is '0001-01-01.00.00.00.000000' if the column was created prior to migration to Version 6.
STATS_FORMAT	CHAR(1)	Type of statistics gathered: Blank Statistics have not been collected or varchar column statistical columns are padded N Varchar column statistical values are padded This is an updateable column
PARTKEY_ COLSEQ	SMALLINT	The columns numeric position within the tables partitioning key. The value is 0 if it is not part of the partitioning key.
PARTKEY_ ORDERING	CHAR(1)	Order of the column in the partitioning key A Ascending D Descending Blank Column is not used as part of a partitioning key
ALTERDTS	TIMESTAMP	Timestamp when the alter occurred.
CCSID	INTEGER	CCSID of the column. 0 if the object was created prior to V8 or is not a string column
HIDDEN	INTEGER	Indicates whether the column is hidden. P Partically hidden N Not hidden Blank Not hidden
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object.

SYSIBM.SYSCOLUMNS_HIST

Contains rows from SYSCOLUMNS. Whenever rows are added or changed in SYSCOLUMNS, the rows are also written to the new history table. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
NAME	VARCHAR(128)	Name of the column.
TBNAME	VARCHAR(128)	Name of the table or view that contains the column.
TBCREATOR	VARCHAR(128)	Schema of the owner of the table or view that contains the column.
COLNO	SMALLINT	Numeric place of the column in the table or view; for example 4 (out of 10).
COLTYPE	CHAR(8)	<p>The type of the column specified in the definition of the column:</p> <p>INTEGER Large integer</p> <p>SMALLINT Small integer</p> <p>FLOAT Floating-point</p> <p>CHAR Fixed-length character string</p> <p>VARCHAR Varying-length character string</p> <p>LONGVAR Varying-length character string (prior to V9)</p> <p>DECIMAL Decimal</p> <p>GRAPHIC Fixed-length graphic string</p> <p>VARGRAPHIC Varying-length graphic string</p> <p>LONGVARG Varying-length graphic string (prior to V9)</p> <p>DATE Date</p> <p>TIME Time</p> <p>TIMESTAMP Timestamp</p> <p>BLOB Binary large object</p> <p>CLOB Character large object</p> <p>DBCLOB Double Byte Character Large Objects</p> <p>ROWID ROWID Data Type</p> <p>DISTINCT Distinct Type</p> <p>XML XML data type</p> <p>BIGINT Big integer</p> <p>BINARY Fixed-length binary string</p> <p>VARBIN Varying-length binary string</p> <p>DECFLOAT Decimal floating point</p> <p>Whether a column described as VARCHAR, LONGVAR, CLOB, VARG, LONGVAR, DBCLOB, or BLOB is a long string column depends on its length attribute.</p>
LENGTH	SMALLINT	<p>Length attribute of the column or, in the case of a decimal column, its precision. The number does not include the internal prefixes that are used to record the actual length and null state, where applicable.</p> <p>INTEGER 4</p> <p>SMALLINT 2</p> <p>FLOAT 4 or 8</p> <p>CHAR Length of string</p> <p>VARCHAR Maximum length of string</p> <p>LONGVAR Maximum length of string</p> <p>DECIMAL Precision of number</p> <p>GRAPHIC Number of DBCS characters</p> <p>VARG Maximum number of DBCS characters</p>

Column Name	Data Type	Description
		LONGVARG Maximum number of DBCS characters DATE 4 TIME 3 TIMESTAMP 10 BLOB 4 – The length of the field that is stored in the base table. The maximum length of the LOB column is found in LENGTH2 CLOB 4 – The length of the field that is stored in the base table. The maximum length of the CLOB column is found in LENGTH2 DBCLOB 4 – The length of the field that is stored in the base table. The maximum length of the CLOB column is found in LENGTH2 ROWID 17 – The maximum length of the stored portion of the identifier. DISTINCT The length of the source data type XML 6 BIGINT 8 BINARY Length of String VARBIN Maximum length of string DECFLOAT 8 or 16
LENGTH2	INTEGER	Maximum length of the data retrieved from the column. Possible values are: 0 Not a LOB or ROWID column 40 For a ROWID column, the length of the returned value 2 to 2 147 483 647 bytes For a LOB column, the maximum length.
NULLS	CHAR(1)	Whether the column can contain null values: N =No Y =Yes
HIGH2KEY	VARCHAR(2000)	Second highest value of the column. Blank if statistics have not been gathered, or the column is an indicator column or a column of an auxiliary table. If the column has a non-character data type, the data might not be printable.
LOW2KEY	VARCHAR(2000)	Second lowest value of the column. Blank if statistics have not been gathered, or the column is an indicator column or a column of an auxiliary table. If the column has a non-character data type, the data might not be printable.
STATSTIME	TIMESTAMP	If RUNSTATS updated the statistics, the date and time when the last invocation of RUNSTATS updated the statistics.
COLCARDF	FLOAT	Estimated number of distinct values in the column. For an indicator column, this is the number of LOBs that are not null and have a length greater than zero. The value is -1 if statistics have not been gathered. The value is -2 for the first column of an index of an auxiliary table.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No ,Y=Yes
STATS_FORMAT	CHAR(1)	The type of statistics gathered: Blank Statistics have not been collected or varchar column statistical values are padded N Varchar column statistical values are not padded This is an updatable column

SYSIBM.SYSCONSTDEP

Records dependencies on check constraints or user-defined defaults for a column.

Column Name	Data Type	Description
BNAME	VARCHAR(128)	Name of the object on which the dependency exists.
BSHEMA	VARCHAR(128)	Schema of the object on which the dependency exists.
BTYPE	CHAR(1)	Type of object on which the dependency exists: F=Function instance
DTBNAME	VARCHAR(128)	Name of the table to which the dependency applies.
DTBCREATOR	CHAR(8)	Schema of the owner of the table to which the dependency applies.
DCONSTNAME	VARCHAR(128)	If DTYPE = 'C', the unqualified name of the check constraint. If DTYPE = 'D', a column name.
DTYPE	CHAR(1)	Type of object: C Check constraint D User-defined default constant
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
DTBOWNER	VARCHAR(128)	Authorization ID of the owner of the table or a zero length string for tables that were created in a DB2 release prior to Version 9.
OWNERTYPE	CHAR(1)	Indicates the type of owner: blank Authorization ID R Role

SYSIBM.SYSCONTEXT

The SYSIBM.SYSCONTEXT table contains one row for each trusted context.

Column name	Data Type	Description
NAME	VARCHAR(128)	Name of the trusted context.
CONTEXTID	INTEGER	Internal context ID.
DEFINER	VARCHAR(128)	Authorization ID or role that defined the trusted context.
DEFINERTYPE	CHAR(1)	The type of the definer: L Role blank Authorization ID
SYSTEMAUTHID	VARCHAR(128)	The DB2 primary authorization ID that is used to establish the connection. For remote requests, SYSTEMAUTHID is derived from the system user ID that is provided by an external entity, such as a middleware server. For local requests, SYSTEMAUTHID depends on one of the following sources of the address space: BATCH USER parameter on JOB statement RRSAF USER parameter on JOB statement or RACF user TSO TSO logon ID
DEFAULTROLE	VARCHAR(128)	Name of the trusted context default role.
OBJECTOWNERTYPE	CHAR(1)	Specification of ROLE AS OBJECT OWNER on the trusted context L ROLE AS OBJECT OWNER is specified. A role owns any object created in the trusted context. blank ROLE AS OBJECT OWNER not specified. An

		authorization ID owns any object created in the trusted context.
CREATEDTS	TIMESTAMP	The time when the trusted context is created.
ALTEREDTS	TIMESTAMP	The time when the trusted context is last altered.
ENABLED	CHAR(1)	The status of the trusted context: Y Enabled N Disabled
ALLOWPUBLIC	CHAR(1)	Whether the connection is allowed to be reused for PUBLIC: Y Connection reuse is allowed N Connection reuse is not allowed
AUTHENTICATEPUBLIC	CHAR(1)	Whether authentication is required for PUBLIC when ALLOWPUBLIC is Y: Y Authentication token is required for PUBLIC. For local requests, the token is the password. For remote requests, the token can be a password, a RACF passticket, or a KERBEROS token N Authentication is not required
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.
REMARKS	VARCHAR(762)	A character string that is provided using the COMMENT statement.
DEFAULT-SECURITYLABEL	VARCHAR(24)	Name of the context default RACF security label.

SYSIBM.SYSCONTEXTAUTHIDS

The SYSIBM.SYSCONTEXTAUTHIDS table contains one row for each authorization ID with which the trusted context can be used.

Column name	Data type	Description
CONTEXTID	INTEGER	The internal trusted context ID.
AUTHID	VARCHAR(128)	The primary authorization ID that can reuse a connection in the identified trusted context.
AUTHENTICATE	CHAR(1)	Whether authentication is required for the authorization ID in the AUTHID column: Y Authentication token is required for the authorization ID. For local requests, the token is the password. For remote requests, the token can be a password, a RACF passticket, or a KERBEROS token N Authentication is not required
ROLE	VARCHAR(128)	The role for the authorization ID in the AUTHID column. The role supersedes the default role that is defined for the trusted context.
CREATEDTS	TIMESTAMP	The time when the authorization ID is added to the trusted context.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.
SECURITYLABEL	VARCHAR(24)	RACF security label for AUTHID. The security label supersedes the default security label, if any, that is

		defined for the context.
--	--	--------------------------

SYSIBM.SYSCOPY

Contains information needed for recovery.

Column Name	Data Type	Description
DBNAME	CHAR(8)	Name of the database.
TSNAME	CHAR(8)	Name of the target tablespace or index space.
DSNUM	INTEGER	Data set number within the tablespace. For partitioned tablespaces, this value corresponds to the partition number for a single partition copy, or 0 for a copy of an entire partitioned tablespace or index space.
ICTYPE	CHAR(1)	Type of operation: A ALTER B REBUILD INDEX C CREATE D CHECK DATA LOG(NO) (no log records for the range are available for RECOVER utility) E RECOVER (to current point) F COPY FULL YES I COPY FULL NO M MODIFY RECOVERY utility P RECOVER TOCOPY or RECOVER TORBA (partial recovery point) Q QUIESCE R LOAD REPLACE LOG(YES) S LOAD REPLACE LOG(NO) V REPAIR VERSIONS utility W REORG LOG(NO) X REORG LOG(YES) Y LOAD LOG(NO) Z LOAD LOG(YES) T TERM UTILITY command (terminated utility)
ICDATE	CHAR(6)	Date of the entry in the form <i>yymmdd</i> . For the COPYTOCOPY utility, this value is the date of the original entry, when the primary local site or primary recovery site copy was made.
START_RBA	CHAR(6)	A 48-bit positive integer that contains the LRSN of a point in the DB2 recovery log. (The LRSN is the RBA in a non-data-sharing environment.) * For ICTYPE I or F, the starting point for all updates since the image copy was taken * For ICTYPE P, the point after the log-apply phase of point-in-time recovery * For ICTYPE Q, the point after all data sets have been successfully quiesced * For ICTYPE R or S, the end of the log before the start of the LOAD utility and before any data is changed * For ICTYPE T, the end of the log when the utility is terminated * For other values of ICTYPE, the end of the log before the start of the RELOAD phase of the LOAD or REORG utility.
FILESEQNO	INTEGER	Tape file sequence number of the copy.

Column Name	Data Type	Description
DEVTYPE	CHAR(8)	Device type the copy is on.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
DSNAME	CHAR(44)	For ICTYPE='P' (RECOVER TOCOPY only), 'I', or 'F', DSNAME contains the data set name. Otherwise, DSNAME contains the name of the database and tablespace or index space in the form, <i>database-name.space-name</i> , or DSNAME is blank for any row migrated from a DB2 release prior to Version 4.
ICTIME	CHAR(6)	The time at which this row was inserted, in the form <i>hhmmss</i> . The insertion takes place after the completion of the operation that the row represents. ICTIME is blank for any row that was migrated from Version 1 Release 1 of DB2.
SHRLEVEL	CHAR(1)	SHRLEVEL parameter on COPY (for ICTYPE F or I only): C Change R Reference blank Does not describe an image copy or was migrated from Version 1 Release 1 of DB2.
DSVOLSER	VARCHAR(1784)	The volume serial numbers of the data set. A list of 6-byte numbers separated by commas. Blank if the data set is cataloged.
TIMESTAMP	TIMESTAMP	The date and time when the row was inserted. This is the date and time recorded in ICDATE and ICTIME. The use of TIMESTAMP is recommended over that of ICDATE and ICTIME, because the latter two columns may not be supported in later DB2 releases.
ICBACKUP	CHAR(2)	Specifies the type of image copy contained in the data set: Blank LOCALSITE primary copy (first data set named with COPYDDN) LB LOCALSITE backup copy (second data set named with COPYDDN) RP RECOVERYSITE primary copy (first data set named with RECOVERYDDN) RB RECOVERYSITE backup copy (second data set named with RECOVERYDDN)
ICUNIT	CHAR(1)	Indicates the media that the image copy data set is stored on: D DASD T Tape blank Medium is neither tape nor DASD, the image copy is from a DB2 release prior to Version 2 Release 3, or ICTYPE is not 'I' or 'F'.
STYPE	CHAR(1)	When ICTYPE=A, the values are: A A partition was added to a table. C A column was added to a table and an index in different commit scopes. E The data set numbers of a base table and its associated clone table are exchanged. G An index was regenerated L The logging attribute of the table space was altered to LOGGED. N An index was altered to not padded O The logging attribute of the table space was altered to NOT LOGGED.

Column Name	Data Type	Description
		<p>P An index was altered to padded</p> <p>R A table was altered to rotate partitions.</p> <p>V A column in a table was altered for a numeric data type change and the column is in an index.</p> <p>Z A column that is in the key of an index that was versioned prior to DB2 Version 8 was altered.</p> <p>When ICTYPE=C, the values are:</p> <p>L The logging attribute of the table space was altered to LOGGED.</p> <p>O The logging attribute of the table space was altered to NOT LOGGED.</p> <p>When ICTYPE=F, the values are:</p> <p>A ADD PARTITION execution</p> <p>C DFSMS concurrent copy ("I" instance of the table space)</p> <p>J DFSMS concurrent copy ("J" instance of the table space)</p> <p>R ROTATE FIRST TO LAST S LOAD REPLACE(NO)</p> <p>V ALTER INDEX NOT PADDED</p> <p>W REORG LOG(NO)</p> <p>X REORG LOG(YES)</p> <p>blank DB2 image copy</p> <p>The MERGECOPY utility, when used to merge an embedded copy with subsequent incremental copies, also produces a record that contains ICTYPE=F and the STYPE of the original image copy (R, S, W, or X).</p> <p>When ICTYPE = M and the MODIFY RECOVERY utility was executed to delete SYSCOPY and/or SYSLGRNX records, the value is R.</p> <p>When ICTYPE=O, the values are:</p> <p>R Reordered format</p> <p>B Basic row format</p> <p>When ICTYPE=P, the values are:</p> <p>C Recover to a point in time without using logonly with consistency.</p> <p>L Recover to a point in time using logonly without consistency.</p> <p>M Recover to a point in time using logonly with consistency.</p> <p>blank Recover to a point in time without using logonly without consistency.</p> <p>When ICTYPE=Q and option WRITE(YES) is in effect when the quiesce point is taken, the value is W.</p> <p>When ICTYPE=R, S, W, or X and the operation is resetting REORG pending status, the value is A.</p> <p>When ICTYPE=R, S, W, or X and the operation is first materializing the default value for a row change timestamp</p>

Column Name	Data Type	Description
		column, the value is T. When ICTYPE=T, this field indicates which COPY utility was terminated by the TERM UTILITY command or the START DATABASE command with the ACCESS(FORCE) option. The values are: F COPY FULL YES I COPY FULL NO For other values of ICTYPE, the value is blank.
PIT_RBA	CHAR(6)	When ICTYPE=P, this field contains the LRSN for the point in the DB2 log. (The LRSN is the RBA in a non-data-sharing Environment). For other ICTYPES, this field is X'000000000000'. When ICTYPE=P, this field indicates the stop location of a point-in-time recovery. If a record contains ICTYPE=P and PIT_RBA=X'000000000000', the copy pending status is active and a full image copy is required. If such a record is encountered during fallback processing of RECOVER, the recover job fails, and a point-in-time recovery is required. PIT_RBA can be zero if the point-in-time recovery is completed by the fall-back processing of RECOVER, or if CTYPE=P from a prior release of DB2. When ICTYPE=F or I and SHRLEVEL=C, this column contains the current RBA or LRSN that corresponds to the point in the DB2 log when the SHRLEVEL CHANGE copy completes.
GROUP_NAME	CHAR(8)	The DB2 data-sharing member name of the DB2 subsystem that performed the operation. This column is blank if the DB2 subsystem was not in a DB2 data-sharing environment at the time the operation was performed.
OTYPE	CHAR(1)	Type of object that the recovery information is for: I Index space T Tablespace
LOWDSNUM	INTEGER	Partition number of the lowest partition in the range for SYSCOPY records created for REORG and LOAD REPLACE for resetting a REORG pending status. Version number of an index for SYSCOPY records created for a COPY (ICTYPE=F) of an index space (OTYPE=I). (An index is versioned when a VARCHAR column in the index key is lengthened.) The column is valid only for these uses.
HIGHDSNUM	INTEGER	Partition number of the highest partition in the range. This column is valid only for SYSCOPY records created for REORG and LOAD REPLACE for resetting REORG pending status.
COPYPAGESF	FLOAT(8)	Number of pages written to the copy data set.
NPAGESF	FLOAT(8)	The number of pages in the tablespace or index at the time of INLINE COPY.
CPAGESF	FLOAT(8)	Total number of changed pages.
JOBNAME	CHAR(8)	Job name of the utility.
AUTHID	CHAR(8)	Authorization ID of the utility.
OLDEST_VERSION	SMALLINT	Version number of the oldest format of data for an object.
LOGICAL_PART	INTEGER	Logical partition number.
LOGGED	CHAR(1)	Indicates the logging attribute of the table space at the time the SYSCOPY record is written:

Column Name	Data Type	Description
		Y — indicates that the logging attribute of the table space is LOGGED N — indicates that the logging attribute of the table spaces is NOT LOGGED blank — indicates that the row was inserted prior to Version 9.1. For a non-LOB table spaces or an index space, blank indicates that the logging attribute is LOGGED.
TTYTYPE	CHAR(8)	When ICTYPE=T, TTYTYPE of B indicates that a broken page was detected during copy. When ICTYPE = P, R, S, W, X, this column indicates the row format for the table space or partition. RFR Indicates that the row format is the reordered row format BRF Indicates that the row format is the basic row format When ICTYPE = E, this column indicates if the full recovery reset the object: blank The full recovery reset the object N The full recovery did not reset the object
INSTANCE	SMALLINT	When STYPE = E and ICTYPE = A, INSTANCE indicates the data set instance number of a base object after an EXCHANGE statement completes. The value of the INSTANCE column for the last data exchange will match the value of the INSTANCE column for the SYSIBM.SYSTABLESPACE table. For an image copy, INSTANCE indicates the instance number of the current base objects (table and index).
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object. Blank if created prior to Version 9

SYSIBM.SYSCTXTTRUSTATTRS

Contains one row for each list of attributes for a given trusted context.

Column Name	Data Type	Description
CONTEXTID	INTEGER	The internal trusted context ID.
NAME	VARCHAR(128)	Name of the trust attribute. Possible values including the following attributes: <ul style="list-style-type: none"> An IPv4 address is represented as a dotted decimal IP address. An example of an IPv4 address is 9.112.46.111 An IPv6 address is represented as a colon hexadecimal address. An example of an IPv6 address is 2001:0DB8:0000:0000:0008:0800:200C:417A, which can also be expressed in a compressed form as 2001:DB8::8:800:200C:417A A domain name which is converted to an IP address by the domain name server where a resulting IPv4 or IPv6 address is determined. A job or started task name for local

		applications. <ul style="list-style-type: none"> • A network access security zone name in the RACF SERVAUTH class.
VALUE	VARCHAR(254)	The value of the trust attribute.
CREATEDTS	TIMESTAMP	The time when the attribute is created.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.

SYSIBM.SYSDATABASE

Contains one row for each database, except for database DSNDB01.

Column Name	Data Type	Description
NAME	VARCHAR(24)	Database name.
CREATOR	VARCHAR(128)	Authorization ID of the owner of the database.
STGROUP	VARCHAR(128)	Name of the default storage group of the database; blank for a system database.
BPOOL	CHAR(8)	Name of the default buffer pool of the tablespace; blank for a system tablespace.
DBID	SMALLINT	Internal identifier of the database. If there were 32511 databases or more when this database was created, the DBID is a negative number.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
CREATEDBY	VARCHAR(128)	Primary authorization ID of the user who created the database.
	CHAR(1)	Not used.
TIMESTAMP	TIMESTAMP	The value is '0001-01-01-00.00.00.000000'.
TYPE	CHAR(1)	Type of database: blank Not a work file database or a TEMP database. T A TEMP database. The database was created with the AS TEMP clause, which indicates it is used for declared temporary tables. W A work file database. The database is DSNDB07, or it was created with the WORKFILE clause and used as a work file database by a member of a DB2 data-sharing group.
GROUP_MEMBER	VARCHAR(24)	The DB2 data-sharing member name of the DB2 subsystem that use this work file database. This column is blank if the work file database was not created in a DB2 data-sharing environment, or if the database is not a work file database as indicated by the TYPE column.
CREATEDTS	TIMESTAMP	Time when the CREATE statement was executed for the database. For DSNDB04 and DSNDB06, the value is '1985-04-01.00.00.00.000000'.
ALTEREDTS	TIMESTAMP	Time when the most recent ALTER DATABASE statement was applied. If no ALTER DATABASE statement has been applied, ALTEREDTS has the value

Column Name	Data Type	Description
		of CREATEDTS.
ENCODING_ SCHEME	CHAR(1)	Default encoding scheme for the database: E EBCDIC A ASCII U UNICODE blank For DSND04, a work file database, and a TEMP database.
SBCS_CCSID	INTEGER	Default SBCS CCSID for the database. For a TEMP database or a database created in a DB2 release prior to Version 5, the value is 0.
DBCS_CCSID	INTEGER	Default DBCS CCSID for the database. For a TEMP database or a database created in a DB2 release prior to Version 5, the value is 0.
MIXED_CCSID	INTEGER	Default mixed CCSID for the database. For a TEMP database or database created in a DB2 release prior to Version 5, the value is 0.
INDEXBP	CHAR(8)	Name of the default buffer pool for indexes.
IMPLICIT	CHAR(1)	Indicates whether the database was implicitly created: Y The database was implicitly created N The database was explicitly created
CREATORTYPE	CHAR(1)	Indicates the type of creator: blank Authorization ID L Role
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object.

SYSIBM.SYSDATATYPES

Contains one row for each distinct type defined to the system.

Column Name	Data Type	Description
SCHEMA	VARCHAR(128)	Schema of the distinct type.
OWNER	VARCHAR(128)	Owner of the distinct type.
NAME	VARCHAR(128)	Name of the distinct type.
CREATEDBY	VARCHAR(128)	Schema under which the distinct type was created.
SOURCESCHEMA	VARCHAR(128)	Schema of the source data type.
SOURCETYPE	VARCHAR(128)	Name of the source type.
METATYPE	CHAR(1)	The class of data type: T Distinct type.
DATATYPEID	INTEGER	Internal identifier of the distinct type.
SOURCETYPEID	INTEGER	Internal ID of the built-in data type upon which the distinct type is sourced.
LENGTH	INTEGER	Maximum length or precision of a distinct type that is sourced on the IBM-defined DECIMAL data type.
SCALE	SMALLINT	Scale for a distinct type that is sourced on the IBM-defined DECIMAL type. For all other distinct types, the value is 0.
SUBTYPE	CHAR(1)	Subtype of the distinct type, which is based on the subtype of the source type: B The subtype is FOR BIT DATA. S The subtype is FOR SBCS DATA. M The subtype is FOR MIXED DATA. blank The source type is not a character type.
CREATEDTS	TIMESTAMP	Time when the distinct type was created.
ENCODING_ SCHEME	CHAR(1)	Encoding scheme of the distinct type:

Column Name	Data Type	Description
		A ASCII E EBCDIC U UNICODE
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No ,Y=Yes
REMARKS	VARCHAR(762)	A character string provided by the user with the COMMENT ON statement.
OWNERTYPE	CHAR(1)	Indicates the type of owner: blank Authorization ID L Role
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object.

SYSIBM.SYSDBAUTH

Records the privileges that are held by users over databases.

Column Name	Data Type	Description
GRANTOR	VARCHAR(128)	Authorization ID of the user who granted the privileges. Could also be PUBLIC or PUBLIC followed by an asterisk.
GRANTEE	VARCHAR(128)	Application ID of the user who holds the privilege. Could also be PUBLIC for a grant to PUBLIC.
NAME	VARCHAR(24)	Database name.
	CHAR(12)	Internal use only.
DATEGRANTED	CHAR(6)	Date the privileges were granted; in the form <i>yyymmdd</i> .
TIMEGRANTED	CHAR(8)	Time the privileges were granted; in the form <i>hhmmssst</i> .
GRANTEETYPE	CHAR(1)	Indicates the type of owner: blank Authorization ID L Role
AUTHHOWGOT	CHAR(1)	Authorization level of the user from whom the privileges were received. This authorization level is not necessarily the highest authorization level of the grantor. blank Not applicable C DBCTL D DBADM L SYSCTRL M DBMAINT S SYSADM
CREATETABAUTH	CHAR(1)	Whether the GRANTEE can create tables within the database: blank Privilege is not held G Privilege held with the GRANT option Y Privilege is held without the GRANT option
CREATETSAUTH	CHAR(1)	Whether the GRANTEE can create tablespaces within the database: blank Privilege is not held G Privilege held with the GRANT option Y Privilege is held without the GRANT option
DBADMAUTH	CHAR(1)	Whether the GRANTEE has DBADM authority over the database: blank Privilege is not held G Privilege held with the GRANT option Y Privilege is held without the GRANT option
DBCTRLAUTH	CHAR(1)	Whether the GRANTEE has DBCTRL authority over the

Column Name	Data Type	Description
		database: blank Privilege is not held G Privilege held with the GRANT option Y Privilege is held without the GRANT option
DBMAINTAUTH	CHAR(1)	Whether the GRANTEE has DBMAINT authority over the database: blank Privilege is not held G Privilege held with the GRANT option Y Privilege is held without the GRANT option
DISPLAYDBAUTH	CHAR(1)	Whether the GRANTEE can issue the DISPLAY command for the database: blank Privilege is not held G Privilege held with the GRANT option Y Privilege is held without the GRANT option
DROPAUTH	CHAR(1)	Whether the GRANTEE can issue the ALTER DATABASE and DROP DATABASE statement: blank Privilege is not held G Privilege held with the GRANT option Y Privilege is held without the GRANT option
IMAGCOPYAUTH	CHAR(1)	Whether the GRANTEE can use the COPY, MERGECOPY, MODIFY, and QUIESCE utilities on the database: blank Privilege is not held G Privilege held with the GRANT option Y Privilege is held without the GRANT option
LOADAUTH	CHAR(1)	Whether the GRANTEE can use the LOAD utility to load tables in the database: blank Privilege is not held G Privilege held with the GRANT option Y Privilege is held without the GRANT option
REORGAUTH	CHAR(1)	Whether the GRANTEE can use the REORG utility to reorganize tablespaces and indexes in the database: blank Privilege is not held G Privilege held with the GRANT option Y Privilege is held without the GRANT option
RECOVERDBAUTH	CHAR(1)	Whether the GRANTEE can use the RECOVER and REPORT utilities on tablespaces in the database: blank Privilege is not held G Privilege held with the GRANT option Y Privilege is held without the GRANT option
REPAIRAUTH	CHAR(1)	Whether the GRANTEE can use the DIAGNOSE and REPAIR utilities on tablespaces and indexes in the database: blank Privilege is not held G Privilege held with the GRANT option Y Privilege is held without the GRANT option
STARTDBAUTH	CHAR(1)	Whether the GRANTEE can use the START command against the database: blank Privilege is not held G Privilege held with the GRANT option Y Privilege is held without the GRANT option
STATSAUTH	CHAR(1)	Whether the GRANTEE can use the CHECK and RUNSTATS utilities against the database: blank Privilege is not held G Privilege held with the GRANT option

Column Name	Data Type	Description
		Y Privilege is held without the GRANT option
STOPAUTH	CHAR(1)	Whether the GRANTEE can issue the STOP command against the database: blank Privilege is not held G Privilege held with the GRANT option Y Privilege is held without the GRANT option
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
GRANTEDTS	TIMESTAMP	Time when the GRANT statement was executed.
GRANTORTYPE	CHAR(1)	Indicates the type of owner: blank Authorization ID L Role

SYSIBM.SYSDBRM

Contains one row for each DBRM of each application plan.

Column Name	Data Type	Description
NAME	VARCHAR(24)	Name of the DBRM.
TIMESTAMP	CHAR(8)	Consistency token.
PDSNAME	CHAR(132)	Name of the partitioned data set of which the DBRM is a member.
PLNAME	VARCHAR(24)	Name of the application plan of which this DBRM is a part.
PLCREATOR	VARCHAR(128)	Authorization ID of the owner of the application plan.
PRECOMPTIME	CHAR(8)	Time of precompilation in the form <i>hhmmss.th</i> . If the LEVEL precompiler option is used, then this value does not represent the precompile time.
PRECOMPDATE	CHAR(6)	Date of precompilation in the form <i>yyymmdd</i> . If the LEVEL precompiler option is used, then this value does not represent the precompile date.
QUOTE	CHAR(1)	SQL string delimiter for the SQL statements in the DBRM: N Apostrophe Y Quotation mark
COMMA	CHAR(1)	Decimal point representation for SQL statements in the DBRM: N Period Y Comma
HOSTLANG	CHAR(1)	The host language used B Assembler language C OS/VS COBOL D C F Fortran P PL/I 2 VS COBOL II or IBM COBOL Release 1 (formerly called COBOL/370) 3 IBM COBOL (Release 2 or subsequent releases) 4 C++
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
CHARSET	CHAR(1)	Indicates whether the system CCSID for SBCS data was 290 (Katakana) when the program was precompiled: A No K Yes
MIXED	CHAR(1)	Indicates if mixed data was in effect when the application program was precompiled.

Column Name	Data Type	Description
		N No Y Yes
DEC31	CHAR(1)	Indicates whether DEC31 was in effect when the program was precompiled. Blank No Y Yes
VERSION	VARCHAR(122)	Version identifier for the DBRM.
PRECOMPTS	TIMESTAMP	Time when the DBRM was precompiled.
PLCREATOR TYPE	CHAR(1)	Indicates the type of creator: blank Authorization ID L Role
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object.

SYSIBM.SYSDEPENDENCIES

Records the dependencies between objects.

Column Name	Data Type	Description
BNAME	VARCHAR(128)	Name of the object on which another object is dependent. If BTYPE is 'F', the name is the specific name of the function.
BSHEMA	VARCHAR(128)	Schema or qualifier of the object on which another object is dependent.
BCOLNAME	VARCHAR(128)	Column name of the object on which another object is dependent.
BCOLNO	SMALLINT	Column number of the object on which another object is dependent.
BTYPE	CHAR(1)	Type of object that is identified by BNAME, BSHEMA, and BCOLNAME F Function
BOWNER	VARCHAR(128)	Authorization ID of the owner of the object on which another object is dependent.
BOWNERTYPE	CHAR(1)	Type of creator of the object on which another object is dependent: L Role blank Authorization ID that is not a role
DNAME	VARCHAR(128)	Name of the object that has dependencies on another object.
DSHEMA	VARCHAR(128)	Schema or qualifier of the object that has dependencies on another object.
DCOLNAME	VARCHAR(128)	Column name of the object that has dependencies on another object.
DCOLNO	SMALLINT	Column number of the object that has dependencies on another object.
DTYPE	CHAR(1)	Type of the object that is identified by DNAME, DSHEMA, and DCOLNAME: I Index
DOWNER	VARCHAR(128)	Authorization ID of the owner of the object that has dependencies on another object.
DOWNERTYPE	CHAR(1)	Type of creator of the object that has dependencies on another object: L Role blank Authorization ID if not a role
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.

SYSIBM.SYSDUMMY1

Contains one row. The table is used for SQL statements in which a table reference is required, but the contents of the table are not important.

Column Name	Data Type	Description
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes

SYSIBM.SYSENVIRONMENT

Records the environment variables when an object is created.

Column Name	Data Type	Description
ENVID	INTEGER	Internal identifier of the environment.
CURRENT_SCHEMA	VARCHAR(128)	The current schema.
RELCREATED	CHAR(1)	The release when the environment information is created.
PATHSCHEMAS	VARCHAR(2048)	The schema path.
APPLICATION_ENCODING_CCSID	INTEGER	The CCSID of the application environment.
ORIGINAL_ENCODING_CCSID	INTEGER	The original CCSID of the statement text string.
DECIMAL_POINT	CHAR(1)	The decimal point indicator: C Comma P Period
MIN_DIVIDE_SCALE	CHAR(1)	The minimum divide scale: N The usual rules apply for decimal division in SQL Y Retain at least three digits to the right of the decimal point after any decimal division.
STRING_DELIMITER	CHAR(1)	The string delimiter that is used in COBOL string constants: A Apostrophe (') Q Quote (")
SQL_STRING_DELIMITER	CHAR(1)	The SQL string delimiter that is used in string constants: A Apostrophe (') Q Quote (")
MIXED_DATA	CHAR(1)	Uses mixed DBCS data: N No mixed data Y Mixed data
DECIMAL_ARITHMETIC	CHAR(1)	The rules that are to be used for CURRENT PRECISION and when both operands in a decimal operation have a precision of 15 or less: 1 DEC15 specifies that the rules do not allow a precision greater than 15 digits 2 DEC31 specifies that the rules allow a precision of up to 31 digits
DATA_FORMAT	CHAR(1)	The date format: I ISO - yyyy-mm-dd J JIS - yyyy-mm-dd U USA - mm/dd/yyyy E EUR - dd.mm.yyyy L Locally defined by an installation exit routine
TIME_FORMAT	CHAR(1)	The time format: I ISO - hh.mm.ss

		J JIS - hh.mm.ss U USA - hh:mm AM or hh:mm PM E EUR - hh.mm.ss L Locally defined by an installation exit routine
FLOAT_FORMAT	CHAR(1)	The floating point format: I IEEE floating point format S System/390 floating point format
HOST_LANGUAGE	CHAR(8)	The host language: ASM C CPP IBMCOB PLI FORTRAN
CHARSET	CHAR(1)	The character set: A Alphanumeric
FOLD	CHAR(1)	FOLD is only applicable when HOST_LANGUAGE is C or CPP. Otherwise FOLD is blank. N Lower case letters in SBCS ordinary identifiers are not folded to uppercase Y Lower case letters in SBCS ordinary identifiers are folded to uppercase blank Not applicable
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.
ROUNDING	CHAR(1)	The rounding mode that is used when arithmetic and casting operations are performed on DECFLOAT data: C ROUND_CEILING D ROUND_DOWN F ROUND_FLOOR G ROUND_HALF_DOWN E ROUND_HALF_EVEN H ROUND_HALF_UP U ROUND_UP

SYSIBM.SYSFIELDS

Contains one row for every column that has a field procedure.

Column Name	Data Type	Description
TBCREATOR	VARCHAR(128)	Authorization ID of the owner of the table that contains the column.
TBNAME	VARCHAR(128)	Name of the table that contains the column.
COLNO	SMALLINT	Numeric place of this column in the table.
NAME	VARCHAR(128)	Name of the column.
FLDTYPE	VARCHAR(24)	Data type of the encoded values in the field: INTEGER Large integer SMALLINT Small integer FLOAT Floating-point CHAR Fixed-length character string VARCHAR Varying-length character string DECIMAL Decimal GRAPHIC Fixed-length graphic string VARG Varying-length graphic string

Column Name	Data Type	Description
LENGTH	SMALLINT	The length attribute of the field; or, for a decimal field, its precision. The number does not include the internal prefixes that can be used to record actual length and null state. INTEGER 4 SMALLINT 2 FLOAT 8 CHAR Length of string VARCHAR Maximum length of string DECIMAL Precision of number GRAPHIC Number of DBCS characters VARG Maximum number of DBCS characters
SCALE	SMALLINT	Scale if FLDTYPE is DECIMAL; otherwise, the value is 0.
FLDPROC	VARCHAR(24)	For a row describing a field procedure, the name of the procedure.
WORKAREA	SMALLINT	For a row describing a field procedure, the size, in bytes, of the work area required for the encoding and decoding of the procedure.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
EXITPARML	SMALLINT	For a row describing a field procedure, the length of the field procedure parameter value block.
PARMLIST	VARCHAR(735)	For a row describing a field procedure, the parameter list following FIELDPROC in the statement that created the column, with insignificant blanks removed.
EXITPARM	VARCHAR(1530) FOR BIT DATA	For a row describing a field procedure, the parameter value block of the field procedure (the control block passed to the field procedure when it is invoked).

SYSIBM.SYSFOREIGNKEYS

Contains one row for every column of every foreign key.

Column Name	Data Type	Description
CREATOR	VARCHAR(128)	Authorization ID of the owner of the table that contains the column.
TBNAME	VARCHAR(128)	Name of the table that contains the column.
RELNAME	VARCHAR(128)	Constraint name for the constraint for which the column is part of the foreign key.
COLNAME	VARCHAR(128)	Name of the column.
COLNO	SMALLINT	Numeric place of the column in its table.
COLSEQ	SMALLINT	Numeric place of the column in the foreign key.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes

SYSIBM.SYSINDEXES

Contains one row for every index.

Column Name	Data Type	Description
NAME	VARCHAR(128)	Name of the index.
CREATOR	VARCHAR(128)	Schema of the owner of the index.
TBNAME	VARCHAR(128)	Name of the table on which the index is defined.
TBCREATOR	VARCHAR(128)	Schema of the owner of the table.
UNIQUERULE	CHAR(1)	Whether the index is unique:

Column Name	Data Type	Description
		D No (duplicates are allowed) U Yes P Yes, and it is a primary index (As in prior releases of DB2, a value of P is used for primary keys that are used to enforce a referential constraint.) C Yes, and it is an index used to enforce UNIQUE constraint N Yes, and it is defined with UNIQUE WHERE R Yes, and it is an index used to enforce the uniqueness of a non-primary parent key G Yes, and it is an index used to enforce the uniqueness of values in a column defined as ROWID GENERATED BY DEFAULT. X Yes, and it is an index used to enforce the uniqueness of values in a column that contains XML data
COLCOUNT	SMALLINT	The number of columns in the key.
CLUSTERING	CHAR(1)	Whether CLUSTER was specified when the index was created: N No Y Yes
CLUSTERED	CHAR(1)	Whether the table is actually clustered by the index: N A significant number of rows are not in clustering order, or statistics have not been gathered. Y Most of the rows are in clustering order. blank Not applicable. This is an updatable column that can also be changed by the RUNSTATS utility.
DBID	SMALLINT	Internal identifier of the database.
OBID	SMALLINT	Internal identifier of the index fan set descriptor.
ISOBID	SMALLINT	Internal identifier of the index page set descriptor.
DBNAME	VARCHAR(24)	Name of the database that contains the index.
INDEXSPACE	VARCHAR(24)	Name of the index space.
	INTEGER	Not used.
	INTEGER	Not used.
NLEAF	INTEGER	Number of active leaf pages in the index. The value is -1 if statistics have not been gathered. This is an updatable column.
NLEVELS	SMALLINT	Number of levels in the index tree. If the index is partitioned, it is the maximum of the number of levels in the index tree for all the partitions. The value is -1 if statistics have not been gathered. This is an updatable column.
BPOOL	CHAR(8)	Name of the buffer pool used for the index.
PGSIZE	SMALLINT	Contains the value 4, 8, 16, or 32 which indicates the size, in KB, of the leaf pages in the index.
ERASERULE	CHAR(1)	Whether the data sets are erased when dropped. The value is meaningless if the index is partitioned: N No Y Yes
CLOSERULE	CHAR(1)	Whether the data sets are candidates for closure when the limit on the number of open data sets is reached: N No Y Yes

Column Name	Data Type	Description
SPACE	INTEGER	Number of kilobytes of DASD storage allocated to the index, as determined by the last execution of the STOSPACE utility. The value is 0 if the index is not related to a storage group, or if STOSPACE has not been run. If the index space is partitioned, the value is the total kilobytes of DASD storage allocated to all partitions that are defined in a storage group.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
CLUSTERRATIO	SMALLINT	Percentage of rows that are in clustering order. For a partitioning index, it is the weighted average of all index partitions in terms of the number of rows in the partition. The value is 0 if statistics have not been gathered. The value is -2 if the index is for an auxiliary table. This is an updatable column.
CREATEDBY	VARCHAR(128)	Primary authorization ID of the user who created the index.
STATTIME	TIMESTAMP	If RUNSTATS updated the statistics, the date and time when the last invocation of RUNSTATS updated the statistics. The default value is '0001-01-01.00.00.00.000000'. This is an updatable column.
INDEXTYPE	CHAR(1)	The index type: 2 Type 2 index blank Type 1 index D Data partitioned secondary index P Partitioning index
FIRSTKEYCARDF	FLOAT	Number of distinct values of the first key column. This number is an estimate if updated while collecting statistics on a single partition. The value is -1 if statistics have not been gathered. This is an updatable column.
FULLKEYCARDF	FLOAT	Number of distinct values of the key. The value is -1 if statistics have not been gathered. This is an updatable column.
CREATEDTS	TIMESTAMP	Time when the CREATE statement was executed for the index. If the index was created in a DB2 release prior to Version 5, the value is '0001-01-01.00.00.00.000000'.
ALTEREDTS	TIMESTAMP	Time when the most recent ALTER INDEX statement was executed for the index. If no ALTER INDEX statement has been applied, ALTEREDTS has the value of CREATEDTS. If the index was created in a DB2 release prior to Version 5, the value is '0001-01-01.00.00.00.000000'.
PIECESIZE	INTEGER	Maximum size of a data set in kilobytes for non-partitioning indexes. A value of zero (0) indicates that the index is a partitioning index or that the index was created in a DB2 release prior to Version 5.
COPY	CHAR(1)	Whether COPY YES was specified for the index, which indicates if the index can be copied and if SYSIBM.SYSLGRNX recording is enabled for the index. N No Y Yes
COPYLRN	CHAR(6)	The value can be either an RBA or LRSN. (LRSN is only for data sharing.) If the index is currently defined as COPY YES, the value is the RBA or LRSN when the index was created with COPY YES or altered to COPY YES, not the current

Column Name	Data Type	Description
		RBA or LRSN. If the index is currently defined as COPY NO, the value is set to X'000000000000' if the index was created with COPY NO; otherwise, if the index was altered to COPY NO, the value in COPYLRSN is not changed when the index is altered to COPY NO.
CLUSTERRATIOF	FLOAT	When multiplied by 100, the value of the column is the percentage of rows that are in clustering order. For example, a value of .9125 indicates 91.25%. For a partitioning index, it is the weighted average of all index partitions in terms of the number of rows in the partition. The value is 0 if statistics have not been gathered. The value is -2 if the index is for an auxiliary table, a node ID index or an XML index. This is an updatable column.
SPACEF	FLOAT(8)	Kilobytes of DASD storage. The value is -1 if statistics have not been gathered. This is an updatable column.
REMARKS	VARCHAR(762)	A character field string provided by the user with the COMMENT ON statement.
PADDED	CHAR(1)	Indicates whether keys within the index will be padded for vary-length column data. Y The index contains varying length character or graphic data is padded N The index contains varying length characters or graphic data that is not padded Blank The index does not contain varying length or graphic data
VERSION	SMALLINT	The version of the data row format for the index.
OLDEST_VERSION	SMALLINT	The version number describing the oldest format of the data in the index space and any image copies of the index
CURRENT_VERSION	SMALLINT	The version number describing the newest format of the data in the index space. 0 indicates no versioning.
RELCREATED	CHAR(1)	Release of DB2 use to the object. Blank if before V8.
AVGKEYLEN	INTEGER	Average key length within the index.
KEYTARGET_COUNT	SMALLINT	The number of key-targets for an extended index. The value is 0 for a simple index.
UNIQUE_COUNT	SMALLINT	The value is 0 for a simple index or if the index has no unique key. Otherwise, the value is the number of key-targets that are required for the unique key of the index.
IX_EXTENSION_TYPE	CHAR(1)	Identifies the type of extended index: blank Simple index S Index on a scalar expression N node ID index V XML index
COMPRESS	CHAR(1)	Indicates whether index compression is active: N Index compression is not active Y Index compression is active
OWNER	VARCHAR(128)	Authorization ID of the owner of the index, empty string for indexes created in a DB2 release prior to Version 9.
OWNERTYPE	CHAR(1)	Indicates the type of owner: blank Authorization ID L Role
DATAPEAT FACTORF	FLOAT	The anticipated number of data pages that will be touched following an index key order. This statistic is only collected when the STATCLUS subsystem parameter is set to ENHANCED. This number is -1 if statistics have not been

Column Name	Data Type	Description
		collected. The valid value is -1 or any value that is equal to or greater than 1. This is an updatable column.
ENVID	INTEGER	Internal environment identifier.

SYSIBM.SYSINDEXES_HIST

Contains rows from SYSINDEXES. Whenever rows are added or changed in SYSINDEXES, the rows are also written to the new history table. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
NAME	VARCHAR(128)	Name of the index.
CREATOR	VARCHAR(128)	Schema of the owner of the index.
TBNAME	VARCHAR(128)	Name of the table on which the index is defined.
TBCREATOR	VARCHAR(128)	Schema of the owner of the table.
CLUSTERING	CHAR(1)	Whether CLUSTER was specified when the index was created: N No Y Yes
NLEAF	INTEGER	Number of active leaf pages in the index. The value is -1 if statistics have not been gathered.
NLEVELS	SMALLINT	Number of levels in the index tree .If the index is partitioned, it is the maximum of the number of levels in the index tree for all the partitions. The value is -1 if statistics have not been gathered.
STATSTIME	TIMESTAMP	If RUNSTATS updated the statistics ,the date and time when the last invocation of RUNSTATS updated the statistics. The default value is '0001-01-01.00.00.00.000000 '.
FIRSTKEYCARDF	FLOAT(8)	Number of distinct values of the first key column. This number is an estimate if updated while collecting statistics on a single partition. The value is -1 if statistics have not been gathered.
FULLKEYCARDF	FLOAT(8)	Number of distinct values of the key. The value is -1 if statistics have not been gathered.
CLUSTERRATIOF	FLOAT(8)	Percentage of rows that are in clustering order. For a partitioning index, it is the weighted average of all index partitions in terms of the number of rows in the partition. The value is 0 if statistics have not been gathered. The value is -2 if the index is for an auxiliary table.
SPACEF	FLOAT(8)	Number of kilobytes of DASD storage allocated to the index space partition. The value is -1 if statistics have not been gathered.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.
AVGKEYLEN	INTEGER	Average key length within the index.
DATAPEAT FACTORF	FLOAT	The anticipated number of data pages that will be touched following an index key order. This statistic is only collected when the STATCLUS subsystem parameter is set to ENHANCED. This number is -1 if statistics have not been collected. The valid value is -1 or any value that is equal to or greater than 1. This is an updatable column.

SYSIBM.SYSINDEXPART

Contains one row for each non-partitioning secondary index and one row for each partition of a partitioning index or data partitioned secondary index.

Column Name	Data Type	Description
PARTITION	SMALLINT	Partition number; Zero if index is not partitioned.
IXNAME	VARCHAR(128)	Name of the index.
IXCREATOR	VARCHAR(128)	Schema of the owner of the index.
PQTY	INTEGER	Primary space allocation in units of 4KB storage blocks. For user-managed data sets, the value is set to the primary space allocation only if RUNSTATS INDEX with UPDATE(ALL) or UPDATE(SPACE) is executed; otherwise, the value is zero.
SQTY	SMALLINT	Secondary space allocation in units of 4KB storage blocks. For user-managed data sets, the value is set to the secondary space allocation only if RUNSTATS INDEX with UPDATE(ALL) or UPDATE(SPACE) is executed; otherwise, the value is zero. If the value does not fit into the column, the value of the column is 0. See the description of column SECQTYI.
STORTYPE	CHAR(1)	Type of storage allocation: E Explicit, and STORNAME names an integrated catalog facility catalog I Implicit, and STORNAME names a storage group
STORNAME	VARCHAR(128)	Name of storage group or integrated catalog facility catalog used for space allocation.
VCATNAME	VARCHAR(24)	Name of integrated catalog facility catalog used for space allocation.
LEAFDIST	INTEGER	100 times the average number of leaf pages between successive active leaf pages of the index. The value is -1 if statistics have not been gathered. The value is -2 if the index is a node ID index or an XML index.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
LIMITKEY	VARCHAR(512)	The high value of the limit key of the partition in an internal format. Zero if the index is not partitioned. If any column of the key has a field procedure, the internal format is the encoded form of the value.
FREEPAGE	SMALLINT	Number of pages that are loaded before a page is left as free space.
PCTFREE	SMALLINT	Percentage of each leaf or non-leaf page that is left as free space.
SPACE	INTEGER	Number of kilobytes of DASD storage allocated to the index space partition, as determined by the last execution of the STOSPACE utility. The value is 0 if STOSPACE or RUNSTATS has not been run. The value is updated by STOSPACE if the index is related to a storage group. The value is updated by RUNSTATS if the utility is executed as RUNSTATS INDEX with UPDATE(ALL) or UPDATE(SPACE). The value is -1 if the index was defined with the DEFINE NO clause, which defers the physical creation of the data sets until data is first inserted into the index, and data has yet to be inserted into the index.

Column Name	Data Type	Description
STATSTIME	TIMESTAMP	If RUNSTATS updated the statistics, the date and time when the last invocation of RUNSTATS updated the statistics. The default value is '0001-01-01.00.00.00.000000'.
GBPCACHE	CHAR(1)	Group buffer pool cache option specified for this index or index partition. blank Only changed pages are cached in the group buffer pool. A Changed and unchanged pages are cached in the group buffer pool. N No data is cached in the group buffer pool.
FAROFFPOSF	FLOAT	Number of referred to rows far from optimal position because of an insert into a full page. The value is -1 if statistics have not been gathered. The value is -2 if the index is a node ID index or an XML index. The column is not applicable for an index on an auxiliary table.
NEAROFFPOSF	FLOAT	Number of referred to rows near, but not at optimal position, because of an insert into a full page. The value is -2 if the index is a node ID index or an XML index. Not applicable for an index on an auxiliary table.
CARDF	FLOAT	Number of keys in the index that refer to data rows or LOBs. The value is -1 if statistics have not been gathered.
SECQTYI	INTEGER	Secondary space allocation in units of 4KB storage. For user-managed data sets, the value is the secondary space allocation in units of 4KB blocks if RUNSTATS INDEX with UPDATE(SPACE) or UPDATE(ALL) is executed; otherwise, the value is zero.
IPREFIX	CHAR(1)	The first character of the instance qualifier for this index's data set name. 'I' or 'J' are the only valid characters for this field.
ALTEREDTS	TIMESTAMP	Time when the most recent ALTER INDEX statement was executed for the index. If no ALTER INDEX statement has been applied, the value is '0001-01-01.00.00.00.000000'.
SPACEF	FLOAT(8)	Kilobytes of DASD storage. The value is -1 if statistics have not been gathered. This is an updatable column.
DSNUM	INTEGER	Number of data sets. The value is -1 if statistics have not been gathered. This is an updatable column.
EXTENTS	INTEGER	Number of data set extents. The value is -1 if statistics have not been gathered. This is an updatable column.
PSEUDO_DEL_ENTRIES	INTEGER	Number of pseudo deleted entries (entries that are logically deleted but still physically present in the index). For a non-unique index, value is the number of RIDs that are pseudo deleted. For a unique index, the value is the number of keys and RIDs that are pseudo deleted. The value is -1 if statistics have not been gathered. This is an updatable column.
LEAFNEAR	INTEGER	Number of leaf pages physically near previous leaf page for successive active leaf pages. The value is -1 if statistics have not been gathered. This is an updatable column.

Column Name	Data Type	Description
LEAFFAR	INTEGER	Number of leaf pages located physically far away from previous leaf pages for successive (active leaf) pages accessed in an index scan. The value is -1 if statistics have not been gathered. This is an updatable column.
OLDEST_VERSION	SMALLINT	The version numbers describing the oldest format of data in the index part and any image copies of the index part.
CREATEDTS	TIMESTAMP	Time when the partition was created.
AVGKEYLEN	INTEGER	Average length of keys within the index.

SYSIBM.SYSINDEXPART_HIST

Contains rows from SYSINDEXPART. Whenever rows are added or changed in SYSINDEXPART, the rows are also written to the new history table. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
PARTITION	SMALLINT	Partition number; zero if index is not partitioned.
IXNAME	VARCHAR(128)	Name of the index.
IXCREATOR	VARCHAR(128)	Schema of the owner of the index.
PQTY	INTEGER	Primary space allocation in units of 4KB storage blocks. Zero if a storage group is used.
SECQTYI	INTEGER	Secondary space allocation in units of 4KB storage. Zero if a storage group is used.
LEAFDIST	INTEGER	100 times the average number of leaf pages between successive active leaf pages of the index. The value is -1 if statistics have not been gathered.
SPACEF	INTEGER	Number of kilobytes of DASD storage allocated to the index space partition. The value is -1 if statistics have not been gathered.
STATTIME	TIMESTAMP	If RUNSTATS updated the statistics, the date and time when the last invocation of RUNSTATS updated the statistics. The default value is '0001-01-01.00.00.00.000000'.
FAROFFPOSF	FLOAT	Number of referred to rows far from optimal position because of an insert into a full page. The value is -1 if statistics have not been gathered. The column is not applicable for an index on an auxiliary table.
NEAROFFPOSF	FLOAT	Number of referred to rows near, but not at optimal position, because of an insert into a full page. Not applicable for an index on an auxiliary table.
CARDF	FLOAT	Number of keys in the index that refer to data rows or LOBs. The value is -1 if statistics have not been gathered.
EXTENTS	INTEGER	Number of data set extents. The value is -1 if statistics have not been gathered.
PSEUDO_DEL_ENTRIES	INTEGER	Number of pseudo deleted entries. The value is -1 if statistics have not been gathered.
DSNUM	INTEGER	Data set number within the tablespace. For partitioned index spaces, this value corresponds to the partition number for a single partition copy, or 0 for a copy of an entire partitioned index space. The value is -1 if statistics have not been gathered.

Column Name	Data Type	Description
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape
LEAFNEAR	INTEGER	Number of leaf pages physically near previous leaf page for successive active leaf pages. The value is -1 if statistics have not been gathered. This is an updatable column.
LEAFFAR	INTEGER	Number of leaf pages located physically far away from previous leaf pages for successive (active leaf) pages accessed in an index scan. The value is -1 if statistics have not been gathered. This is an updatable column.
AVGKEYLEN	INTEGER	Average length of keys within the index.

SYSIBM.SYSINDEXSPACESTATS

Contains real time statistics for index spaces. Rows in this table can inserted, updated and deleted.

Column name	Data type	Description
UPDATESTATTIME	TIMESTAMP	The timestamp when the row was inserted or last updated.
NLEVELS	SMALLINT	The number of levels in the index tree A null value indicates that the number of levels is unknown.
NPAGES	INTEGER	The number of distinct pages with active rows in the associated table. This is an updatable column.
NLEAF	INTEGER	The number of leaf pages in the index. This is an updatable column.
NACTIVE	INTEGER	The number of active pages in the index space or partition. This value is equivalent to the number of preformatted pages. A null value indicates that the number of active pages is unknown.
SPACE	INTEGER	The amount of space, in KB, that is allocated to the index space or partition. For multi-piece linear page sets, this value is the amount of space in all data sets. A null value indicates the amount of space is unknown.
EXTENTS	SMALLINT	The number of extents in the index space or partition. For multi-piece index spaces, this value is the number of extents for the last data set. For a data set that is striped across multiple volumes, the value is the number of logical extents. A null value indicates the number of extents is unknown.
LOADRLASTTIME	TIMESTAMP	The timestamp of the last LOAD REPLACE on the index space or partition. A null value indicates that the LOAD REPLACE utility has never been run on the index space or partition or that the timestamp is unknown.
REBUILDLASTTIME	TIMESTAMP	The timestamp of the last REBUILD INDEX on the index space or partition. A null value indicates that the timestamp that the REBUILD INDEX was last run is unknown.
REORGLASTTIME	TIMESTAMP	The timestamp of the last REORG INDEX on the index space or partition. A null value indicates that the REORG INDEX utility has never been run on the index space or partition or that the

		timestamp is unknown.
REORGINSERTS	INTEGER	The number of index entries that have been inserted since the last REORG, REBUILD INDEX, or LOAD REPLACE on the index space or partition. A null value indicates that the number of inserted index entries is unknown.
REORGDELETES	INTEGER	The number of index entries that have been deleted since the last REORG, REBUILD INDEX, or LOAD REPLACE on the index space or partition. A null value indicates that the number of deleted index entries is unknown.
REORGAPPENDINSERT	INTEGER	The number of index entries that have been inserted since the last REORG, REBUILD INDEX, or LOAD REPLACE on the index space or partition that have a key value that is greater than the maximum key value in the index or partition. A null value indicates that the number of inserted index entries is unknown.
REORGPSEUDODELETES	INTEGER	The number of index entries that have been pseudo-deleted since the last REORG, REBUILD INDEX, or LOAD REPLACE on the index space or partition. A pseudo-delete is a RID entry that has been marked as deleted. A null value indicates that the number of pseudo-deleted index entries is unknown.
REORGMASDELETE	INTEGER	The number of mass deletes from a segmented or LOB table space, or the number of dropped tables from a segmented table space since the last time the REORG or LOAD REPLACE utilities were run. A null value indicates that the number of mass deletes is unknown.
REORGLAFAFFAR	INTEGER	The number of index page splits that occurred since the last REORG, REBUILD INDEX, or LOAD REPLACE in which the higher part of the split page was near the location of the original page. The higher part of a split page is near the original page if the two page numbers differ by 16 or less. A null value means that the number of split pages near their original pages is unknown.
REORGLAFAFFAR	INTEGER	The number of index page splits that occurred since the last REORG, REBUILD INDEX, or LOAD REPLACE in which the higher part of the split page was far from the location of the original page. The higher part of a split page is far from the original page if the two page numbers differ by more than 16. A null value means that the number of split pages near their original pages is unknown.
REORGNUMLEVELS	INTEGER	The number of levels in the index tree that were added or removed since the last REORG, REBUILD INDEX, or LOAD REPLACE. A null value means that the number of added or deleted levels is unknown.
STATSLASTTIME	TIMESTAMP	The timestamp of the last RUNSTATS on the index space or partition. A null value means that RUNSTATS has never been run on the index space or partition, or that the timestamp of the last RUNSTATS is unknown.

STATSINSERTS	INTEGER	The number of records or LOBs that have been inserted into the table space or partition since the last time that the RUNSTATS utility was run. A null value indicates that the number of inserted records or LOBs is unknown.
STATSDELETES	INTEGER	The number of index entries that have been deleted since the last RUNSTATS on the index space or partition. A null value means that the number of deleted index entries is unknown.
STATSMASDELETE	INTEGER	The number of times that the index or index space partition was mass deleted since the last RUNSTATS. A null value means that the number of mass deletes is unknown.
COPYLASTTIME	TIMESTAMP	The timestamp of the last full image copy on the index space or partition. A null value means that COPY has never been run on the index space or partition, or that the timestamp of the last full image copy is unknown.
COPYUPDATEDPAGES	INTEGER	The number of distinct pages that have been updated since the last COPY. A null value indicates that the number of updated pages is unknown.
COPYCHANGES	INTEGER	The number of insert or delete operations since the last COPY. A null value indicates that the number of insert, update, and delete operations is unknown.
COPYUPDATELRSN	CHAR(6)	The LRSN or RBA of the first update after the last COPY. A null value indicates that the LRSN or RBA is unknown.
COPYUPDATETIME	TIMESTAMP	The timestamp of the first update after the last COPY. A null value indicates that the timestamp is unknown.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.
DBID	SMALLINT	The internal identifier of the database.
ISOBID	SMALLINT	The internal identifier of the index space page set descriptor.
PSID	SMALLINT	The internal identifier of the table space page set descriptor for the table space associated with the index.
PARTITION	SMALLINT	The data set number within the index space. For partitioned index spaces, this value corresponds to the partition number for a single partition. For non-partitioned table spaces, this value is 0.
INSTANCE	SMALLINT	Indicates if the object is associated with data set 1 or 2. This is an updatable column.
TOTALENTRIES	FLOAT	The number of entries, including duplicate entries, in the index space or partition. A null value indicates that the number of entries is unknown.
DBNAME	CHAR(8)	The name of the database.
NAME	CHAR(8)	The name of the index.
CREATOR	VARCHAR(128)	The schema of the index.
INDEXSPACE	VARCHAR(128)	The name of the index space.
LASTUSED	DATE	The date when the index is used for SELECT, FETCH, searched UPDATE, searched DELETE, or used to enforce

		referential integrity constraints. The default value is 1/1/0001.
--	--	---

SYSIBM.SYSINDEXSTATS

Contains one row for each partition of a partitioning index or a data partitioned secondary index. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
FIRSTKEYCARD	INTEGER	For the index partition, number of distinct values of the first key column.
FULLKEYCARD	INTEGER	For the index partition, number of distinct values of the key.
NLEAF	INTEGER	Number of active leaf pages in the index partition.
NLEVELS	SMALLINT	Number of levels in the partition index tree.
CLUSTERRATIO	SMALLINT	For the index partition, the percentage of rows that are in clustering order. The value is 0 if statistics have not been gathered.
STATTIME	TIMESTAMP	If RUNSTATS updated the statistics, the date and time when the last invocation of RUNSTATS updated the statistics. The default value is '0001-01-01.00.00.00.000000'.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
PARTITION	SMALLINT	Partition number of the index.
OWNER	VARCHAR(128)	Schema of the owner of the index.
NAME	VARCHAR(128)	Name of the index.
KEYCOUNT	INTEGER	Total number of rows in the partition.
FIRSTKEYCARDF	FLOAT	For the index partition, number of distinct values of the first key column.
FULLKEYCARDF	FLOAT	For the index partition, number of distinct values of the key.
KEYCOUNTF	FLOAT	Total number of rows in the partition.
CLUSTERRATIOF	FLOAT	For the index partition, the value, when multiplied by 100, is the percentage of rows that are in clustering order. For example, a value of .9125 indicates 91.25%. The value is 0 if statistics have not been gathered.
DATAPEAT FACTORF	FLOAT	The anticipated number of data pages that will be touched following an index key order. This statistic is only collected when the STATCLUS subsystem parameter is set to ENHANCED. This number is -1 if statistics have not been collected. The valid value is -1 or any value that is equal to or greater than 1. This is an updatable column.

SYSIBM.SYSINDEXSTATS_HIST

Contains rows from SYSINDEXSTATS. Whenever rows are added or changed in SYSINDEXSTATS, the rows are also written to the new history table. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
NLEAF	INTEGER	Number of active leaf pages in the index partition. The value is -1 if statistics have not been gathered.
NLEVELS	SMALLINT	Number of levels in the partition index tree. The value is -1 if statistics have not been gathered.
STATTIME	TIMESTAMP	If RUNSTATS updated the statistics, the date and time when the last invocation of RUNSTATS updated the statistics.

Column Name	Data Type	Description
		The default value is '0001-01-01.00.00.00.000000'.
PARTITION	SMALLINT	Partition number of the index.
OWNER	VARCHAR(128)	Schema of the owner of the index.
NAME	VARCHAR(128)	Name of the index.
FIRSTKEYCARDF	FLOAT	For the index partition, number of distinct values of the first key column. The value is -1 if statistics have not been gathered.
FULLKEYCARDF	FLOAT	For the index partition, number of distinct values of the key. The value is -1 if statistics have not been gathered.
KEYCOUNTF	FLOAT	Total number of rows in the partition. The value is -1 if statistics have not been gathered.
CLUSTERRATIOF	FLOAT	For the index partition, the value, when multiplied by 100, is the percentage of rows that are in clustering order. For example, a value of .9125 indicates 91.25%. The value is 0 if statistics have not been gathered.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.
DATAPEAT FACTORF	FLOAT	The anticipated number of data pages that will be touched following an index key order. This statistic is only collected when the STATCLUS subsystem parameter is set to ENHANCED. This number is -1 if statistics have not been collected. The valid value is -1 or any value that is equal to or greater than 1. This is an updatable column.

SYSIBM.SYSJARCLASS_SOURCE

Auxiliary table for SYSIBM.SYSCONTENTS, which contains the source code for a Java stored procedure.

Column Name	Data Type	Description
CLASS_SOURCE	CLOB(10M)	The contents of the class in the jar file.

SYSIBM.SYSJARCONTENTS

Contains Java class source for installed jar.

Column Name	Data Type	Description
JARSCHEMA	VARCHAR(128)	The schema of the jar file.
JAR_ID	VARCHAR(128)	The name of the jar file.
CLASS	VARCHAR(384)	The class name contained in the jar file.
CLASS_SOURCE_ROWID	ROWID	ID used to support CLOB data type.
CLASS_SOURCE	CLOB(10M)	The contents of the class in the jar file.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.

SYSIBM.SYSJARDATA

Auxiliary table for SYSIBM.SYSJAROBJECTS.

Column Name	Data Type	Description
JAR_DATA	BLOB(100M)	The contents of the jar file.

SYSIBM.SYSJAROBJECTS

Contains binary large object representing the installed jar.

Column Name	Data Type	Description
JARSCHEMA	VARCHAR(128)	The schema of the jar file.
JAR_ID	VARCHAR(128)	The name of the jar file.
OWNER	VARCHAR(128)	Authorization ID of the owner of the jar object.
JAR_DATA_ROWID	ROWID	ID used to support BLOB data type.
JAR_DATA	BLOB(100M)	The contents of the jar file. This is an updatable column.
PATH	VARCHAR(2048)	The URL path of the source jar file. This is an updatable column.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.
CREATEDTS	TIMESTAMP	Time when the JAR object was created.
ALTEREDTS	TIMESTAMP	Time when the JAR object was altered.
OWNERTYPE	CHAR(1)	Indicates the type of owner: blank Authorization ID L Role

SYSIBM.SYSJAVA_OPTS

Contains build options used during INSTALL_JAR.

Column Name	Data Type	Description
JARSCHEMA	VARCHAR(128)	The schema of the jar file.
JAR_ID	VARCHAR(128)	The name of the jar file.
BUILDSHEMA	VARCHAR(128)	Schema name for BUILDNAME.
BUILDNAME	VARCHAR(128)	Procedure used to create the routine.
BUILDOWNER	VARCHAR(128)	Authorization ID used to create the routine.
DBMLIB	VARCHAR(256)	PDS name where DBRM is located.
HPJCOMPILE_OPTS	VARCHAR(512)	HPJ compile options used to install the routine.
BIND_OPTS	VARCHAR(2048)	Bind options used to install the routine.
POBJECT_LIB	VARCHAR(256)	PDSE name where program object is located.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.

SYSIBM.SYSJAVAPATHS

Contains the complete JAR class resolution path, and records the dependencies that one JAR has on the JARs in its Java path.

Column Name	Data Type	Description
JARSCHEMA	VARCHAR(128)	The schema of the JAR file.
JAR_ID	VARCHAR(128)	The name of the JAR file.
OWNER	VARCHAR(128)	Authorization ID of the owner of the JAR object.
ORDINAL	SMALLINT	The ordinal number of the path element within the JAR's Java path.
PE_CLASS_PATTERN	VARCHAR(2048)	The pattern for the names of the classes that are to be searched for in this path element's JAR file.
PE_JARSCHEMA	VARCHAR(128)	The schema of this path element's JAR file.

PE_JAR_ID	VARCHAR(128)	The name of this path element's JAR file.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.

SYSIBM.SYSKEYCOLUSE

Contains a row for every column in a unique constraint (primary key or unique key) from the SYSIBM.SYSTABCONST table.

Column Name	Data Type	Description
CONSTNAME	VARCHAR(128)	Name of the constraint.
TBCREATOR	VARCHAR(128)	Authorization ID of the owner of the table on which the constraint is defined.
TBNAME	VARCHAR(128)	Name of the table on which the constraint is defined.
COLNAME	VARCHAR(128)	Name of the column.
COLSEQ	SMALLINT	Numeric position of the column in the key (the first position in the key is 1).
COLNO	SMALLINT	Numeric position of the column in the table on which the constraint is defined.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.

SYSIBM.SYSKEYS

Contains one row for each column of an index key.

Column Name	Data Type	Description
IXNAME	VARCHAR(128)	Name of the index.
IXCREATOR	VARCHAR(128)	Authorization ID of the owner of the index.
COLNAME	VARCHAR(128)	Name of the column of the key.
COLNO	SMALLINT	Numeric position of the column in the table; for example, 4 (out of 10).
COLSEQ	SMALLINT	Numeric position of the column in the key; for example, 4 (out of 4). This value is meaningless for an index that is based on an expression.
ORDERING	CHAR(1)	Order of the column in the key: Blank index is based on an expression A Ascending D Descending R Random
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes

SYSIBM.SYSKEYTARGETS

Contains one row for each key-target that is participating in an extended index definition.

Column Name	Data Type	Description
IXNAME	VARCHAR(128)	Qualifier of the index.
IXSCHEMA	VARCHAR(128)	Numeric position of the key-target in the index.
KEYSEQ	SMALLINT	Numeric position of the key-target in the index.
COLNO	SMALLINT	Numeric position of the column in the table if the expression is a single column.

ORDERING	CHAR(1)	Order of the key: A Ascending																												
TYPESHEMA	VARCHAR(128)	Schema of the data type.																												
TYPENAME	VARCHAR(128)	Name of the data type.																												
DATATYPEID	INTEGER	The internal ID of the data type.																												
SOURCETYPEID	INTEGER	For a built-in data type, this column contains 0. For a distinct type, this column contains the internal ID of the built-in type on which the distinct type is based.																												
LENGTH	SMALLINT	The length attribute of the key-target or its precision for a decimal key-target. The number does not include the internal prefixes that are used to record the actual length and null states, when applicable. <table><tr><td>Data type</td><td>Value of the LENGTH column</td></tr><tr><td>INTEGER</td><td>4</td></tr><tr><td>SMALLINT</td><td>2</td></tr><tr><td>FLOAT</td><td>4 or 8</td></tr><tr><td>CHAR</td><td>The length of the string</td></tr><tr><td>VARCHAR</td><td>The maximum length of the string</td></tr><tr><td>DECIMAL</td><td>The precision of the number</td></tr><tr><td>GRAPHIC</td><td>The number of DBCS characters</td></tr><tr><td>VARGRAPHIC</td><td>The maximum number of DBCS characters</td></tr><tr><td>DATE</td><td>4</td></tr><tr><td>TIME</td><td>3</td></tr><tr><td>TIMESTAMP</td><td>10</td></tr><tr><td>BIGINT</td><td>8</td></tr><tr><td>BINARY</td><td>The length of the string VARBINARY The maximum length of the string DECFLOAT 8 or 16</td></tr></table>	Data type	Value of the LENGTH column	INTEGER	4	SMALLINT	2	FLOAT	4 or 8	CHAR	The length of the string	VARCHAR	The maximum length of the string	DECIMAL	The precision of the number	GRAPHIC	The number of DBCS characters	VARGRAPHIC	The maximum number of DBCS characters	DATE	4	TIME	3	TIMESTAMP	10	BIGINT	8	BINARY	The length of the string VARBINARY The maximum length of the string DECFLOAT 8 or 16
Data type	Value of the LENGTH column																													
INTEGER	4																													
SMALLINT	2																													
FLOAT	4 or 8																													
CHAR	The length of the string																													
VARCHAR	The maximum length of the string																													
DECIMAL	The precision of the number																													
GRAPHIC	The number of DBCS characters																													
VARGRAPHIC	The maximum number of DBCS characters																													
DATE	4																													
TIME	3																													
TIMESTAMP	10																													
BIGINT	8																													
BINARY	The length of the string VARBINARY The maximum length of the string DECFLOAT 8 or 16																													
LENGTH2	INTEGER	The maximum length of the data that is retrieved from the column. Possible values include the following values: 0 Not a ROWID column 40 For a ROWID																												
SCALE	SMALLINT	The scale of decimal data. SCALE contains 0 if the key is not a decimal key.																												
NULLS	CHAR(1)	Whether the key can contain null values: N No Y Yes. Y also indicates that the index is an XML index.																												
CCSID	INTEGER	The CCSID of the key. CCSID contains 0 if the key is a non-character type key.																												
SUBTYPE	CHAR(1)	SUBTYPE applies to character keys only and indicated the subtype of the data: B BIT data M MIXED data S SBCS data blank non-character data																												
CREATEDTS	TIMESTAMP	The timestamp for when the key-target is created.																												
RELCREATED	CHAR(1)	The release of DB2 in which the key-target is created.																												
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.																												
DERIVED_FROM	VARCHAR(4000)	For an index on a scalar expression, DERIVED_FROM contains the text of the scalar expression that is used to generated the key-target value. For an XML index, this is the XML pattern that is used to generate the key-target value. Otherwise DERIVED_FROM contains an empty string.																												

STATSTIME	TIMESTAMP	The timestamp of the most recent RUNSTATS. The default value is '0001-01-01.00.00.00.000000'. STATSTIME is an updatable column.
CARDF	FLOAT	The number of distinct values for the key-target.
HIGH2KEY	VARCHAR(2000)	The second highest key-value. HIGH2KEY is an updatable column.
LOW2KEY	VARCHAR(2000)	The second lowest key-value. LOW2KEY is an updatable column.
STATS_FORMAT	CHAR(1)	The type of statistics that are gathered: N VARCHAR column statistical values are not padded blank Statistics have not been collected or VARCHAR column statistical values are padded STATS_FORMAT is an updatable column.

SYSIBM.SYSKEYTARGETSTATS

The SYSIBM.SYSKEYTARGETSTATS table contains partition statistics for selected key-targets. For each key-target, a row exists for each partition in the table. Rows are inserted when RUNSTATS collects indexed key statistics or non-indexed key statistics for a partitioned table space. No row is inserted if the table space is non-partitioned. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
IXSCHEMA	VARCHAR(128)	The qualifier of the index.
IXNAME	VARCHAR(128)	The name of the index.
KEYSEQ	SMALLINT	Numeric position of the key-target in the index.
HIGHKEY	VARCHAR(2000)	The highest key value.
HIGH2KEY	VARCHAR(2000)	The second highest key-value.
LOWKEY	VARCHAR(2000)	The lowest key value.
LOW2KEY	VARCHAR(2000)	The second lowest key-value.
PARTITION	SMALLINT	The partition number of the table space.
STATSTIME	TIMESTAMP	The timestamp of the most recent RUNSTATS. The default value is '0001-01-01.00.00.00.000000'.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.
STATS_FORMAT	FLOAT	Number of distinct values for the key target.
CARDF	FLOAT	Number of distinct values for the key target.

SYSIBM.SYSKEYTARGETS_HIST

Contains rows from the SYSKEYTARGETS table. Whenever rows are added or changed in SYSKEYTARGETS, the rows are also written to this table. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
IXNAME	VARCHAR(128)	Name of the index.
IXSCHEMA	VARCHAR(128)	Qualifier of the index.
KEYSEQ	SMALLINT	Numeric position of the key-target in the index.
TYPESCHEMA	VARCHAR(128)	Schema of the data type.
TYPENAME	VARCHAR(128)	Name of the data type.
DATATYPEID	INTEGER	The internal ID of the data type.

SOURCETYPEID	INTEGER	For a built-in data type, this field contains 0. For a distinct type, this field contains the internal ID of the built-in type on which the distinct type is based.
LENGTH	SMALLINT	<p>Length attribute of the column or, in the case of a decimal column, its precision. The number does not include the internal prefixes that are used to record the actual length and null state, where applicable.</p> <p>INTEGER 4 SMALLINT 2 FLOAT 4 or 8 CHAR Length of string VARCHAR Maximum length of string LONGVAR Maximum length of string (prior to V9) DECIMAL Precision of number GRAPHIC Number of DBCS characters VARGRAPHIC Maximum number of DBCS char.(prior to V9) LONGVARG Maximum number of DBCS characters DATE 4 TIME 3 TIMESTAMP 10 BLOB 4 – The length of the field that is stored in the base table. The maximum length of the LOB column is found in LENGTH2 CLOB 4 – The length of the field that is stored in the base table. The maximum length of the CLOB column is found in LENGTH2 DBCLOB 4 – The length of the field that is stored in the base table. The maximum length of the CLOB column is found in LENGTH2 ROWID 17 – The maximum length of the stored portion of the identifier DISTINCT The length of the source data type XML 6 BIGINT 8 BINARY Length of String VARBINARY Maximum length of string DECFLOAT 8 or 16</p>
LENGTH2	INTEGER	The maximum length of the data that is retrieved from the column. Possible values include the following values: 0 Not a ROWID column 40 For a ROWID column, the length of the value that is returned
SCALE	SMALLINT	The scale of decimal data. SCALE contains 0 if the key is not a decimal key.

SYSIBM.SYSKEYTGTDIST

The SYSIBM.SYSKEYTGTDIST table contains one or more rows for the first key-target of an extended index key. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
STATSTIME	TIMESTAMP	If the RUNSTATS utility updated the statistics, this column contains the date and time when the last invocation of RUNSTATS updated the statistics. The default value is

		'0001-01-01.00.00.00.000000'.
IBMREQD	CHAR(1)	The qualifier of the index.
IXSCHEMA	VARCHAR(128)	The name of the index.
IXNAME	VARCHAR(128)	The numeric position of the key-target in the index.
KEYSEQ	SMALLINT	The numeric position of the key-target in the index.
KEYVALUE	VARCHAR(2000)	KEYVALUE contains the data of a frequently occurring value. If the value has a non-character data type, the data might not be printable.
TYPE		The type of statistics that are gathered: C Cardinality F Frequent value N Non-padded frequent value H Histogram statistics
CARDF	FLOAT	When TYPE='C', CARDF contains the number of distinct values for the key group. When TYPE='H', CARDF contains the number of distinct values for the key group in a quantile indicated by QUANTILENO.
KEYGROUPKEYNO	VARCHAR(254)	KEYGROUPKEYNO contains a value that identifies the set of keys that are associated with the statistics. KEYGROUPKEYNO contains 0 if the statistics are only associated with a single key. If the statistics are associated with more than a single key, KEYGROUPKEYNO contains an array of SMALLINT key numbers with
NUMKEYS	SMALLINT	The number of keys that are associated with the statistics.
FREQUENCYF	FLOAT	When TYPE='F' or 'N', FREQUENCYF contains the percentage of entries in the index that have the value that is specified in KEYVALUE when the number of entries is multiplied by 100. For example, a value of 1 indicates 100 percent. A value of .153 indicates 15.3 percent. When TYPE='H', FREQUENCYF contains the percentage of entries in the index that have a value that is in the range of the quantile that is indicated in QUANTILENO.
QUANTILENO	SMALLINT	QUANTILENO contains an ordinary sequence number of a quantile in the whole consecutive value range, from low to high.
LOWVALUE	VARCHAR(2000)	When TYPE='H', LOWVALUE contains the lower bound for the quantile that is in QUANTILENO. LOWVALUE is not used if TYPE does not equal 'H'.
HIGHVALUE	VARCHAR(2000)	When TYPE='H', HIGHVALUE contains the upper bound for the quantile that is in QUANTILENO. HIGHVALUE is not used if TYPE does not equal 'H'.

SYSIBM.SYSKEYTGTDISTSTATS

The SYSIBM.SYSKEYTGTDISTSTATS table contains zero or more rows per partition for the first key-target of a data-partitioned secondary index. Rows are inserted when RUNSTATS scans a data-partitioned secondary index. No row is inserted if the index is a secondary index. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
STATSTIME	TIMESTAMP	If RUNSTATS updated the statistics, STATSTIME contains the

		timestamp of the most recent RUNSTATS. The default value is '0001-01-01.00.00.00.000000'.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.
PARTITION	SMALLINT	The partition number of the table space that contains the index in which the key is defined.
IXSCHEMA	VARCHAR(128)	The qualifier of the index.
IXNAME	VARCHAR(128)	The name of the index.
KEYSEQ	SMALLINT	Numeric position of the key-target in the index.
KEYVALUE	VARCHAR(2000)	KEYVALUE contains the data of a frequently occurring value. If the value has a non-character data type, the data might not be printable.
TYPE	CHAR(1)	The type of statistics that are gathered: C Cardinality F Frequent value N Non-padded frequent value H Histogram statistics
CARDF	FLOAT	When TYPE='C', CARDF contains the number of distinct values for the key group. When TYPE='H', CARDF contains the number of distinct values for the key group in the quantile that is in QUANTILENO.
KEYGROUPKEYNO	VARCHAR(254)	Identifies the set of keys that are associated with the statistics. If the statistics are only associated with a single key, KEYGROUPKEYNO contains a zero length value. Otherwise, KEYGROUPKEYNO contains an array of SMALLINT key numbers that have a dimension that is equal to the value in NUMKEYS.
NUMKEYS	SMALLINT	Identifies the number of keys that are associated with the statistics.
FREQUENCYF	FLOAT	When TYPE='F' or 'N', FREQUENCYF contains the percentage of entries in the index that have the value that is specified in KEYVALUE when the number of entries is multiplied by 100. For example, a value of 1 indicates 100 percent. A value of .153 indicates 15.3 percent. When TYPE='H', FREQUENCYF contains the percentage of entries in the index that have a value that is in the range of the quantile that is indicated in QUANTILENO.
QUANTILENO	SMALLINT	QUANTILENO contains an ordinary sequence number of a quantile in the whole consecutive value range, from low to high.
LOWVALUE	VARCHAR(2000)	When TYPE='H', LOWVALUE is the lower bound for the quantile that is indicated in QUANTILENO. LOWVALUE is not used if TYPE does not equal 'H'.
HIGHVALUE	VARCHAR(2000)	When TYPE='H', HIGHVALUE is the upper bound for the quantile that is indicated in QUANTILENO. HIGHVALUE is not used if TYPE does not equal 'H'.

SYSIBM.SYSKEYTGTDIST_HIST

The SYSIBM.SYSKEYTGTDIST_HIST table contains rows from the SYSKEYTGTDIST table. Whenever rows are added or changed in SYSKEYTGTDIST, the rows are also written to this table. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
STATTIME	TIMESTAMP	If the RUNSTATS utility updated the statistics, this column contains the date and time when the last invocation of RUNSTATS

		updated the statistics. The default value is '0001-01-01.00.00.00.000000'.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.
IXSCHEMA	VARCHAR(128)	The qualifier of the index.
IXNAME	VARCHAR(128)	The name of the index.
KEYSEQ	SMALLINT	The numeric position of the key-target in the index.
KEYVALUE	VARCHAR(2000)	KEYVALUE contains the data of a frequently occurring value. If the value has a non-character data type, the data might not be printable.
TYPE	CHAR(1)	The type of statistics that are gathered: C Cardinality F Frequent value N Non-padded frequent value H Histogram statistics
CARDF	FLOAT	When TYPE='C', CARDF contains the number of distinct values for the key group. When TYPE='H', CARDF contains the number of distinct values for the key group in a quantile indicated by QUANTILENO.
KEYGROUPKEYNO	VARCHAR(254)	KEYGROUPKEYNO contains a value that identifies the set of keys that are associated with the statistics. KEYGROUPKEYNO contains 0 if the statistics are only associated with a single key. If the statistics are associated with more than a single key, KEYGROUPKEYNO contains an array of SMALLINT key numbers with a dimension that is equal to the value in NUMKEYS.
NUMKEYS	SMALLINT	The number of keys that are associated with the statistics.
FREQUENCYF	FLOAT	When TYPE='F' or 'N', FREQUENCYF contains the percentage of entries in the index that have the value that is specified in KEYVALUE when the number of entries is multiplied by 100. For example, a value of 1 indicates 100 percent. A value of .153 indicates 15.3 percent. When TYPE='H', FREQUENCYF contains the percentage of entries in the index that have a value that is in the range of the quantile that is indicated in QUANTILENO.
QUANTILENO	SMALLINT	QUANTILENO contains an ordinary sequence number of a quantile in the whole consecutive value range, from low to high.
LOWVALUE	VARCHAR(2000)	When TYPE='H', LOWVALUE contains the lower bound for the quantile that is in QUANTILENO. LOWVALUE is not used if TYPE does not equal 'H'.
HIGHVALUE	VARCHAR(2000)	When TYPE='H', HIGHVALUE contains the upper bound for the quantile that is in QUANTILENO. HIGHVALUE is not used if TYPE does not equal 'H'.

SYSIBM.SYSLOBSTATS

Contains one row for each LOB tablespace.

Column Name	Data Type	Description
STATSTIME	TIMESTAMP	Timestamp of RUNSTATS statistics update.
AVGSIZE	INTEGER	Average size of a LOB, measured in bytes, in the LOB tablespace.
FREESPACE	INTEGER	Number of kilobytes of available space in the LOB tablespace.
ORGRATIO	DECIMAL(5,2)	Ratio of organization in the LOB tablespace. A value of 1 indicates perfect organization of the LOB tablespace. The greater the value exceeds 1, the more disorganized the LOB tablespace.
DBNAME	CHAR(8)	Name of the database that contains the LOB tablespace named in NAME.

Column Name	Data Type	Description
NAME	CHAR(8)	Name of the LOB tablespace.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes

SYSIBM.SYSLOBSTATS_HIST

Contains rows from SYSLOBSTATS. Whenever rows are added or changed in SYSLOBSTATS, the rows are also written to the new history table. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
STATSTIME	TIMESTAMP	Timestamp of RUNSTATS statistics update.
FREESPACE	INTEGER	Number of kilobytes of available space in the LOB tablespace.
ORGRATIO	DECIMAL(5,2)	Ratio of organization in the LOB tablespace. A value of 1 indicates perfect organization of the LOB tablespace. The greater the value exceeds 1, the more disorganized the LOB tablespace.
DBNAME	VARCHAR(24)	Name of the database that contains the LOB tablespace named in NAME.
NAME	VARCHAR(24)	Name of the LOB tablespace.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes

SYSIBM.SYSOBJROLEDEP

Contains the dependent objects for each role.

Column Name	Data Type	Description
DEFINER	VARCHAR(128)	The authorization ID or role that created the object.
DEFINERTYPE	CHAR(1)	The type of definer: I Role blank Authorization ID
ROLENAME	VARCHAR(128)	Name of the role on which there is a dependency.
DSHEMA	VARCHAR(128)	Name of the schema of the dependent object.
DNAME	VARCHAR(762)	Name of the dependent object.
DTYPE	CHAR(1)	The type of the dependent object in DNAME: A Alias B Trigger D Database E Distinct type F User-defined function I Index J Jar L Role M Materialized query table N Trusted context O Stored procedure Q Sequence R Table space S Storage group T Table V View
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic

	machine-readable material (MRM) tape.
--	---------------------------------------

SYSIBM.SYSPACKAGE

Contains a row for every package.

Column Name	Data Type	Description
LOCATION	VARCHAR(128)	Always contains blanks.
COLLID	VARCHAR(128)	Name of the package collection. For a trigger package, it is the schema name of the trigger.
NAME	VARCHAR(128)	Name of the package.
CONTOKEN	CHAR(8)	Consistency token for the package. For a package derived from a DB2 DBRM, this is either: <ul style="list-style-type: none"> o The "level" as specified by the LEVEL option when the package's program was precompiled o The timestamp indicating when the package's program was precompiled, in an internal format.
OWNER	VARCHAR(128)	Authorization ID of the package owner. For a trigger package, the value is the authorization ID of the owner of the trigger, which is set to the current authorization ID (the plan or package owner for static CREATE TRIGGER statement; the current SQLID for a dynamic CREATE TRIGGER statement).
CREATOR	VARCHAR(128)	Authorization ID of the owner of the creator of the package version. For a trigger package the value is determined differently. For dynamic SQL, it is the primary authorization ID of the user who issued the CREATE TRIGGER statement. For static SQL, it is the authorization ID of the plan or package owner.
TIMESTAMP	TIMESTAMP	Timestamp indicating when the package was created.
BINDTIME	TIMESTAMP	Timestamp indicating when the package was last bound.
QUALIFIER	VARCHAR(128)	Implicit qualifier for the unqualified table, view, index, and alias names in the static SQL statements of the package.
PKSIZE	INTEGER	Size of the base section of the package, in bytes.
AVGSIZE	INTEGER	Average size, in bytes, of those sections of the plan that contain SQL statements processed at bind time.
SYSENTRIES	SMALLINT	Number of enabled or disabled entries for this package in SYSIBM.SYSPKSYSTEM. A value of 0 if all types of connections are enabled.
VALID	CHAR(1)	Whether the package is valid: <ul style="list-style-type: none"> A The ALTER statement changed the description of the table or base table of a view referred to by the package. For a CREATE INDEX statement involving data sharing, VALID is also marked as "A". The changes do not invalidate the package. H The ALTER TABLE statement changed the description of the table or base table of a view referred to by the package. For releases of DB2 prior to V5R1, the change invalidates the package. N No Y Yes
OPERATIVE	CHAR(1)	Whether the package can be allocated:

Column Name	Data Type	Description
		N No; an explicit BIND or REBIND is required before the package can be allocated. Y Yes
VALIDATE	CHAR(1)	Whether validity checking can be deferred until run time: B All checking must be performed at bind time. R Validation is done at run time for tables, views, and privileges that do not exist at bind time.
ISOLATION	CHAR(1)	Isolation level when the package was last bound or rebound R RR (repeatable read) S CS (cursor stability) T RS (read stability) U UR (uncommitted read) blank Not specified, and therefore at the level specified for the plan executing the package
RELEASE	CHAR(1)	The value used for RELEASE when the package was last bound or rebound: C Value used was COMMIT. D Value used was DEALLOCATE. blank Not specified, and therefore the value specified for the plan executing the package.
EXPLAIN	CHAR(1)	EXPLAIN option specified for the package; that is, whether information on the package's statements was added to the owner of the PLAN_TABLE table: N No Y Yes
QUOTE	CHAR(1)	SQL string delimiter for SQL statements in the package: N Apostrophe Y Quotation mark
COMMA	CHAR(1)	Decimal point representation for SQL statements in package: N Period Y Comma
HOSTLANG	CHAR(1)	Host language for the package's DBRM: B Assembler language C OS/VS COBOL D C F Fortran P PL/I 2 VS COBOL II or IBM COBOL Release 1 (formerly called COBOL/370(TM)) 3 IBM COBOL (Release 2 or subsequent releases) 4 C++ blank For remotely bound packages, or trigger packages (TYPE='T')
CHARSET	CHAR(1)	Indicates whether the system CCSID for SBCS data was 290 (Katakana) when the program was precompiled: K Yes A No
MIXED	CHAR(1)	Indicates if mixed data was in effect when the package's program was precompiled. N No Y Yes
DEC31	CHAR(1)	Indicates whether DEC31 was in effect when the package's program was precompiled.

Column Name	Data Type	Description
		N No Y Yes
DEFERPREP	CHAR(1)	Indicates the CURRENTDATA option when the package was bound or rebound: A Data currency is required for all cursors. Inhibit blocking for all cursors. B Data currency is not required for ambiguous cursors. C Data currency is required for ambiguous cursors. blank The package was created before the CURRENTDATA option was available.
SQLERROR	CHAR(1)	Indicates the SQLERROR option on the most recent subcommand that bound or rebound the package: C CONTINUE N NOPACKAGE
REMOTE	CHAR(1)	Source of the package: C Package was created by BIND COPY. D Package was created by BIND COPY with the OPTIONS(COMMAND) option. K The package was copied from a package that was originally bound on behalf of a remote requester. L The package was copied with the OPTIONS(COMMAND) option from a package that was originally bound on behalf of a remote requester. N Package was locally bound from a DBRM. Y Package was bound on behalf of a remote requester.
PCTIMESTAMP	TIMESTAMP	Date and time the application program was precompiled, or 0001-01-01-00.00.00.000000 if the LEVEL precompiler option was used, or if the package came from a non-DB2 location.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No , Y=Yes
VERSION	VARCHAR(122)	Version identifier for the package. The value is blank for a trigger package (TYPE='T').
PDSNAME	VARCHAR(132)	For a locally bound package, the name of the PDS (library) in which the package's DBRM is a member. For a locally copied package, the value in SYSPACKAGE.PDSNAME for the source package. Otherwise, the product signature of the bind requester followed by one of the following: o The requester's location name if the product is DB2 o Otherwise, the requester' LU name enclosed in angle brackets; for example, "<LUSQLDS>."
DEGREE	CHAR(3)	The DEGREE option used when the package was last bound: ANY DEGREE(ANY) 1 or blank DEGREE(1) Blank if the package was migrated.
GROUP_MEMBER	VARCHAR(24)	The DB2 data-sharing member name of the DB2 subsystem that performed the most recent bind. This column is blank if the DB2 subsystem was not in a DB2 data-sharing environment when the bind was performed.
DYNAMICRULES	CHAR(1)	The DYNAMICRULES option used when the package was last bound: B BIND. Dynamic SQL statements are executed with DYNAMICRULES bind behavior. D DEFINEBIND. When the package is run under

Column Name	Data Type	Description
		<p>an active stored procedure or user-defined function, dynamic SQL statements in the package are executed with DYNAMICRULES define behavior. When the package is not run under an active stored procedure or user-defined functions, dynamic SQL statements in the package are executed with DYNAMICRULES bind behavior.</p> <p>E DEFINERUN. When the package is run under an active stored procedure or user-defined function, dynamic SQL statements in the package are executed with DYNAMICRULES define behavior. When the package is not run under an active stored procedure or user-defined function, dynamic SQL statements in the package are executed with DYNAMICRULES run behavior.</p> <p>H INVOKEBIND. When the package is run under an active stored procedure or user-defined function, dynamic SQL statements in the package are executed with DYNAMICRULES invoke behavior. When the package is not run under an active stored procedure or user-defined function, dynamic SQL statements in the package are executed with DYNAMICRULES bind behavior.</p> <p>I INVOKERUN. When the package is run under an active stored procedure or user-defined function, dynamic SQL statements in the package are executed with DYNAMICRULES invoke behavior. When the package is not run under an active stored procedure or user-defined function, dynamic SQL statements in the package are executed with DYNAMICRULES run behavior.</p> <p>R RUN. Dynamic SQL statements are executed with DYNAMICRULES run behavior.</p> <p>blank DYNAMICRULES is not specified for the package. The package uses the DYNAMICRULES value of the plan to which the package is appended at execution time.</p>
REOPTVAR	CHAR(1)	<p>Whether the access path is determined again at execution time using input variable values:</p> <p>A Bind option REOPT(AUTO) indicates that the access path is determined multiple times at execution time depending on the parameter value.</p> <p>N Bind option REOPT(NONE) indicates that the access path is determined at bind time.</p> <p>Y Bind option REOPT(ALWAYS) indicates that the access path is determined at execution time for SQL statements with variable values.</p> <p>1 Bind option REOPT(ONCE) indicates that the access path is determined only once at execution time, using the first set of input variable values, regardless of how many times the same statement is executed.</p>
DEFERPREPARE	CHAR(1)	Whether PREPARE processing is deferred until OPEN is

Column Name	Data Type	Description
		<p>executed:</p> <p>N Bind option NODEFER(PREPARE) indicates that PREPARE processing is not deferred until OPEN is executed.</p> <p>Y Bind option DEFER(PREPARE) indicates that PREPARE processing is deferred until OPEN is executed.</p> <p>blank Bind option not specified for the package. It is inherited from the plan.</p>
KEEPDYNAMIC	CHAR(1)	<p>Whether prepared dynamic statements are to be purged at each commit point:</p> <p>N The bind option is KEEPDYNAMIC(NO). Prepared dynamic SQL statements are destroyed at commit.</p> <p>Y The bind option is KEEPDYNAMIC(YES). Prepared dynamic SQL statements are kept past commit.</p>
PATHSCHEMAS	VARCHAR(2048)	SQL path specified on the BIND or REBIND command that bound the package. The path is used to resolve unqualified data type, function, and stored procedure names used in certain contexts. If the PATH bind option was not specified, the value in the column is a zero length string; however, DB2 uses a default SQL path of: SYSIBM, SYSFUN, SYSPROC, <i>package qualifier</i> .
TYPE	CHAR(1)	<p>Type of package. Identifies how the package was created:</p> <p>blank BIND PACKAGE command created the package.</p> <p>T CREATE TRIGGER statement created the package, and the package is a trigger package.</p> <p>N CREATE PROCEDURE or ALTER PROCEDURE statement, or BIND PACKAGE DEPLOY command created the package, and this package is a native SQL routine package.</p>
DBPROTOCOL	CHAR(1)	<p>Whether remote access for SQL with three-part names is implemented with DRDA or DB2 private protocol access:</p> <p>D DRDA</p> <p>P DB2 private protocol</p>
FUNCTIONTS	TIMESTAMP	Timestamp when the function was resolved. Set by the BIND and REBIND commands, but not by AUTOBIND.
OPTHINT	VARCHAR(128)	Value of the OPTHINT bind option. Identifies rows in the authid.PLAN_TABLE to be used as input to the optimizer. Contains blanks if no rows in the authid.PLAN_TABLE are to be used as input.
ENCODING_CCSID	INTEGER	<p>The CCSID corresponding to the encoding scheme or CCSID as specified for the bind option ENCODING. The encoding scheme specified on the bind command:</p> <p>CCSID The specified or derived CCSID</p> <p>0 The EBCDIC default CCSID as specified on panel DSNTIPF at installation time.</p>
IMMEDWRITE	CHAR(1)	<p>Indicates when writes of updated group bufferpool dependent pages are to be done. This option is only applicable for data-sharing environments.</p> <p>N Bind option IMMEDWRITE(NO) indicates normal write activity is done.</p> <p>Y Bind option IMMEDWRITE(YES) indicates that immediate writes are done for updated group buffer pool dependent pages.</p> <p>1 Bind option IMMEDWRITE(PH1) indicates that</p>

Column Name	Data Type	Description
		updated group bufferpool dependent pages are written at or before phase 1 commit.
RELBOUND	CHAR(1)	The release when the package was bound or rebound. blank Bound prior to V7 K Bound on V7
REMARKS	VARCHAR(762)	A character string provided by the user with the COMMENT statement.
OWNERTYPE	CHAR(1)	Indicates the type of owner blank Authorization ID L Role
ROUNDING	CHAR(1)	The ROUNDING option used when the package was last bound: C ROUND_CEILING D ROUND_DOWN F ROUND_FLOOR G ROUND_HALF_DOWN E ROUND_HALF_EVEN H ROUND_HALF_UP U ROUND_UP blank The package created in a DB2 release prior to Version 9

SYSIBM.SYSPACKAUTH

Records the privileges that are held by users over packages.

Column Name	Data Type	Description
GRANTOR	VARCHAR(128)	Authorization ID of the user who granted the privilege. Could also be PUBLIC or PUBLIC followed by an asterisk.
GRANTEE	VARCHAR(128)	Authorization ID of the user who holds the privileges, the name of a plan that uses the privileges or PUBLIC for a grant to PUBLIC.
LOCATION	VARCHAR(128)	Always contains blanks.
COLLID	VARCHAR(128)	Collection name for the package or packages on which the privilege was granted.
NAME	VARCHAR(128)	Name of the package on which the privileges are held. An asterisk (*) if the privileges are held on all packages in a collection.
TIMESTAMP	TIMESTAMP	Timestamp indicating when the privilege was granted.
GRANTEETYPE	CHAR(1)	Type of grantee: blank An authorization ID L Role P An application plan
AUTHHOWGOT	CHAR(1)	Authorization level of the user from whom the privileges were received. This authorization level is not necessarily the highest authorization level of the grantor. blank Not applicable A PACKADM (on collection *) C DBCTL D DBADM L SYSCTRL M DBMAINT P PACKADM (on a specific collection) S SYSADM
BINDAUTH	CHAR(1)	Whether GRANTEE can use the BIND and REBIND subcommands against the package:

Column Name	Data Type	Description
		blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
COPYAUTH	CHAR(1)	Whether GRANTEE can COPY the package: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
EXECUTEAUTH	CHAR(1)	Whether GRANTEE can execute the package: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
GRANTORTYPE	CHAR(1)	Indicates the type of grantor: blank Authorization ID L Role

SYSIBM.SYSPACKDEP

Records the dependencies of packages on local tables, views, synonyms, tablespaces, indexes, aliases, functions, and stored procedures.

Column Name	Data Type	Description
BNAME	VARCHAR(128)	The name of an object that a package depends on.
BQUALIFIER	VARCHAR(128)	The value of the column depends on the type of object: <ul style="list-style-type: none"> If BNAME identifies a table space (BTYPE is R), the value is the name of its database. If BNAME identifies user-defined function, a cast function, a stored procedure, or a sequence (BTYPE is F, O, or Q), the value is the schema name. If BNAME identifies a role, the value is blank. Otherwise, the value is the schema of BNAME.
BTYPE	CHAR(1)	Type of object identified by BNAME and BQUALIFIER: A Alias E INSTEAD OF trigger F User-defined function or cast function G Global temporary table I Index M Materialized query table O Stored procedure P Partitioned tablespace Q Sequence object R Tablespace S Synonym T Table V View
DLOCATION	VARCHAR(128)	Always contains blanks
DCOLLID	VARCHAR(128)	Name of the package collection.
DNAME	VARCHAR(128)	Name of the package.
DCONTOKEN	CHAR(8)	Consistency token for the package. This is either: o The "level" as specified by the LEVEL option when the package's program was precompiled

Column Name	Data Type	Description
		o The timestamp indicating when the package's program was precompiled, in an internal format.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
DOWNER	VARCHAR(128)	Owner of the package.
DTYPE	CHAR(1)	Type of package: T Trigger package N Native SQL routine package blank Not a trigger package
DOWNERTYPE	CHAR(1)	Indicates the type of owner of the package: blank Authorization ID L Role

SYSIBM.SYSPACKLIST

Contains one or more rows for every local application plan bound with a package list. Each row represents a unique entry in the plan's package list.

Column Name	Data Type	Description
PLANNAME	VARCHAR(24)	Name of the application plan.
SEQNO	SMALLINT	Sequence number of the entry in the package list.
LOCATION	VARCHAR(128)	Location of the package. Blank if this is local. An asterisk (*) indicates location to be determined at run time.
COLLID	VARCHAR(128)	Collection name for the package. An asterisk (*) indicates that the collection name is determined at run time.
NAME	VARCHAR(128)	Name of the package. An asterisk (*) indicates an entire collection.
TIMESTAMP	TIMESTAMP	Timestamp indicating when the row was created.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes

SYSIBM.SYSPACKSTMT

Contains one or more rows for each statement in a package.

Column Name	Data Type	Description
LOCATION	VARCHAR(128)	Always contains blanks
COLLID	VARCHAR(128)	Name of the package collection.
NAME	VARCHAR(128)	Name of the package.
CONTOKEN	CHAR(8)	Consistency token for the package. This is either: o The "level" as specified by the LEVEL option when the package's program was precompiled o The timestamp indicating when the package's program was precompiled, in an internal format
SEQNO	INTEGER	Sequence number of the row with respect to a statement in the package. The numbering starts with 0.
STMTNO	SMALLINT	The statement number of the statement in the source program. A statement number greater than 32767 is displayed as zero or a or a negative number (see STMTNOI for the statement number).
SECTNO	SMALLINT	The section number of the statement.
BINDERROR	CHAR(1)	Whether an SQL error was detected at bind time: N No Y Yes

Column Name	Data Type	Description
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
VERSION	VARCHAR(122)	Version identifier for the package.
STMT	VARCHAR(3500)	All or a portion of the text for the SQL statement that the row represents.
ISOLATION	CHAR(1)	Isolation level for the SQL statement: R RR (repeatable read) T RS (read stability) S CS (cursor stability) U UR (uncommitted read) L KEEP UPDATE LOCKS for an RS isolation X KEEP UPDATE LOCKS for an RR isolation blank The WITH clause was not specified on this statement. The isolation level is recorded in SYSPACKAGE.ISOLATION and in SYSPPLAN.ISOLATION.
STATUS	CHAR(1)	Status of binding the statement: A Distributed - statement uses DB2 private protocol access. The statement will be parsed and executed at the server using defaults for input variables during access path selection. B Distributed - statement uses DB2 private protocol access. The statement will be parsed and executed at the server using values for input variables during access path selection. C Compiled - statement was bound successfully using defaults for input variables during access path selection. E Explain - statement is an SQL EXPLAIN statement. The explain is done at bind time using defaults for input variables during access path selection. F Parsed - statement did not bind successfully and VALIDATE(RUN) was used. The statement will be rebound at execution time using values for input variables during access path selection. G Compiled - statement bound successfully, but REOPT is specified. The statement will be rebound at execution time using values for input variables during access path selection. H Parsed - statement is either a data definition statement or a statement that did not bind successfully and VALIDATE(RUN) was used. The statement will be rebound at execution time using defaults for input variables during access path selection. Data manipulation statements use defaults for input variables during access path selection. I Indefinite - statement is dynamic. The statement will be bound at execution time using defaults for input variables during access path selection. J Indefinite - statement is dynamic. The statement will be bound at execution time using values for input variables during access path selection. K Control - CALL statement. L Bad - the statement has some allowable error. The bind

Column Name	Data Type	Description
		continues but the statement cannot be executed. blank The statement is non-executable, or was bound in a DB2 release prior to Version 5.
ACCESSPATH	CHAR(1)	For static statements, indicates if the access path for the statement is based on user-specified optimization hints. A value of 'H' indicates that optimization hints were used. A blank value indicates that the access path was determined without the use of optimization hints, or that there is no access path associated with the statement. For dynamic statements, the value is blank.
STMTNOI	INTEGER	The statement number of the statement in the source program.
SECTNOI	INTEGER	The section number of the statement.
EXPLAINABLE	CHAR(1)	Contains one of the following values: Y Indicates that the SQL statement can be used with the EXPLAIN function and may have rows describing its access path in the userid.PLAN_TABLE. N Indicates that the SQL statement does not have any rows describing its access path in the userid.PLAN_TABLE Blank Indicates that the SQL statement was bound prior to V7.
QUERYNO	INTEGER	The query number of the SQL statement in the source program. SQL statements bound prior to V7 have a default value of -1. Statements bound V7 or later used the value specified on the QUERYNO clause on SELECT, UPDATE, INSERT, DELETE, EXPLAIN, and DECLARE CURSOR or REFRESH TABLE statements. If the QUERYNO clause is not specified, the query number is set to the statement number.

SYSIBM.SYSPARMS

Contains a row for each parameter of a routine or multiple rows for table parameters (one for each column of the table).

Column Name	Data Type	Description
SCHEMA	VARCHAR(128)	Schema of the routine.
OWNER	VARCHAR(128)	Owner of the routine.
NAME	VARCHAR(128)	Name of the routine.
SPECIFICNAME	VARCHAR(128)	Specific name of the routine.
ROUTINETYPE	CHAR(1)	Type of routine: F User-defined function or cast function P Stored procedure
CAST_FUNCTION	CHAR(1)	Whether the routine is a cast function: N Not a cast function Y A cast function The only way to get a value of Y is if a user creates a distinct type when DB2 implicitly generates cast functions for the distinct type.
PARMNAME	VARCHAR(128)	Name of the parameter. For a table parameter, the parameter name in the row corresponding to the first column of the table is the parameter name specified on CREATE; an empty string or blanks are stored for the parameter name for the rows corresponding to the remaining columns.
ROUTINEID	INTEGER	Internal identifier of the routine.
ROWTYPE	CHAR(1)	The following values indicate the type of parameter described by this row:

Column Name	Data Type	Description
		<p>P Input parameter.</p> <p>O Output parameter; not applicable for functions</p> <p>B Both an input and an output parameter; not applicable for functions</p> <p>R Result before casting; not applicable for stored procedures</p> <p>C Result after casting; not applicable for stored procedures</p> <p>S Input parameter of the underlying built-in source function.</p> <p>For a sourced function and a given ORDINAL value:</p> <ul style="list-style-type: none"> The row with ROWTYPE = P describes the input parameter of the user-defined function (identified by ROUTINEID). The row with ROWTYPE = S describes the corresponding input parameter of the built-in function that is the underlying source function (identified by the SOURCESHEMA and SOURCESPECIFIC values). <p>A value of 'X' indicates that the row is not used to describe a particular parameter of the routine. Instead, for a routine that was created prior to Version 9, the row is used to record a CCSID for the encoding scheme specified in a PARAMETER CCSID clause, or a DATATYPEID for the representation of the variable length character string parameters of a LANGUAGE C routine, as specified in a PARAMETER VARCHAR clause. For routines created with Version 8 (new function mode) or later releases, the CCSID is recorded in the PARAMETER_CCSID column of SYSROUTINES. For routines created with Version 9 or later releases, the DATATYPEID information to support PARAMETER VARCHAR is recorded in the PARAMETER_VARCHARFORM column of SYSIBM.SYSROUTINES.</p>
ORDINAL	SMALLINT	If ROWTYPE is B, O, P, or S, the ordinal number of the parameter within the routine signature. If ROWTYPE is C or R, the value is 0. When the ROWTYPE is X, because a PARAMETER CCSID is specified for functions or procedures created prior to V8, the ORDINAL value is 0.
TYPESHEMA	CHAR(8)	Schema of the data type of the parameter.
TYPENAME	CHAR(18)	Name of the data type of the parameter.
DATATYPEID	INTEGER	For a built-in data type, the internal ID of the built-in type. For a distinct type, the internal ID of the distinct type.
SOURCETYPEID	INTEGER	For a built-in data type, 0. For a distinct type, the internal ID of the built-in data type upon which the distinct type is sourced.
LOCATOR	CHAR(1)	Indicates whether a locator to a value, instead of the actual value, is to be passed as the input value when the routine is called: N The actual value is to be passed. Y A locator to a value is to be passed
TABLE	CHAR(1)	The data type of a column for a table parameter: N This is not a table parameter. Y This is a table parameter.

Column Name	Data Type	Description
TABLE_COLNO	SMALLINT	For table parameters, the column number of the table. Otherwise, the value is 0.
LENGTH	INTEGER	Length attribute of the parameter, or in the case of a decimal parameter, its precision.
SCALE	SMALLINT	Scale of the data type of the parameter.
SUBTYPE	CHAR(1)	If the data type is a distinct type, the subtype of the distinct type, which is based on the subtype of its source type: B The subtype is FOR BIT DATA. S The subtype is FOR SBCS DATA. M The subtype is FOR MIXED DATA. blank The source type is not a character type.
CCSID	INTEGER	CCSID of the data type for character, graphic, date, time, and timestamp data types. When the ROWTYPE is X and ORDINAL is 0, the CCSID column is the CCSID for all character and graphic string parameters.
CAST_FUNCTION_ID	INTEGER	Internal function ID of the function used to cast the argument, if this function is sourced on another function, or result. Otherwise, the value is 0. Not applicable for stored procedures.
ENCODING_SCHEME	CHAR(1)	Encoding scheme of the parameter: A ASCII E EBCDIC U UNICODE blank The source type is not a character type.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N No Y Yes
VERSION	VARCHAR(122)	The version identifier for the routine. The column is a zero-length string if the value of ORIGIN is not 'I' or if the rows were created prior to Version 9.
OWNERTYPE	CHAR(1)	Indicates the type of owner: blank Authorization ID L Role

SYSIBM.SYSPKSYSTEM

Contains zero or more rows for every package. Each row for a given package represents one or more connections to an environment in which the package could be executed.

Column Name	Data Type	Description
LOCATION	VARCHAR(128)	Always contains blanks.
COLLID	VARCHAR(128)	Name of the package collection.
NAME	VARCHAR(128)	Name of the package.
CONTOKEN	CHAR(8)	Consistency token for the package. This is either: o The "level" as specified by the LEVEL option when the package's program was precompiled o The timestamp indicating when the package's program was precompiled, in an internal format.
SYSTEM	VARCHAR(24)	Environment. Values can be: BATCH TSO batch CICS Customer Information Control System DB2CALL DB2 call attachment facility

Column Name	Data Type	Description
		DLIBATCH DLI batch support facility IMSBMP IMS BMP region IMSMPP IMS MPP and IFP region REMOTE remote application server
ENABLE	CHAR(1)	Indicates whether the connections represented by the row are enabled or disabled: N Disabled Y Enabled
CNAME	VARCHAR(60)	Identifies the connection or connections to which the row applies. Interpretation depends on the environment specified by SYSTEM. Values can be: <ul style="list-style-type: none"> o Blank if SYSTEM=BATCH or SYSTEM=DB2CALL o The LU name for an application server if SYSTEM=REMOTE o Either the requester's location (if the product is DB2) or the requester's LU name enclosed in angle brackets if SYSTEM=REMOTE. o The name of a single connection if SYSTEM has any other value. CNAME can also be blank when SYSTEM is not equal to BATCH or DB2CALL. When this is so, the row applies to all servers or connections for the indicated environment.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes

SYSIBM.SYSPLAN

Contains one row for each application plan.

Column Name	Data Type	Description
NAME	VARCHAR(24)	Name of the application plan.
CREATOR	VARCHAR(128)	Authorization ID of the owner of the application plan.
BINDDATE	CHAR(6)	Date on which the plan was last bound, in the form <i>yyymmdd</i> .
VALIDATE	CHAR(1)	Whether validity checking can be deferred until run time: B All checking must be performed during BIND. R Validation is done at run time for tables, views, and privileges that do not exist at bind time.
ISOLATION	CHAR(1)	Isolation level for the plan: R RR (repeatable read) T RS (read stability) S CS (cursor stability) U UR (uncommitted read)

Column Name	Data Type	Description
VALID	CHAR(1)	Whether the application plan is valid: A The ALTER TABLE statement changed the description of the table or base table of a view that is referred to by the application plan. For a CREATE INDEX statement involving data sharing, VALID is also marked as 'A'. The change does not invalidate the application plan. H The ALTER TABLE statement changed the description of the table or base table of a view that is referred to by the application plan. For releases of DB2 prior to Version 5, the change invalidates the application plan. N No Y Yes
OPERATIVE	CHAR(1)	Whether the application plan can be allocated: N No; an explicit BIND or REBIND is required before the plan can be allocated Y Yes
BINDTIME	CHAR(8)	Time of the BIND in the form <i>hhmmssstth</i> .
PLSIZE	INTEGER	Size of the base section of the plan, in bytes.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
AVGSIZE	INTEGER	Average size, in bytes, of those sections of the plan that contain SQL statements processed at bind time.
ACQUIRE	CHAR(1)	When resources are acquired: A At allocation U At first use
RELEASE	CHAR(1)	When resources are released: C At commit D At deallocation
EXPLAN	CHAR(1)	EXPLAIN option specified for the plan; that is, whether information on the plan's statements was added to the owner's PLAN_TABLE table: N No Y Yes
EXPREDICATE	CHAR(1)	Indicates the CURRENTDATA option when the plan was bound or rebound: B Data currency is not required for ambiguous cursors. Allow blocking for ambiguous cursors. C Data currency is required for ambiguous cursors. Inhibit blocking for ambiguous cursors. N Blocking is inhibited for ambiguous cursors, but the plan was created before the CURRENTDATA option was available.
BOUND BY	VARCHAR(128)	Primary authorization ID of the binder of the plan.
QUALIFIER	VARCHAR(128)	Implicit qualifier for the unqualified table, view, index, and alias names in the static SQL statements of the plan.
CACHESIZE	SMALLINT	Size, in bytes, of the cache to be acquired for the plan. A value of zero indicates that no cache is used.
PLENTRIES	SMALLINT	Number of package list entries for the plan. The negative of that number if there are rows for the plan in SYSIBM.SYPACKLIST but the plan was bound in a prior release after fall back.

Column Name	Data Type	Description
DEFERPREP	CHAR(1)	Whether the package was last bound with the DEFER(PREPARE) option: N No Y Yes
CURRENTSERVER	VARCHAR(128)	Location name specified with the CURRENTSERVER option when the plan was last bound. Blank if none was specified, implying that the first server is the local DB2 subsystem.
SYSENTRIES	SMALLINT	Number of rows associated with the plan in SYSIBM.SYSPLSYSTEM. The negative of that number if such rows exist but the plan was bound in a prior release after fall back. A negative value or zero means that all connections are enabled.
DEGREE	CHAR(3)	The DEGREE option used when the plan was last bound: ANY DEGREE(ANY) 1 or blank DEGREE(1). Blank if the plan was migrated.
SQLRULES	CHAR(1)	The SQLRULES option used when the plan was last bound: D or blank SQLRULES(DB2) S SQLRULES(STD) blank A migrated plan
DISCONNECT	CHAR(1)	The DISCONNECT option used when the plan was last bound: E or blank DISCONNECT (EXPLICIT) A DISCONNECT (AUTOMATIC) C DISCONNECT (CONDITIONAL) blank A migrated plan
GROUP_MEMBER	VARCHAR(24)	The DB2 data-sharing member name of the DB2 subsystem that performed the most recent bind. This column is blank if the DB2 subsystem was not in a DB2 data-sharing environment when the bind was performed.
DYNAMICRULES	CHAR(1)	The DYNAMICRULES option used when the plan was last bound: B BIND. Dynamic SQL statements are executed with DYNAMICRULES bind behavior. blank RUN. Dynamic SQL statements in the plan are executed with DYNAMICRULES run behavior.
BOUNDTS	TIMESTAMP	Time when the plan was bound.
REOPTVAR	CHAR(1)	Whether the access path is determined again at execution time using input variable values: A Bind option REOPT(AUTO) indicates that the access path is determined multiple times at execution time depending on the parameter value. N Bind option REOPT(NONE) indicates that the access path is determined at bind time. Y Bind option REOPT(ALWAYS) indicates that the access path is determined at execution time for SQL statements with variable values. 1 Bind option REOPT(ONCE) indicates that the access path is determined only once at execution time, using the first set of input variable values, regardless of how many times the same statement is executed.

Column Name	Data Type	Description
KEEPDYNAMIC	CHAR(1)	Whether prepared dynamic statements are to be purged at each commit point: N The bind option is KEEPDYNAMIC(NO). Prepared dynamic SQL statements are destroyed at commit or rollback. Y The bind option is KEEPDYNAMIC(YES). Prepared dynamic SQL statements are kept past commit or rollback.
PATHSCHEMAS	VARCHAR(254)	SQL path specified on the BIND or REBIND command that bound the plan. The path is used to resolve unqualified data type, function, and stored procedure names used in certain contexts. If the PATH bind option was not specified, the value in the column is a zero length string; however, DB2 uses a default SQL path of: SYSIBM, SYSFUN, SYSPROC, <i>plan qualifier</i> .
DBPROTOCOL	CHAR(1)	Whether remote access for SQL with three-part names is implemented with DRDA or DB2 private protocol access: D DRDA P DB2 private protocol
FUNCTIONTS	TIMESTAMP	Timestamp when the function was resolved. Set by the BIND and REBIND commands, but not by AUTOBIND.
OPTHINT	CHAR(8)	Value of the OPTHINT bind option. Identifies rows in the authid.PLAN_TABLE to be used as input to the optimizer. Contains blanks if no rows in the authid.PLAN_TABLE are to be used as input.
ENCODING_CCSID	INTEGER	The CCSID corresponding to the encoding scheme or CCSID as specified for the bind option ENCODING. The encoding scheme specified on the bind command: CCSID The specified or derived CCSID 0 The EBCDIC default CCSID as specified on panel DSNTIPF at installation time.
IMMEDWRITE	CHAR(1)	Indicates when writes of updated group bufferpool dependent pages are to be done. This option is only applicable for data-sharing environments. N Bind option IMMEDIATEWRITE(NO) indicates normal write activity is done. Y Bind option IMMEDIATEWRITE(YES) indicates that immediate writes are done for updated group buffer pool dependent pages. 1 Bind option IMMEDIATEWRITE(PH1) indicates that updated group bufferpool dependent pages are written at or before phase 1 commit.
RELBOUND	CHAR(1)	The release when the package was bound or rebound. blank Bound prior to V7 K Bound on V7
REMARKS	VARCHAR(128)	A character string provided by the user with the COMMENT statement.
CREATORTYPE	CHAR(1)	Indicates the type of creator: blank Authorization ID L Role

Column Name	Data Type	Description
ROUNDING	CHAR(1)	The ROUNDING option used when the plan was last bound: C ROUND_CEILING D ROUND_DOWN F ROUND_FLOOR G ROUND_HALF_DOWN E ROUND_HALF_EVEN H ROUND_HALF_UP U ROUND_UP blank The plan was created in a DB2 release prior to Version 9.

SYSIBM.SYSPLANAUTH

Records the privileges that are held by users over application plans.

Column Name	Data Type	Description
GRANTOR	VARCHAR(128)	Authorization ID of the user who granted the privileges.
GRANTEE	VARCHAR(128)	Authorization ID of the user who holds the privileges. Could also be PUBLIC for a grant to PUBLIC.
NAME	VARCHAR(24)	Name of the application plan on which the privileges are held.
DATEGRANTED	CHAR(6)	Date the privileges were granted; in the form <i>yymmdd</i> .
TIMEGRANTED	CHAR(8)	Time the privileges were granted; in the form <i>hhmmssst</i> .
AUTHHOWGOT	CHAR(1)	Authorization level of the user from whom the privileges were received. This authorization level is not necessarily the highest authorization level of the grantor. blank Not applicable C DBCTL D DBADM L SYSCTRL M DBMAINT S SYSADM
BINDAUTH	CHAR(1)	Whether the GRANTEE can use the BIND, REBIND, or FREE subcommands against the plan: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
EXECUTEAUTH	CHAR(1)	Whether the GRANTEE can run application programs that use the application plan: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
GRANTEDTS	TIMESTAMP	Time when the GRANT statement was executed.
GRANTEETYPE	CHAR(1)	Indicates the type of grantee: blank Authorization ID L Role
GRANTORTYPE	CHAR(1)	Indicates the type of grantor: blank Authorization ID L Role

SYSIBM.SYSPLANDEP

Records the dependencies of plans on tables, views, aliases, synonyms, tablespaces, indexes, functions, and stored procedures.

Column Name	Data Type	Description
BNAME	VARCHAR(128)	The name of an object the plan depends on.
BCREATOR	VARCHAR(128)	If BNAME is a table space, its database. Otherwise, the schema of BNAME. If BNAME is a role, the value is blank.
BTYPE	CHAR(1)	Type of object identified by BNAME: A Alias E INSTEAD OF trigger F User-defined function or cast function I Index L Role M Materialized query table O Stored procedure P Partitioned tablespace Q Sequence object R Tablespace S Synonym T Table V View
DNAME	VARCHAR(24)	Name of the plan.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes

SYSIBM.SYSPLSYSTEM

Contains zero or more rows for every plan. Each row for a given plan represents one or more connections to an environment in which the plan could be used.

Column Name	Data Type	Description
NAME	VARCHAR(24)	Name of the plan.
SYSTEM	VARCHAR(24)	Environment. Values can be: BATCH TSO batch DB2CALL DB2 call attachment facility CICS Customer Information Control System DLIBATCH DLI batch support facility IMSBMP IMS BMP region IMSMPP IMS MPP or IFP region
ENABLE	CHAR(1)	Indicates whether the connections represented by the row are enabled or disabled: N Disabled Y Enabled
CNAME	VARCHAR(60)	Identifies the connection or connections to which the row applies. Interpretation depends on the environment specified by SYSTEM. Values can be: o Blank if SYSTEM=BATCH or SYSTEM=DB2CALL o The name of a single connection if SYSTEM has any other value CNAME can also be blank when SYSTEM is not equal to BATCH or DB2CALL. When this is so, the row applies to all connections for the indicated environment.

Column Name	Data Type	Description
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape N=No, Y=Yes

SYSIBM.SYSRELS

Contains one row for every referential constraint.

Column Name	Data Type	Description
CREATOR	VARCHAR(128)	Schema of the owner of the dependent table of the referential constraint.
TBNAME	VARCHAR(128)	Name of the dependent table of the referential constraint.
RELNAME	VARCHAR(128)	Constraint name.
REFTBNAME	VARCHAR(128)	Name of the parent table of the referential constraint.
REFTBCREATOR	VARCHAR(128)	Schema of the owner of the parent table.
COLCOUNT	SMALLINT	Number of columns in the foreign key.
DELETERULE	CHAR(1)	Type of delete rule for the referential constraint: A NO ACTION C CASCADE N SET NULL R RESTRICT
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
RELOBID1	SMALLINT	Internal identifier of the constraint with respect to the database that contains the parent table.
RELOBID2	SMALLINT	Internal identifier of the constraint with respect to the database that contains the dependent table.
TIMESTAMP	TIMESTAMP	Date and time the constraint was defined. If the constraint is between catalog tables prior to DB2 Version 2 Release 3, the value is '1985-04-01-00.00.00.000000.'.
IXOWNER	VARCHAR(128)	Schema of unique non-primary index used for the parent key. '99999999' if the enforcing index has been dropped. Blank if the enforcing index is a primary index.
IXNAME	VARCHAR(128)	Name of unique non-primary index used for a parent key. '99999999' if the enforcing index has been dropped. Blank if the enforcing index is a primary index.
ENFORCED	CHAR(1)	Enforced by the system or not: Y Enforced by the system N Not enforced by the system(trusted)
CHECKEXISTING DATA	CHAR(1)	Option for checking existing data I Immediately check existing data. If ENFORCED = Y this column will have a value of 'I' N Never check existing data. If ENFORCED = N, this column will have a value of N
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object.

SYSIBM.SYSRESAUTH

Records CREATE IN and PACKADM ON privileges for collections; USAGE privileges for distinct types; and USE privileges for buffer pools, storage groups, and tablespaces.

Column Name	Data Type	Description
GRANTOR	VARCHAR(128)	Authorization ID of the user who granted the privilege.

Column Name	Data Type	Description
GRANTEE	VARCHAR(128)	Authorization ID of the user who holds the privilege. Could also be PUBLIC for a grant to PUBLIC.
QUALIFIER	VARCHAR(128)	Qualifier of the tablespace (the database name) if the privilege is for a tablespace (OBTYP='R'). The schema name of the distinct type if the privilege is for a distinct type (OBTYP='D'). Otherwise, the value is blank.
NAME	VARCHAR(128)	Name of the buffer pool, collection, DB2 storage group, distinct type, or tablespace. Could also be ALL when USE OF ALL BUFFERPOOLS is granted.
AUTHHOWGOT	CHAR(1)	Authorization level of the user from whom the privileges were received. This authorization level is not necessarily the highest authorization level of the grantor. blank Not applicable C DBCTL D DBADM L SYSCTRL M DBMAINT S SYSADM P PACKADM (on a specific collection) A PACKADM (on collection *)
OBTYP	CHAR(1)	Type of object: B Buffer pool C Collection D Distinct type R Tablespace S Storage group J JAR (Java Archive file)
DATEGRANTED	CHAR(6)	Date the privilege was granted; in the form <i>yyymmdd</i> .
TIMEGRANTED	CHAR(8)	Time the privilege was granted; in the form <i>hhmmssst</i> .
USEAUTH	CHAR(1)	Whether the privilege is held with the GRANT option: G Privilege is held with the GRANT option Y Privilege is held without the GRANT option The authority held is PACKADM when the OBTYP is C (a collection) and QUALIFIER is PACKADM. The authority held is CREATE IN when the OBTYP is C and QUALIFIER is blank.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
GRANTEDTS	TIMESTAMP	Time when the GRANT statement was executed.
GRANTEETYPE	CHAR(1)	Indicates the type of grantee: blank Authorization ID L Role
GRANTORTYPE	CHAR(1)	Indicates the type of grantor: blank Authorization ID L Role

SYSIBM.SYSROLES

Contains one row for each role.

Column Name	Data Type	Description
NAME	VARCHAR(128)	The name of the role.
DEFINER	VARCHAR(128)	The authorization ID or role that defined this role listed in the

		NAME column.
DEFINERTYPE	CHAR(1)	The type of definer: L Role blank Authorization ID
CREATEDTS	TIMESTAMP	The time when the role is created.
RELCREATED	CHAR(1)	The release of DB2 that is used to create the role.
REMARKS	VARCHAR(762)	A character string that is provided using the COMMENT statement.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.

SYSIBM.SYSROUTINEAUTH

Records the privileges that are held by users on routines. (A routine can be a user-defined function, cast function, or stored procedure.)

Column Name	Data Type	Description
GRANTOR	VARCHAR(128)	Authorization ID of the user who granted the privilege.
GRANTEE	VARCHAR(128)	Authorization ID of the user who holds the privilege or the name of a plan or package that uses the privilege. Can also be PUBLIC for a grant to PUBLIC.
SCHEMA	VARCHAR(128)	Schema of the routine.
SPECIFICNAME	VARCHAR(128)	Specific name of the routine. An asterisk (*) if the privilege is held on all routines in the schema.
GRANTEDTS	TIMESTAMP	Time when the GRANT statement was executed.
ROUTINETYPE	CHAR(1)	Type of routine: F User-defined function or cast function P Stored procedure
GRANTEETYPE	CHAR(1)	Type of grantee: blank An authorization ID L Role P An application plan or package. The grantee is a package if COLLID is not blank. R Internal use only
AUTHHOWGOT	CHAR(1)	Authorization level of the user from whom the privileges were received. This authorization level is not necessarily the highest authorization level of the grantor. This field is also used to indicate that the privilege was held on all schemas by the grantor. blank Not applicable 1 Grantor had privilege on schema.* at time of grant L SYSCTRL S SYSADM
EXECUTEAUTH	CHAR(1)	Whether GRANTEE can execute the routine: Y Privilege is held without GRANT option. G Privilege is held with GRANT option.
COLLID	VARCHAR(128)	If the GRANTEE is a package, its collection name. Otherwise, the value is blank.
CONTOKEN	CHAR(8)	If the GRANTEE is a package, the consistency token of the DBRM from which the package was derived. Otherwise, the value is blank.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material

Column Name	Data Type	Description
		(MRM) tape.
GRANTORTYPE	CHAR(1)	Indicates the type of grantor: blank Authorization ID L Role

SYSIBM.SYSROUTINES

Contains a row for every routine. (A routine can be a user-defined function, cast function, or stored procedure.)

Column Name	Data Type	Description
SCHEMA	VARCHAR(128)	Schema of the routine.
OWNER	VARCHAR(128)	Owner of the routine.
NAME	VARCHAR(128)	Name of the routine.
ROUTINETYPE	CHAR(1)	Type of routine: F User-defined function or cast function P Stored procedure
CREATEDBY	VARCHAR(128)	Primary authorization ID under which the routine was created.
SPECIFICNAME	VARCHAR(128)	Specific name of the routine.
ROUTINEID	INTEGER	Internal identifier of the routine.
RETURN_TYPE	INTEGER	Internal identifier of the result data type of the function. The column contains a -2 if the function is a table function.
ORIGIN	CHAR(1)	Origin of the routine: E External user-defined function or stored procedure N Native SQL Procedure Q SQL Function U Sourced on user-defined function or built-in function S System-generated function
FUNCTION_TYPE	CHAR(1)	Type of function: C Column function S Scalar function T Table function blank For a stored procedure (ROUTINETYPE = 'P')
PARAM_COUNT	SMALLINT	Number of parameters for the routine.
LANGUAGE	VARCHAR(24)	Implementation language of the routine: ASSEMBLE C COBOL COMPJAVA JAVA PLI REXX SQL blank ORIGIN is not 'E'.
COLLID	VARCHAR(128)	Name of the package collection to be used when the routine is executed. A blank value indicates the package collection is the same as the package collection of the program that invoked the routine.

Column Name	Data Type	Description
SOURCESCHEMA	VARCHAR(128)	If ORIGIN is 'U' and ROUTINETYPE is 'F', the schema of the source user-defined function ('SYSIBM' for a source built-in function). Otherwise, the value is blank.
SOURCESPECIFIC	VARCHAR(128)	If ORIGIN is 'U' and ROUTINETYPE is 'F', the specific name of the source user-defined function or source built-in function name. Otherwise, the value is blank.
DETERMINISTIC	CHAR(1)	The deterministic option of an external function or a stored procedure: N Indeterminate (results may differ with a given set of input values). Y Deterministic (results are consistent). blank ROUTINETYPE='F' and ORIGIN is not 'E' (the routine is a function, but not an external function).
EXTERNAL_ACTION	CHAR(1)	The external action option of an external function: N Function has no side effects. E Function has external side effects so that the number of invocations is important. blank ORIGIN is not 'E' for the function (ROUTINETYPE='F'), or it is a stored procedure (ROUTINETYPE='P').
NULL_CALL	CHAR(1)	The CALLED ON INPUT option of an external function or stored procedure: N The routine is not called if any parameter has a NULL value. Y The routine is called if any parameter has a NULL value. blank ROUTINETYPE='F' and ORIGIN is not 'E' (the routine is a function, but not an external function).
CAST_FUNCTION	CHAR(1)	Whether the routine is a cast function: N The routine is not a cast function. Y The routine is a cast function. A cast function is generated by DB2 for a CREATE DISTINCT TYPE statement.
SCRATCHPAD	CHAR(1)	The SCRATCHPAD option of an external function: N This function does not have a SCRATCHPAD. Y This function has a SCRATCHPAD. blank ORIGIN is not 'E' for the function (ROUTINETYPE='F'), or it is a stored procedure (ROUTINETYPE='P').
SCRATCHPAD_LENGTH	INTEGER	Length of the scratchpad if the ORIGIN is 'E' for the function (ROUTINETYPE='F') and NO SCRATCHPAD is not specified. Otherwise, the value is 0.
FINAL_CALL	CHAR(1)	The FINAL CALL option of an external function: N A final call will not be made to the function. Y A final call will be made to the function. blank ORIGIN is not 'E' for the function (ROUTINETYPE='F'), or it is a stored procedure (ROUTINETYPE='P').

Column Name	Data Type	Description
PARALLEL	CHAR(1)	The PARALLEL option of an external function: A This function can be invoked by parallel tasks. D This function cannot be invoked by parallel tasks. blank ORIGIN is not 'E' for the function (ROUTINETYPE='F'), or it is a stored procedure (ROUTINETYPE='P').
PARAMETER_STYLE	CHAR(1)	The PARAMETER STYLE option of an external function or stored procedure: D DB2SQL. All parameters are passed to the external function or stored procedure according to the DB2SQL standard convention. G GENERAL. All parameters are passed to the stored procedure according to the GENERAL standard convention. N GENERAL CALL WITH NULLS. All parameters are passed to the stored procedure according to the GENERAL CALL WITH NULLS convention.
FENCED	CHAR(1)	Y Indicates that this routine runs separately from the DB2 address space in a WLM managed DB2 address space. All user defined routines that are not marked with Y in this column run in the DB2 address space. blank ORIGIN is 'Q' or ORIGIN is 'N'.
SQL_DATA_ACCESS	CHAR(1)	The SQL statements that are allowed in an external function or stored procedure: C CONTAINS SQL: Only SQL that does not read or modify data is allowed. M MODIFIES SQL DATA: All SQL is allowed, including SQL that reads or modifies data. N NO SQL: SQL is not allowed. R READS SQL DATA: Only SQL that reads data is allowed. blank Not applicable.
DBINFO	CHAR(1)	The DBINFO option of an external function or stored procedure: N No, the DBINFO parameter will not be passed to the external function or stored procedure. Y Yes, the DBINFO parameter will be passed to the external function or stored procedure.
STAYRESIDENT	CHAR(1)	The STAYRESIDENT option of the routine, which determines whether the routine is to be deleted from memory when the routine ends. N The load module is to be deleted from memory after the routine terminates. Y The load module is to remain resident in memory after the routine terminates. blank ORIGIN is not 'E'.

Column Name	Data Type	Description
ASUTIME	INTEGER	Number of CPU service units permitted for any single invocation of this routine. If ASUTIME is zero, the number of CPU service units is unlimited. If a routine consumes more CPU service units than the ASUTIME value allows, DB2 cancels the routine.
WLM_ENVIRONMENT	VARCHAR(54)	<p>Name of the WLM environment to be used to run this routine.</p> <p>When ORIGIN = 'N', this is the name of the WLM ENVIRONMENT FOR DEBUG MODE that is to be used when debugging a native SQL procedure.</p> <p>The column is blank if ROUTINETYPE = 'F' and ORIGIN is not 'E'. If the ROUTINETYPE = 'P', the value might be blank. If this value is blank the stored procedure cannot be run.</p>
WLM_ENV_FOR_NESTED	CHAR(1)	<p>For nested routine calls, indicates whether the address space of the calling stored procedure or user-defined function is used to run the nested stored procedure or user-defined function:</p> <p>N The nested stored procedure or user-defined function runs in an address space other than the specified WLM environment if the calling stored procedure or user-defined function is not running in the specified WLM environment. 'WLM ENVIRONMENT name' was specified.</p> <p>Y The nested stored procedure or user-defined function runs in the environment used by the calling stored procedure or user-defined function. 'WLM ENVIRONMENT(name,*)' was specified.</p> <p>blank WLM_ENVIRONMENT is blank.</p>
PROGRAM_TYPE	CHAR(1)	<p>Indicates whether the routine runs as a Language Environment main routine or a subroutine:</p> <p>M The routine runs as a main routine.</p> <p>S The routine runs as a subroutine.</p> <p>blank ORIGIN is not 'E'.</p>
EXTERNAL_SECURITY	CHAR(1)	<p>Specifies the authorization ID to be used if the routine accesses resources protected by an external security product:</p> <p>D DB2 - The authorization ID associated with the WLM-established stored procedure address space.</p> <p>U SESSSION_USER - The authorization ID of the SQL user that invoked the routine.</p> <p>C DEFINER - The authorization ID of the owner of the routine.</p> <p>blank ORIGIN is not 'E'.</p>

Column Name	Data Type	Description
COMMIT_ON_RETURN	CHAR(1)	If ROUTINETYPE = 'P', whether the transaction is always to be committed immediately on successful return (non-negative SQLCODE) from this stored procedure: N The unit of work is to continue. Y The unit of work is to be committed immediately. If ROUTINETYPE = 'F', the value is blank.
RESULT_SETS	SMALLINT	If ROUTINETYPE = 'P', the maximum number of ad hoc result sets that this stored procedure can return. If no ad hoc result exists or ROUTINETYPE = 'F', the value is zero.
LOBCOLUMNS	SMALLINT	If ORIGIN = 'E', the number of LOB columns found in the parameter list for this user-defined function. If no LOB columns are found in the parameter list or ORIGIN is not 'E', the value is 0.
CREATEDTS	TIMESTAMP	Time when the CREATE statement was executed for this routine.
ALTEREDTS	TIMESTAMP	Time when the last ALTER statement was executed for this routine.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
PARM1 - 30	SMALLINT	Internal use only.
IOS_PER_INVOC	FLOAT	Estimated number of I/Os required to execute the routine. The value is -1 if the estimated number is not known.
INSTS_PER_INVOC	FLOAT	Estimated number of machine instructions required to execute the routine. The value is -1 if the estimated number is not known.
INITIAL_IOS	FLOAT	Estimated number of I/Os that are performed the first time or the last time the routine is invoked. The value is -1 if the estimated number is not known.
INITIAL_INSTS	FLOAT	Estimated number of machine instructions that are performed the first time or the last time the routine is invoked. The value is -1 if the estimated number is not known.
CARDINALITY	FLOAT	The predicted cardinality of the routine. The value is -1 if the predicted cardinality is not known.
RESULT_COLS	SMALLINT	For a table function, the number of columns in the result table. Otherwise, the value is 1.
EXTERNAL_NAME	VARCHAR(762)	The path/module/function that DB2 should load to execute the routine. The column is blank if the ORIGIN is not 'E'.
PARM_SIGNATURE	VARCHAR(150)	Internal use only.
RUNOPTS	VARCHAR(762)	The Language Environment run-time options to be used for this routine. An empty string indicates that the installation default Language Environment run-time options are to be used.
REMARKS	VARCHAR(762)	A character string provided by the user with the COMMENT ON statement.
JAVA_SIGNATURE	VARCHAR(3072)	The signature of the jar file: Blank When PARAMETER STYLE is not JAVA

Column Name	Data Type	Description
CLASS	VARCHAR(384)	The class name contained in the jar file: Blank When PARAMETER STYLE is not JAVA
JARSCHEMA	VARCHAR(128)	The schema of the jar file: Blank When PARAMETER STYLE is not JAVA
JAR_ID	VARCHAR(128)	The name of the jar file: Blank When PARAMETER STYLE is not JAVA
SPECIAL_REGS	CHAR(1)	The SPECIAL REGISTER option for a routine: I INHERIT SPECIAL REGISTER D DEFAULT SPECIAL REGISTER
NUM_DEP_MQTS	SMALLINT	Number of dependent MQTs. The value is 0 if the row does not describe a user defined table function or if no MQTs are defined on the table function.
MAX_FAILURES	SMALLINT	Allowable failures for the routine.
PARAMETER_CCSID	INTEGER	A CCSID that specifies how character, graphic, data, time, and timestamp data types for system generated parameters to the routine such as message tokens and DBINFO should be passed.
VERSION	VARCHAR(122)	The version identifier for a native SQL procedure (indicated by the value 'N' in the column ORIGIN). A zero length string for the rows that are created prior to Version 9 and for the rows in which the value of ORIGIN is not 'N'.
CONTOKEN	CHAR(8)	The consistency token for the routine. The column is set to X'20' if the value of ORIGIN is not 'N'
ACTIVE	CHAR(1)	Identifies the active version of the routine: Y The routine is the active version. N The routine is not the active version. blank The value of ORIGIN is not 'N' or the row was created prior to Version 9.
DEBUG_MODE	CHAR(1)	Identifies whether or not this routine is enabled for debugging: 1 This routine is enabled for debugging and can be debugged in a client debug session using the DB2 Unified Debugger. 0 This routine is not enabled for debugging. N This routine can never be enabled for debugging. blank The LANGUAGE is not specified as JAVA, the value of ORIGIN is not 'N', or the row was created prior to Version 9.
TEXT_ENVID	INTEGER	Internal identifier of the environment. The column is 0 if the value of ORIGIN is not 'N' or if the row was created prior to Version 9.
TEXT_ROWID	ROWID	ID to support LOB columns for source text.
TEXT	CLOB(2M)	The source text of the CREATE statement or the ALTER statement with the body for the routine. The column is a zero-length string if the value of ORIGIN is not 'N' or if the row was created prior to Version 9.
OWNERTYPE	CHAR(1)	Indicates the type of owner: blank Authorization ID L Role

Column Name	Data Type	Description
PARAMETER_VARCHARFORM	INTEGER	A non-zero value that indicates the actual representation, to a LANGUAGE C routine, of any varying length string parameter that appears in the parameter list or RETURNS clause for that routine.
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object. Blank if created prior to Version 9.
PACKAGEPATH	VARCHAR(4096)	The value of the PACKAGE PATH option of the CREATE FUNCTION, CREATE PROCEDURE, ALTER FUNCTION, or ALTER PROCEDURE statement that created or last changed the routine. PACKAGE PATH identifies the package path to use when the routine is executed. A blank value indicates the package path is the same as the package path of the program that invoked the routine.

SYSIBM.SYSROUTINESTEXT

An auxiliary table for the TEXT column of SYSIBM.SYSROUTINES and is required to hold the LOB data.

Column Name	Data Type	Description
TEXT	CLOB(2M)	The source text of the CREATE PROCEDURE statement for the routine. TEXT can also hold the source text of the ALTER PROCEDURE statement for the routine if the routine is a native SQL procedure and the SQL procedure body is included in the ALTER PROCEDURE statement.

SYSIBM.SYSROUTINES_OPTS

Contains a row for each generated routine, such as one created by the DB2 Stored Procedure Builder tool, that records the build options for the routine. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
SCHEMA	VARCHAR(128)	Schema of the routine.
ROUTINENAME	VARCHAR(128)	Name of the routine.
BUILDDATE	DATE	Date the routine was built.
BUILDTIME	TIME	Time the routine was built.
BUILDSTATUS	CHAR(1)	Whether this version of the routine's source is the current version.
BUILDSHEMA	VARCHAR(128)	Schema name for BUILDNAME.
BUILDNAME	VARCHAR(128)	Procedure used to create the routine.
BUILDOWNER	VARCHAR(128)	Authorization ID used to create the routine.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.
PRECOMPILE_OPTS	VARCHAR(765)	Precompiler options used to build the routine.
COMPILE_OPTS	VARCHAR(765)	Compiler options used to build the routine.
PRELINK_OPTS	VARCHAR(765)	Prelink-edit options used to build the routine.
LINK_OPTS	VARCHAR(765)	Link-edit options used to build the routine.
BIND_OPTS	VARCHAR(3072)	Bind options used to build the routine.
SOURCEDSN	VARCHAR(765)	Name of the source data set.
DEBUG_MODE	CHAR(1)	Debugging is on or off for this objects

Column Name	Data Type	Description
		0 Debugging is off.
		1 Debugging is on.

SYSIBM.SYSROUTINES_SRC

Contains source for generated routines, such as those created by the DB2 Stored Procedure Builder tool. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
SCHEMA	VARCHAR(128)	Schema of the routine.
ROUTINENAME	VARCHAR(128)	Name of the routine.
BUILDDATE	DATE	Date the routine was built.
BUILDTIME	TIME	Time the routine was built.
BUILDSTATUS	CHAR(1)	Whether this version of the routine's source is the current version.
SEQNO	INTEGER	Number of the source statement piece in CREATESTMT.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.
CREATESTMT	VARCHAR(7500)	Routine source statement.

SYSIBM.SYSSCHEMAAUTH

Contains one or more rows for each user that is granted a privilege on a particular schema in the database.

Column Name	Data Type	Description
GRANTOR	VARCHAR(128)	Authorization ID of the user who granted the privileges or SYSADM.
GRANTEE	VARCHAR(128)	Authorization ID of the user or group that holds the privileges. Can also be PUBLIC for a grant to PUBLIC.
SCHEMANAME	VARCHAR(128)	Name of the schema or '*' for all schemas.
AUTHHOWGOT	CHAR(1)	Authorization level of the user from whom the privileges were received. This authorization level is not necessarily the highest authorization level of the grantor. This field is also used to indicate that the privilege was held on all schemas by the grantor. 1 Grantor had privilege on all schemas at time of grant L SYSCtrl S SYSADM
CREATEINAUTH	CHAR(1)	Indicates whether grantee holds CREATEIN privilege on the schema: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
ALTERINAUTH	CHAR(1)	Indicates whether grantee holds ALTERIN privilege on the schema: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
DROPINAUTH	CHAR(1)	Indicates whether grantee holds DROPIN privilege on the schema: blank Privilege is not held

Column Name	Data Type	Description
		G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
GRANTEDTS	TIMESTAMP	Time when the GRANT statement was executed.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: 1 V6 dependency indicator; not from MRM tape
GRANTEETYPE	CHAR(1)	Indicates the type of grantee: blank Authorization ID L Role
GRANTORTYPE	CHAR(1)	Indicates the type of grantor: blank Authorization ID L Role

SYSIBM.SYSSEQUENCEAUTH

Records the privileges that are held by users over sequences.

Column Name	Data Type	Description
GRANTOR	VARCHAR(128)	Authorization ID of the user who granted the privileges.
GRANTEE	VARCHAR(128)	Authorization ID of the user or group that holds the privileges or the name of an application plan or package that uses the privileges. PUBLIC for a grant to PUBLIC.
SCHEMA	VARCHAR(128)	Schema of the sequence.
NAME	VARCHAR(128)	Name of the sequence.
GRANTEETYPE	CHAR(1)	Type of grantee: blank An authorization ID. L Role P An application plan or package. The grantee is a package if COLLID is not blank. R Internal use only.
AUTHHOWGOT	CHAR(1)	Authorization level of the user from whom the privileges were received. This authorization level is not necessarily the highest authorization level of the grantor: L SYSCtrl S SYSADM blank Not applicable
ALTERAUTH	CHAR(1)	Indicates whether grantee holds ALTER privilege on the sequence: blank Privilege is not held. G Privilege is held with the GRANT option. Y Privilege is held without the GRANT option.
USEAUTH	CHAR(1)	Indicates whether grantee holds USAGE privilege on the sequence: blank Privilege is not held. G Privilege is held with the GRANT option. Y Privilege is held without the GRANT option.
COLLID	VARCHAR(128)	If the GRANTEE is a package, its collection name. Otherwise, a string of length zero.
CONTOKEN	CHAR(8)	If the GRANTEE is a package, the consistency token of the DBRM from which the package was derived. Otherwise, blank.
GRANTEDTS	TIMESTAMP	Time when the GRANT statement was executed.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.

Column Name	Data Type	Description
GRANTORTYPE	CHAR(1)	Indicates the type of grantor: blank Authorization ID L Role

SYSIBM.SYSSEQUENCEDEP

Records the dependencies of identity columns on tables.

Column Name	Data Type	Description
BSEQUENCEID	INTEGER	Internal identifier of the identity column or sequence.
DCREATOR	VARCHAR(128)	Owner of the object that is dependent on this identity column or sequence.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.
DNAME	VARCHAR(128)	Name of the object that is dependent on this identity column or sequence.
DCOLNAME	VARCHAR(128)	Name of the identity column. Blank for SQL function rows.
DTYPE	CHAR(1)	The type of object that is dependent on this sequence: F SQL function I Identity column X Implicit DOCID column that is created on a base tabl with XML blank Represents an identity column created prior to Version 8
BSHEMA	VARCHAR(129)	The schema name of the sequence, will be a string of length zero for an object created prior to Version 8.
BNAME	VARCHAR(128)	The sequence name (generated by DB2 for an identity column), will be a string of length zero for an object created prior to Version 8.
DSHEMA	VARCHAR(128)	The qualifier of the object that is dependent on this sequence, will be a string of length zero for an object created prior to Version 8.
DOWNER	VARCHAR(128)	The owner of the object that is dependent on this sequence. This will be a string of length zero for an object that was created prior to Version 9.
DOWNERTYPE	CHAR(1)	The type of owner: Blank An authorization ID L A role

SYSIBM.SYSSEQUENCES

Contains one row for each identity column or user-defined sequence.

Column Name	Data Type	Description
SCHEMA	VARCHAR(128)	Schema of the sequence. For an identity column, the value of TBCREATOR from the SYSCOLUMNS entry for the column.
OWNER	VARCHAR(128)	Owner of the sequence. For an identity column, the value of TBCREATOR from the SYSCOLUMNS entry for the column.
NAME	VARCHAR(128)	Name of the identity column or sequence. (The name for an identity is generated by DB2.)
SEQTYPE	CHAR(1)	Type of sequence object: I An identity column S A user-defined sequence X An implicitly created DOCID column

Column Name	Data Type	Description
		for a base table that contains XML data.
SEQUENCEID	INTEGER	Internal identifier of the identity column or sequence.
CREATEDBY	VARCHAR(128)	Primary authorization ID of the user who created the sequence or identity column.
INCREMENT	DECIMAL(31,0)	Increment value (positive or negative, within INTEGER scope).
START	DECIMAL(31,0)	Start value.
MAXVALUE	DECIMAL(31,0)	Maximum value allowed for the data type.
MINVALUE	DECIMAL(31,0)	Minimum value allowed for the data type.
CYCLE	CHAR(1)	Whether cycling will occur when a boundary is reached: N No Y Yes
CACHE	INTEGER	Number of sequence values to preallocate in memory for faster access. A value of 0 indicates that values are not to be preallocated.
ORDER	CHAR(1)	Whether the values must be generated in order Y Yes N No
DATATYPEID	INTEGER	For a built-in data type, the internal ID of the built-in type. For a distinct type, the internal ID of the distinct type.
SOURCETYPEID	INTEGER	For a built-in data type, 0. For a distinct type, the internal ID of the built-in data type upon which the distinct type is sourced.
CREATEDTS	TIMESTAMP	Timestamp when the identity column or sequence was created.
ALTEREDTS	TIMESTAMP	Timestamp when the identity column or sequence was ALTERed.
MAXASSIGNEDVAL	DECIMAL(31,0)	Last possible assigned value. Initialized to null when the sequence object is created. Updated each time the next chunk of <i>n</i> values is cached, where <i>n</i> is the value for CACHE.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.
REMARKS	VARCHAR(254)	Character string provided by user with the COMMENT statement. The value is blank for an identity column.
PRECISION	SMALLINT	The precision defined for a sequence with a decimal or numeric type. Value is 5 for SMALLINT, 10 for INTEGER, or the actual precision specified by the user for the decimal data type. The value is 0 for rows created prior to Version 8.
RESTARTWITH	DECIMAL(31,0)	The RESTART WITH value specified for a sequence during ALTER or NULL. The RESTART WITH value is reset to NULL during the first value generation after the ALTER. The value is NULL if no ALTER with RESTART WITH has happened.
OWNERTYPE	CHAR(1)	Indicates the type of owner: blank Authorization ID L Role
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object. Blank if created prior to Version 9.

SYSIBM.SYSSTMT

Contains one or more rows for each SQL statement of each DBRM.

Column Name	Data Type	Description
NAME	VARCHAR(24)	Name of the DBRM.
PLNAME	VARCHAR(24)	Name of the application plan.
PLCREATOR	VARCHAR(128)	Authorization ID of the owner of the application plan.
SEQNO	SMALLINT	Sequence number of this row with respect to a statement of the DBRM. The numbering starts with zero.
STMTNO	SMALLINT	The statement number of the statement in the source program. A statement number greater than 32767 is displayed as zero (see STMTNOI for the statement number).
SECTNO	SMALLINT	The section number of the statement.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N No Y Yes
TEXT	VARCHAR(3800)	Text or portion of the text of the SQL statement.
ISOLATION	CHAR(1)	Isolation level for the SQL statement: R RR (repeatable read) T RS (read stability) S CS (cursor stability) U UR (uncommitted read) L KEEP UPDATE LOCKS for an RS isolation X KEEP UPDATE LOCKS for an RR isolation blank The WITH clause was not specified on this statement. The isolation level is recorded in SYSPACKAGE.ISOLATION and in SYSPLAN.ISOLATION.

Column Name	Data Type	Description
STATUS	CHAR(1)	<p>Status of binding the statement:</p> <p>A Distributed - statement uses DB2 private protocol access. The statement will be parsed and executed at the server using defaults for input variables during access path selection.</p> <p>B Distributed - statement uses DB2 private protocol access. The statement will be parsed and executed at the server using values for input variables during access path selection.</p> <p>C Compiled - statement was bound successfully using defaults for input variables during access path selection.</p> <p>E Explain - statement is an SQL EXPLAIN statement. The explain is done at bind time using defaults for input variables during access path selection.</p> <p>F Parsed - statement did not bind successfully and VALIDATE(RUN) was used. The statement will be rebound at execution time using values for input variables during access path selection.</p> <p>G Compiled - statement bound successfully, but REOPT is specified. The statement will be rebound at execution time using values for input variables during access path selection.</p> <p>H Parsed - statement is either a data definition statement or a statement that did not bind successfully and VALIDATE(RUN) was used. The statement will be rebound at execution time using defaults for input variables during access path selection. Data manipulation statements use defaults for input variables during access path selection.</p> <p>I Indefinite - statement is dynamic. The statement will be bound at execution time using defaults for input variables during access path selection.</p> <p>J Indefinite - statement is dynamic. The statement will be bound at execution time using values for input variables during access path selection.</p> <p>K Control - CALL statement.</p> <p>L Bad - the statement has some allowable error. The bind continues but the statement cannot be executed.</p> <p>blank The statement is non-executable, or was bound in DB2 release prior to Version 5.</p>
ACCESSPATH	CHAR(1)	For static statements, indicates if the access path for the statement is based on user-specified optimization hints. A value of 'H' indicates that optimization hints were used. A blank value indicates that the access path was determined without the use of optimization hints, or that there is no access path associated with the statement. For dynamic statements, the value is blank.
STMTNOI	INTEGER	The statement number of the statement in the source program.
SECTNOI	INTEGER	The section number of the statement.
EXPLAINABLE	CHAR(1)	Contains one of the following values:

Column Name	Data Type	Description
		Y Indicates that the SQL statement can be used with the EXPLAIN function and may have rows describing its access path in the userid.PLAN_TABLE. N Indicates that the SQL statement does not have any rows describing its access path in the userid.PLAN_TABLE Blank Indicates that the SQL statement was bound prior to V7.
QUERYNO	INTEGER	The query number of the SQL statement in the source program. SQL statements bound prior to V7 have a default value of -1. Statements bound V7 or later used the value specified on the QUERYNO clause on SELECT, UPDATE, INSERT, DELETE, EXPLAIN, and DECLARE CURSOR statements. If the QUERYNO clause is not specified, the query number is set to the statement number.
PLCREATOR	CHAR(1)	Indicates the type of creator: blank Authorization ID L Role

SYSIBM.SYSTOGROUP

Contains one row for each storage group.

Column Name	Data Type	Description
NAME	VARCHAR(128)	Name of the storage group.
CREATOR	VARCHAR(128)	Authorization ID of the owner of the storage group.
VCATNAME	VARCHAR(128)	Name of the integrated catalog facility catalog.
SPACE	INTEGER	Number of kilobytes of DASD storage allocated to the storage group as determined by the last execution of the STOSPACE utility.
SPCDATE	CHAR(5)	Date when the SPACE column was last updated, in the form yyddd.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
CREATEDBY	VARCHAR(128)	Primary authorization ID of the user who created the storage group.
STATSTIME	TIMESTAMP	If the STOSPACE utility was executed for the storage group, date and time when STOSPACE was last executed.
CREATEDTS	TIMESTAMP	Time when the CREATE statement was executed for the storage group.
ALTEREDTS	TIMESTAMP	Time when the most recent ALTER STOGROUP statement was executed for the storage group. If no ALTER STOGROUP statement has been applied, ALTEREDTS has the value of CREATEDTS.
SPACEF	FLOAT	Kilobytes of DASD storage for the storage group.
DATACLAS	VARCHAR(24)	Name of the SMS data class. Blank if data class is not used.
MGMTCLAS	VARCHAR(24)	Name of the SMS management class. Blank if management class is not used.
STORCLAS	VARCHAR(24)	Name of the SMS storage class. Blank if storage class is not used.
CREATOR TYPE	CHAR(1)	Indicates the type of creator: blank Authorization ID L Role
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object. Blank if created prior to Version 9.

SYSIBM.SYSSTRINGS

Contains information about character conversion. Each row describes a conversion from one coded character set to another. If OS/390 Version 2 Release 9 is installed, additional conversions that are supported.

Column Name	Data Type	Description
INCCSID	INTEGER	The source CCSID for the character conversion represented by this row.
OUTCCSID	INTEGER	The target CCSID for the character conversion represented by this row.
TRANSTYPE	CHAR(2)	Indicates the nature of the conversion. Values can be: GG GRAPHIC to GRAPHIC MM EBCDIC MIXED to EBCDIC MIXED MS EBCDIC MIXED to SBCS PM ASCII MIXED to EBCDIC MIXED PS ASCII MIXED to SBCS SM SBCS to EBCDIC MIXED SS SBCS to SBCS MP EBCDIC MIXED to ASCII MIXED PP ASCII MIXED to ASCII MIXED SP SBCS to ASCII MIXED
ERRORBYTE	CHAR(1)	The byte used in the conversion table as an error byte. Null indicates the absence of an error byte.
SUBBYTE	CHAR(1)	The byte used in the conversion table as a substitution character. Null indicates the absence of a substitution character.
TRANSPROC	VARCHAR(24)	The name of a module or blanks. If IBMREQD is 'N', a nonblank value is the name of a conversion procedure provided by the user. If IBMREQD is 'Y', a nonblank value is the name of a DB2 module that contains DBCS conversion tables. The first five characters of the name of a user-provided conversion procedure must not be 'DSNXV'; these characters are used to distinguish user-provided conversion procedures from DB2 modules that contain DBCS conversion tables.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
TRANSTAB	VARCHAR(256)	Either a conversion table or an empty string.

SYSIBM.SYSSYNONYMS

Contains one row for each synonym of a table or view.

Column Name	Data Type	Description
NAME	VARCHAR(128)	Synonym for the table or view.
CREATOR	VARCHAR(128)	Authorization ID of the owner of the synonym.
TBNAME	VARCHAR(128)	Name of the table or view.
TBCREATOR	VARCHAR(128)	Schema of the owner of the table or view.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
CREATEDBY	VARCHAR(128)	Primary authorization ID of the user who created the synonym.
CREATEDTS	TIMESTAMP	Time when the CREATE statement was executed for the synonym. The value is '0001-01.01.00.00.000000' for

Column Name	Data Type	Description
		synonyms created in a DB2 release prior to Version 5.
CREATORTYPE	CHAR(1)	Indicates the type of creator: blank Authorization ID L Role
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object. Blank if created prior to Version 9.

SYSIBM.SYSTABAUTH

Records the privileges that users hold on tables and views.

Column Name	Data Type	Description
GRANTOR	VARCHAR(128)	Authorization ID of the user who granted the privileges. Could also be PUBLIC, or PUBLIC followed by an asterisk.
GRANTEE	VARCHAR(128)	Authorization ID of the user who holds the privileges or the name of an application plan or package that uses the privileges. PUBLIC for a grant to PUBLIC. PUBLIC followed by an asterisk for a grant to PUBLIC AT ALL LOCATIONS.
GRANTEETYPE	CHAR(1)	Type of grantee: blank An authorization ID L Role P An application plan or a package. The grantee is a package if COLLID is not blank.
DBNAME	VARCHAR(24)	If the privileges were received from a user with DBADM, DBCTRL, or DBMAINT authority, DBNAME is the name of the database on which the GRANTOR has that authority. Otherwise, DBNAME is blank.
SCREATOR	VARCHAR(128)	If the row of SYSIBM.SYSTABAUTH was created as a result of a CREATE VIEW statement, SCREATOR is the schema of the owner of a table or view referred to in the CREATE VIEW statement. Otherwise, SCREATOR is the same as TCREATOR.
STNAME	VARCHAR(128)	If the row of SYSIBM.SYSTABAUTH was created as a result of a CREATE VIEW statement, STNAME is the name of a table or view referred to in the CREATE VIEW statement. Otherwise, STNAME is the same as TCREATOR.
TCREATOR	VARCHAR(128)	Schema of the owner of the table or view.
TTNAME	VARCHAR(128)	Name of the table or view.
AUTHHOWGOT	CHAR(1)	Authorization level of the user from whom the privileges were received. This authorization level is not necessarily the highest authorization level of the grantor. blank Not applicable C DBCTL D DBADM L SYSCtrl M DBMAINT S SYSADM
DATEGRANTED	CHAR(6)	Date the privileges were granted, in the form <i>yyymmdd</i> .
TIMEGRANTED	CHAR(8)	Time the privileges were granted, in the form <i>hhmmssst</i> .
UPDATECOLS	CHAR(1)	The value of this column is blank if the value of UPDATEAUTH applies uniformly to all columns of the table or view. The value is an asterisk (*) if the value of UPDATEAUTH applies to some columns but not to others. In this case, rows will exist in SYSIBM.SYSCOLAUTH with matching timestamps and

Column Name	Data Type	Description
		PRIVILEGE = blank. These rows list the columns on which update privileges have been granted.
ALTERAUTH	CHAR(1)	Whether the GRANTEE can alter the table: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
DELETEAUTH	CHAR(1)	Whether the GRANTEE can delete rows from the table or view: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
INDEXAUTH	CHAR(1)	Whether the GRANTEE can create indexes on the table: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
INSERTAUTH	CHAR(1)	Whether the GRANTEE can insert rows into the table or view: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
SELECTAUTH	CHAR(1)	Whether the GRANTEE can select rows from the table or view: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
UPDATEAUTH	CHAR(1)	Whether the GRANTEE can update rows of the table or view: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
COLLID	VARCHAR(128)	If the GRANTEE is a package, its collection name. Otherwise, the value is blank.
CONTOKEN	CHAR(8)	If the GRANTEE is a package, the consistency token of the DBRM from which the package was derived. Otherwise, the value is blank.
REFERENCESAUTH	CHAR(1)	Whether the GRANTEE can create or drop referential constraints in which the table is a parent. blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
REFCOLS	CHAR(1)	The value of this column is blank if the value of REFERENCESAUTH applies uniformly to all columns of the table. The value is an asterisk(*) if the value of REFERENCESAUTH applies to some columns but not to others. In this case, rows will exist in SYSIBM.SYSCOLAUTH with PRIVILEGE = R and matching timestamps that list the columns on which reference privileges have been granted.
GRANTEDTS	TIMESTAMP	Time when the GRANT statement was executed.
TRIGGERAUTH	CHAR(1)	Whether the GRANTEE can create triggers in which the table is named as the triggering table: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
GRANTORTYPE	CHAR(1)	Indicates the type of grantor:

Column Name	Data Type	Description
		blank Authorization ID L Role

SYSIBM.SYSTABCONST

Contains one row for each unique constraint (primary key or unique key) created in DB2 for OS/390 Version 7 or later.

Column Name	Data Type	Description
CONSTNAME	VARCHAR(128)	Name of the constraint.
TBCREATOR	VARCHAR(128)	Schema of the owner of the table on which the constraint is defined.
TBNAME	VARCHAR(128)	Name of the table on which the constraint is defined.
CREATOR	CHAR(8)	Authorization ID under which the constraint was created.
TYPE	CHAR(1)	Type of constraint: P Primary key U Unique key
IXOWNER	VARCHAR(128)	Schema of the index enforcing the constraint or blank if index has not been created yet.
IXNAME	VARCHAR(128)	Name of the index enforcing the constraint or blank if index has not been created yet.
CREATEDTS	TIMESTAMP	Time when the statement to create the constraint was executed.
IBMREQD	CHAR(1) DEFAULT 'N '	A value of Y indicates that the row name from the basic machine-readable material (MRM) tape.
COLCOUNT	SMALLINT	Number of columns in the constraint.
CREATORTYPE	CHAR(1)	Indicates the type of creator: blank Authorization ID L Role
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object. Blank if created prior to Version 9.

SYSIBM.SYSTABLEPART

Contains one row for each non-partitioned tablespace and one row for each partition of a partitioned tablespace.

Column Name	Data Type	Description
PARTITION	SMALLINT	Partition number; 0 if tablespace is not partitioned.
TSNAME	VARCHAR(24)	Name of the tablespace.
DBNAME	VARCHAR(24)	Name of the database that contains the tablespace.
IXNAME	VARCHAR(128)	Name of the partitioning index. This column is blank if the tablespace is not partitioned.
IXCREATOR	VARCHAR(128)	Schema of the owner of the partitioning index. This column is blank if the tablespace is not partitioned.
PQTY	INTEGER	Primary space allocation in units of 4KB storage blocks. For user-managed data sets, the value is set to the primary space allocation only if RUNSTATS TABLESPACE with UPDATE(ALL) or UPDATE(SPACE) is executed; otherwise, the value is zero. PQTY is based on a value of PRIQTY in the appropriate CREATE or ALTER TABLESPACE statement. Unlike PQTY, however, PRIQTY asks for space

Column Name	Data Type	Description
		in 1KB units.
SQTY	SMALLINT	Secondary space allocation in units of 4KB blocks. For user-managed data sets, the value is set to the secondary space allocation only if RUNSTATS TABLESPACE with UPDATE(ALL) or UPDATE(SPACE) is executed; otherwise, the value is zero. SQTY is based on a value of SECQTY in the appropriate CREATE or ALTER TABLESPACE statement. Unlike SQTY, however, SECQTY asks for space in 1KB units. If the value does not fit into the column, the value of the column is 0. See the description of column SECQTYI.
STORTYPE	CHAR(1)	Type of storage allocation: E Explicit (storage group not used) I Implicit (storage group used)
STORNAME	VARCHAR(128)	Name of storage group used for space allocation. Blank if storage group not used.
VCATNAME	VARCHAR(24)	Name of integrated catalog facility catalog used for space allocation.
CARD	INTEGER	Number of rows in the tablespace or partition or, if the tablespace is a LOB tablespace, the number of LOBs in the tablespace. The value is 2 147 483 647 if the number of rows is greater than or equal to 2 147 483 647. The value is -1 if statistics have not been gathered.
FARINDREF	INTEGER	Number of rows that have been relocated far from their original page. The value is -1 if statistics have not been gathered. Not applicable if the tablespace is a LOB tablespace.
NEARINDREF	INTEGER	Number of rows that have been relocated near their original page. The value is -1 if statistics have not been gathered. Not applicable if the tablespace is a LOB tablespace.
PERCACTIVE	SMALLINT	Percentage of space occupied by rows of data from active tables. The value is -1 if statistics have not been gathered. The value is -2 if the tablespace is a LOB tablespace.
PERCDROP	SMALLINT	Percentage of space occupied by rows of dropped tables. The value is -1 if statistics have not been gathered. The value is 0 for segmented tablespaces. Not applicable if the table is an auxiliary table.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
LIMITKEY	VARCHAR(765)	The high value of the partition in external format. The value is 0 if the tablespace is not partitioned.
FREEPAGE	SMALLINT	Number of pages loaded before a page is left as free space.
PCTFREE	SMALLINT	Percentage of each page left as free space.
CHECKFLAG	CHAR(1)	C The tablespace partition is in a check pending status and there are rows in the table that can violate referential constraints, table check constraints, or both. blank The tablespace is not a partition, or does not contain rows that may violate referential constraints, table check constraints, or both.
SPACE	INTEGER	Number of kilobytes of DASD storage allocated to the tablespace partition, as determined by the last execution of

Column Name	Data Type	Description
		the STOSPACE utility or RUNSTATS utility. The value is 0 if STOSPACE or RUNSTATS has not been run. The value is updated by STOSPACE if the tablespace is related to a storage group. The value is updated by RUNSTATS if the utility is executed as RUNSTATS TABLESPACE with UPDATE(ALL) or UPDATE(SPACE). The value is -1 if the table space was defined with the DEFINE NO clause, which defers the physical creation of the data sets until data is first inserted into one of the partitions, and data has yet to be inserted.
COMPRESS	CHAR(1)	Indicates the following: <ul style="list-style-type: none"> o For a tablespace partition, whether the COMPRESS attribute for the partition is YES. o For a non-partitioned tablespace, whether the COMPRESS attribute is YES for the tablespace. Values for the column can be: Y Compression is defined for the tablespace blank No compression
PAGESAVE	SMALLINT	Percentage of pages saved in the tablespace or partition as a result of defining the tablespace with COMPRESS YES or other compression routines. For example, a value of 25 indicates a savings of 25%, so that the pages required are only 75% of what would be required without data compression. The calculation includes overhead bytes for each row, the bytes required for dictionary, and the bytes required for the current FREEPAGE and PCTFREE specification for the table space or partition. This calculation is based on an average row length, and the result varies depending on the actual lengths of the rows. The value is 0 if there are no savings from using data compression, or if statistics have not been gathered. The value can be negative, if for example, data compression causes an increase in the number of pages in the data set.
STATSTIME	TIMESTAMP	If RUNSTATS updated the statistics, the date and time when the last invocation of RUNSTATS updated the statistics. The default value is '0001-01-01.00.00.00.000000'.
GBPCACHE	CHAR(1)	Group buffer pool cache option specified for this tablespace or tablespace partition. A Changed and unchanged pages are cached in the group buffer pool. N No data is cached in the group buffer pool. S Only changed system pages, such as space map pages that do not contain actual data values, are cached in the group buffer pool. blank Only changed pages are cached in the group buffer pool.
CHECKRID5B	CHAR(5)	Blank if the table or partition is not in a check pending status (CHECKFLAG is blank), or if the tablespace is not partitioned. Otherwise, the RID of the first row of the tablespace partition that can violate referential constraints, table check

Column Name	Data Type	Description
		constraints, or both; or the value is X'0000000000', indicating that any row can violate referential constraints.
TRACKMOD	CHAR(1)	Whether to track the page modifications in the space map pages: N No blank Yes
EPOCH	INTEGER	A number that is incremented whenever an operation that changes the location of rows in a table occurs.
SECQTYI	INTEGER	Secondary space allocation in units of 4KB storage. For user-managed data sets, the value is the secondary space allocation in units of 4KB blocks if RUNSTATS TABLESPACE with UPDATE(SPACE) or UPDATE(ALL) is executed; otherwise, the value is zero.
CARDF	FLOAT	Number of rows in the tablespace or partition, or if the tablespace is a LOB tablespace, the number of LOBs in the tablespace. The value is -1 if statistics have not been gathered.
IPREFIX	CHAR(1)	Number of rows in the tablespace or partition, or if the tablespace is a LOB tablespace, the number of LOBs in the tablespace. The value is -1 if statistics have not been gathered.
ALTEREDTS	TIMESTAMP	Time when the most recent ALTER INDEX statement was executed for the index. If no ALTER INDEX statement has been applied, the value is '0001-01-01.00.00.00.000000'.
SPACEF	FLOAT(8)	Kilobytes of DASD storage. The value is -1 if statistics have not been gathered. This is an updatable column.
DSNUM	FLOAT(8)	Number of data sets. The value is -1 if statistics have not been gathered. This is an updatable column.
EXTENTS	INTEGER	Number of data set extents. The value is -1 if statistics have not been gathered. This is an updatable column.
LOGICAL_PART	SMALLINT	The logical partition for table spaces created with either table or index controlled partitioning.
LIMITKEY_INTERNAL	VARCHAR(512)	The highest value of the limit key of the partition in an internal format.
OLDEST_VERSION	SMALLINT	The version number of the oldest format of data in the table past and any image copies at the part level.
CREATDTS	TIMESTAMP	Time when the partition was created.
AVGROWLEN	INTEGER	Average length of rows for the table in the table space or part
FORMAT	CHAR(1)	Indicates the format of the rows in the table space or partition: R Indicates reordered row format blank Indicates basic row format or a LOB tablespace
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object. Blank if created prior to Version 9.
REORG_LR_TS	TIMESTAMP	The time when the REORG or LOAD REPLACE utility last occurred. The default value is '0001-01-01.00.00.00.000000'.

SYSIBM.SYSTABLEPART_HIST

Contains rows from SYSTABLEPART. Whenever rows are added or changed in SYSTABLEPART, the rows are also written to the new history table. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
PARTITION	SMALLINT	Partition number; 0 if tablespace is not partitioned.
TSNAME	VARCHAR(24)	Name of the tablespace.
DBNAME	VARCHAR(24)	Name of the database that contains the tablespace.
PQTY	INTEGER	Primary space allocation in units of 4KB storage blocks. The value of this column is 0 if a storage group is not used. PQTY is based on a value of PRIQTY in the appropriate CREATE or ALTER TABLESPACE statement.
SECQTYI	SMALLINT	Secondary space allocation in units of 4KB blocks. If a storage group is not used the value is 0.
FARINDREF	INTEGER	Number of rows that have been relocated far from their original page. The value is -1 if statistics have not been gathered. Not applicable if the tablespace is a LOB tablespace.
NEARINDREF	INTEGER	Number of rows that have been relocated near their original page. The value is -1 if statistics have not been gathered. Not applicable if the tablespace is a LOB tablespace.
PERCACTIVE	SMALLINT	Percentage of space occupied by rows of data from active tables. The value is -1 if statistics have not been gathered. The value is -2 if the tablespace is a LOB tablespace.
PERCDROP	SMALLINT	Percentage of space occupied by rows of dropped tables. The value is -1 if statistics have not been gathered. The value is 0 for segmented tablespaces. Not applicable if the table is an auxiliary table.
SPACEF	FLOAT(8)	Number of kilobytes of DASD storage allocated to the tablespace partition. The value is -1 if statistics have not been gathered.
PAGESAVE	SMALLINT	Percentage of pages saved in the tablespace or partition as a result of defining the tablespace with COMPRESS YES or other compression routines. For example, a value of 25 indicates a savings of 25%, so that the pages required are only 75% of what would be required without data compression. The calculation includes overhead bytes for each row, the bytes required for dictionary, and the bytes required for the current FREEPAGE and PCTFREE specification for the tablespace or partition. This calculation is based on an average row length, and the result varies depending on the actual lengths of the rows. The value is 0 if there are no savings from using data compression, or if statistics have not been gathered. The value can be negative, if for example, data compression causes an increase in the number of pages in the data set.
STATSTIME	TIMESTAMP	If RUNSTATS updated the statistics, the date and time when the last invocation of RUNSTATS updated the statistics. The default value is '0001-01-01.00.00.00.000000'.
CARDF	FLOAT(8)	Number of rows in the tablespace or partition, or if the tablespace is a LOB tablespace, the number of LOBS in the tablespace. The value is -1 if statistics have not been gathered.
EXTENTS	INTEGER	Number of data set extents. The value is -1 if statistics have not been gathered.
DSNUM	INTEGER	Data set number within the tablespace. For partitioned tablespaces, this value corresponds to the partition number for a single partition copy, or 0 for a copy of an entire partitioned tablespace or index space. The value is -1 if statistics have not been gathered.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.

Column Name	Data Type	Description
AVGROWLEN	INTEGER	Average length of rows for the table in the table space or part

SYSIBM.SYSTABLES

Contains one row for each table, view, or alias.

Column Name	Data Type	Description
NAME	VARCHAR(128)	Name of the table, view, or alias.
CREATOR	VARCHAR(128)	Schema of the owner of the table, view, or alias.
TYPE	CHAR(1)	Type of object: A Alias C Clone table G Created global temporary table M Materialized query table P Implicit table created for XML columns T Table V View X Auxiliary table
DBNAME	VARCHAR(24)	For a table, or a view of tables, the name of the database that contains the tablespace named in TSNAME. For a created temporary table, an alias, or a view of a view, the value is DSND06.
TSNAME	VARCHAR(24)	For a table, or a view of one table, the name of the table space that contains the table. For a view of more than one table, the name of a tablespace that contains one of the tables. For a created temporary table, the value is SYSPKAGE. For a view of a view, the value is SYSVIEWS. For an alias, it is SYSDBAUT.
DBID	SMALLINT	Internal identifier of the database; 0 if the row describes a view, alias, or created temporary table. Non-zero if the view has an INSTEAD OF trigger defined.
OBID	SMALLINT	Internal identifier of the table; 0 if the row describes a view, an alias, or a created temporary table. Non-zero if the view has an INSTEAD OF trigger defined.
COLCOUNT	SMALLINT	Number of columns in the table or view. The value is 0 if the row describes an alias.
EDPROC	VARCHAR(24)	Name of the edit procedure; blank if the row describes a view or alias or a table without an edit procedure.
VALPROC	VARCHAR(24)	Name of the validation procedure; blank if the row describes a view or alias or a table without a validation procedure.
CLUSTERTYPE	CHAR(1)	Whether RESTRICT ON DROP applies: blank No Y Yes. Neither the table nor any tablespace or database that contains the table can be dropped.
NPAGES	INTEGER	Total number of pages on which rows of the table appear. The value is -1 if statistics have not been gathered, or the row describes a view, an alias, a created temporary table, or an auxiliary table. This is an updatable column.
PCTPAGES	SMALLINT	Percentage of active tablespace pages that contain rows of the table. A page is termed active if it is formatted for rows, regardless of whether it contains any. If the table space is segmented, the percentage is based on the number of active pages in the set of segments assigned to

Column Name	Data Type	Description
		the table. The value is -1 if statistics have not been gathered, or the row describes a view, alias, created temporary table, or auxiliary table. This is an updatable column.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
REMARKS	VARCHAR(254)	A character string provided by the user with the COMMENT ON statement.
PARENTS	SMALLINT	Number of relationships in which the table is a dependent. The value is 0 if the row describes a view, an alias, a created temporary table or MQT.
CHILDREN	SMALLINT	Number of relationships in which the table is a parent. The value is 0 if the row describes a view, an alias, a created temporary table or MQT.
KEYCOLUMNS	SMALLINT	Number of columns in the table's primary key. The value is 0 if the row describes a view, an alias, or a created temporary table.
RECLENGTH	SMALLINT	For user tables, the maximum length of any record in the table. Length is 8+N+L, where: <ul style="list-style-type: none"> • The number 8 accounts for the header (6 bytes) and the ID map entry (2 bytes). • N is 10 if the table has an edit procedure, or 0 otherwise. • L is the sum of the maximum column lengths. In determining a column's maximum length, take into account whether the column allows nulls and the data type of the column. If the column can contain nulls and is not a LOB or ROWID column, add 1 byte for a null indicator. Use 4 bytes for the length of a LOB column and 19 bytes for the length of a ROWID column. If the column has a varying-length data type (for example, VARCHAR, CLOB, or BLOB), add 2 bytes for a length indicator. The value is 0 if the row describes a view, alias, or auxiliary table.
STATUS	CHAR(1)	Indicates the status of the table definition: <p>I The definition of the table is incomplete. The TABLESTATUS column indicates the reason for the table definition being incomplete.</p> <p>R An error occurred when an attempt was made to regenerate the internal representation of the view.</p> <p>X The table has a parent index and the table definition is complete.</p> <p>blank The table has no parent index, or is a catalog table, or the row describes a view or alias. The definition of the table, view, or alias is complete.</p>
KEYOBID	SMALLINT	Internal DB2 identifier of the index that enforces uniqueness of the table's primary key; 0 if not applicable.
LABEL	VARCHAR(90)	The label as given by a LABEL ON statement; otherwise an empty string.
CHECKFLAG	CHAR(1)	C The tablespace that contains the table is in a check pending status and there are rows in the

Column Name	Data Type	Description
		<p>table that can violate referential constraints, table check constraints, or both.</p> <p>R The table is an mqt that may contain inconsistent data.</p> <p>blank The table contains no rows that violate referential constraints, table check constraints, or both; or the row describes a view, alias, or created temporary table.</p>
AUDITING	CHAR(1)	<p>Value of the audit option:</p> <p>A AUDIT ALL</p> <p>C AUDIT CHANGE</p> <p>blank AUDIT NONE, or the row describes a view, an alias, or a created temporary table.</p>
CREATEDBY	VARCHAR(128)	Primary authorization ID of the user who created the table, view, or alias.
LOCATION	VARCHAR(128)	Location name of the object of an alias. Blank for a table, a view, or for an alias that was not defined with a three-part object name.
TBCREATOR	VARCHAR(128)	<ul style="list-style-type: none"> For an alias, the schema of the referred to table or view For a base table that is involved in a clone relationship, the name of the creator of the clone table For a clone table that is involved in a clone relationship, the name of the creator of the base table Otherwise, TBCREATOR is blank
TBNAME	VARCHAR(128)	<ul style="list-style-type: none"> For an alias, the name for the referred to table or view For a base table that is involved in a clone relationship, the name of the clone table For a clone table that is involved in a clone relationship, the name of the base table Otherwise, TBNAME is blank
CREATEDTS	TIMESTAMP	Time when the CREATE statement was executed for the table, view, or alias.
ALTEREDTS	TIMESTAMP	For a table, the time when the latest ALTER TABLE statement was applied. If no ALTER TABLE statement has been applied, or if the row is for a view or alias, ALTEREDTS has the value of CREATEDTS.
DATA_CAPTURE	CHAR(1)	<p>Records the value of the DATA_CAPTURE option for a table:</p> <p>blank No</p> <p>Y Yes</p> <p>For a created temporary table, DATA_CAPTURE is always blank.</p>
RBA1	CHAR(6)	The log RBA when the table was created. Otherwise, RBA1 is X'000000000000', indicating that the log RBA is not known, or that the object is a view, an alias, or a created temporary table. For data sharing it is the LRSN.
RBA2	CHAR(6)	The log RBA when the table was last altered. Otherwise, RBA2 is X'000000000000' indicating that the log RBA is not known, or that the object is a view, an alias, or a created

Column Name	Data Type	Description
		temporary table. RBA1 will equal RBA2 if the table has not been altered. For data sharing it is the LRSN.
PCTROWCOMP	SMALLINT	Percentage of rows compressed within the total number of active rows in the table. This includes any row in a table space that is defined with COMPRESS YES. The value is -1 if statistics have not been gathered, or the row describes a view, alias, created temporary table, or auxiliary table. This is an updatable column.
STATSTIME	TIMESTAMP	If RUNSTATS updated the statistics, the date and time when the last invocation of RUNSTATS updated the statistics. The default value is '0001-01-01.00.00.00.000000'. For a created temporary table, the value of STATSTIME is always the default value. This is an updatable column.
CHECKS	SMALLINT	Number of check constraints defined on the table. The value is 0 if the row describes a view, an alias, or a created temporary table, or if no constraints are defined on the table.
CARDF	FLOAT	Total number of rows in the table or total number of LOBs in an auxiliary table. The value is -1 if statistics have not been gathered or the row describes a view, alias, or created temporary table. This is an updatable column.
CHECKRID5B	CHAR(5)	Blank if the table or partition is not in a check pending status (CHECKFLAG is blank), if the tablespace is not partitioned, or if the table is a created temporary table. Otherwise, the RID of the first row of the tablespace partition that can violate referential constraints, table check constraints, or both; or the value is X'0000000000', indicating that any row can violate referential constraints.
ENCODING_SCHEME	CHAR(1)	Default encoding scheme for tables, views, and local aliases: E EBCDIC A ASCII M Multiple CCSID set or multiple encoding schemes U UNICODE blank For remote aliases The value is 'E' for tables in non-work-file databases and blank for tables in work-file databases created prior to Version 5 or the default database, DSNDB04.
TABLESTATUS	VARCHAR(30)	Indicates the reason for an incomplete table definition: L Definition is incomplete because an auxiliary table or auxiliary index has not been defined for a LOB column. P Definition is incomplete because the table lacks a parent index. R Definition is incomplete because the table lacks a required index on a row ID. U Definition is incomplete because the table lacks a required index on a unique key. V An error occurred when an attempt was made to regenerate the internal representation of the view. blank Definition is complete.
NPAGESF	FLOAT(8)	Number of pages used by the table. The value is -1 if

Column Name	Data Type	Description
		statistics have not been gathered. This is an updatable column.
SPACEF	FLOAT(8)	Kilobytes of DASD storage. The value is –1 if statistics have not been gathered. This is an updatable column.
AVGROWLEN	INTEGER	Average length of rows for the tables in the tablespace. If the tablespace is compressed, the value is the compressed row length. If the tablespace is not compressed, the value is the uncompressed row. The value is –1 if statistics have not been gathered.
RELCREATED	CHAR(1)	Release of DB2 that was used to create the object.
NUM_DEPT_MQTS	SMALLINT	Number of dependent MQTs.
VERSION	SMALLINT	Version of the data row format for this table.
PARTKEYCOLNUM	SMALLINT	Number of columns in the partitioning key.
SPLIT_ROWS	CHAR(16)	Value is blank except for VOLATILE tables which will have a Y in the field to indicate to DB2 to use index access on the table whenever possible.
SECURITY_LABEL	CHAR(1)	Only meaningful if TYPE column is T or M. Indicates if table has multi-level security: Blank No multi-level security R Table has multi-level security with row granularity

SYSIBM.SYSTABLES_HIST

Contains rows from SYSTABLES. Whenever rows are added or changed in SYSTABLES, the rows are also written to the new history table. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
NAME	VARCHAR(128)	Name of the table, view, or alias.
CREATOR	VARCHAR(128)	Schema of the owner of the table, view, or alias.
DBNAME	VARCHAR(24)	For a table, or a view of tables, the name of the database that contains the tablespace named in TSNAME. For a temporary table, an alias, or a view of a view, the value is DSND06.
TSNAME	VARCHAR(24)	For a table, or a view of one table, the name of the tablespace that contains the table. For a view of more than one table, the name of a tablespace that contains one of the tables. For a temporary table, the value is SYSPKAGE. For a view of a view, the value is SYSVIEWS. For an alias, it is SYSDBAUT.
COLCOUNT	SMALLINT	Number of columns in the table or view. The value is 0 if the row describes an alias.
PCTPAGES	SMALLINT	Percentage of active tablespace pages that contain rows of the table. A page is termed active if it is formatted for rows, regardless of whether it contains any. If the tablespace is segmented, the percentage is based on the number of active pages in the set of segments assigned to the table. The value is -1 if statistics have not been gathered, or the row describes a view, alias, temporary table, or auxiliary table.
PCTROWCOMP	SMALLINT	Percentage of rows compressed within the total number of active rows in the table. This includes any row in a tablespace that is defined with COMPRESS YES. The value is -1 if statistics have not been gathered, or the row

Column Name	Data Type	Description
		describes a view, alias, temporary table, or auxiliary table.
STATSTIME	TIMESTAMP	If RUNSTATS updated the statistics, the date and time when the last invocation of RUNSTATS updated the statistics. The default value is '0001-01-01.00.00.00.000000'. For a temporary table, the value of STATSTIME is always the default value.
CARDF	FLOAT(8)	Total number of rows in the table or total number of LOBs in an auxiliary table. The value is -1 if statistics have not been gathered or the row describes a view, alias, or temporary table.
NPAGESF	FLOAT(8)	Total number of pages on which rows of the partition appear. The value is -1 if statistics have not been gathered.
AVGROWLEN	INTEGER	Average row length of the table specified in the tablespace. The value is -1 if statistics have not been gathered.
SPACEF	FLOAT(8)	Kilobytes of DASD storage. The value is -1 if statistics have not been gathered. This is an updatable column.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.

SYSIBM.SYSTABLESPACE

Contains one row for each tablespace.

Column Name	Data Type	Description
NAME	VARCHAR(24)	Name of the tablespace.
CREATOR	VARCHAR(128)	Authorization ID of the owner of the tablespace.
DBNAME	VARCHAR(24)	Name of the database that contains the tablespace.
DBID	SMALLINT	Internal identifier of the database that contains the tablespace.
OBID	SMALLINT	Internal identifier of the tablespace file descriptor.
PSID	SMALLINT	Internal identifier of the tablespace page set descriptor.
BPOOL	CHAR(8)	Name of the buffer pool used for the tablespace.
PARTITIONS	SMALLINT	Number of partitions of the tablespace; 0 if the tablespace is not partitioned.
LOCKRULE	CHAR(1)	Lock size of the tablespace: A Any L Large object (LOB) P Page R Row S Tablespace T Table X Implicitly created XML table space
PGSIZE	SMALLINT	Size of pages in the tablespace in kilobytes.
ERASERULE	CHAR(1)	Whether the data sets are to be erased when dropped. The value is meaningless if the tablespace is partitioned. N No erase Y Erase
STATUS	CHAR(1)	Availability status of the tablespace: A Available C Definition is incomplete because a partitioning index has not been created.

Column Name	Data Type	Description
		P Tablespace is in a check pending status. S Tablespace is in a check pending status with the scope less than the entire tablespace. T Definition is incomplete because no table has been created.
IMPLICIT	CHAR(1)	Whether the tablespace was created implicitly: N No Y Yes
NTABLES	SMALLINT	Number of tables defined in the tablespace.
NACTIVE	INTEGER	Number of active pages in the tablespace. A page is termed active if it is formatted for rows, even if it currently contains none. The value is 0 if statistics have not been gathered. This is an updatable column.
CLOSERULE	CHAR(1)	Whether the data sets are candidates for closure when the limit on the number of open data sets is reached. N No Y Yes
SPACE	INTEGER	Number of kilobytes of DASD storage allocated to the tablespace, as determined by the last execution of the STOSPACE utility. The value is 0 if the tablespace is not related to a storage group, or if STOSPACE has not been run. If the tablespace is partitioned, the value is the total kilobytes of DASD storage allocated to all partitions that are storage-group defined.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
SEGSIZE	SMALLINT	Number of pages in each segment of a segmented tablespace. The value is 0 if the tablespace is not segmented.
CREATEDBY	VARCHAR(128)	Primary authorization ID of the user who created the tablespace.
STATSTIME	TIMESTAMP	If RUNSTATS updated the statistics, the date and time when the last invocation of RUNSTATS updated the statistics. The default value is '0001-01-01.00.00.00.000000'. This is an updatable column.
LOCKMAX	INTEGER	The maximum number of locks per user to acquire for the table or tablespace before escalating to the next locking level. 0 Lock escalation does not occur. n n, where n > 0, is the maximum number of locks (row, page, or LOB locks for the table or tablespace) an application process can acquire before lock escalation occurs. -1 Represents LOCKMAX SYSTEM. The value of field LOCKS PER TABLE(SPACE) on installation panel DSNTIPJ determines lock escalation. If the value of the field is 0, lock escalation does not occur. If the value is n, where n > 0, lock escalation occurs as it does for LOCKMAX n.
TYPE	CHAR(1)	The type of tablespace: blank The tablespace was created without any of the following options: DSSIZE, LARGE, LOB, and MEMBER CLUSTER.

Column Name	Data Type	Description
		<p>I The table space was defined with the MEMBER CLUSTER option and is not greater than 64 gigabytes.</p> <p>G The table space was defined with the MAXPARTITIONS option (a partitioned-by-growth table space) with the underlying structure of a universal table space.</p> <p>K The table space was defined with the MEMBER CLUSTER option and can be greater than 64 gigabytes.</p> <p>L The table space can be greater than 64 gigabytes.</p> <p>O The table space was defined with the LOB option (the table space is a LOB table space).</p> <p>P Implicit table space created for XML columns.</p> <p>R Range-partitioned universal table space.</p>
CREATEDTS	TIMESTAMP	Time when the CREATE statement was executed for the tablespace. If the tablespace was created in a DB2 release prior to Version 5, the value is '0001-01-01.00.00.00.000000'.
ALTEREDTS	TIMESTAMP	Time when the most recent ALTER TABLESPACE statement was executed for the tablespace. If no ALTER TABLESPACE statement has been applied, ALTEREDTS has the value of CREATEDTS. If the index was created in a DB2 release prior to Version 5, the value is '0001-01-01.00.00.00.000000'.
ENCODING_SCHEME	CHAR(1)	<p>Default encoding scheme for the tablespace:</p> <p>E EBCDIC</p> <p>A ASCII</p> <p>U UNICODE</p> <p>blank For tablespaces in a work file database or a TEMP database (a database that was created AS TEMP, which is for declared temporary tables)</p> <p>The value is 'E' for tables in non-work-file databases and blank for tables in work-file databases created prior to Version 5 or the default database, DSNDB04.</p>
SBCS_CCSID	INTEGER	Default SBCS CCSID for the tablespace. For a tablespace in a TEMP database or a database created in a DB2 release prior to Version 5, the value is 0.
DBCS_CCSID	INTEGER	Default DBCS CCSID for the tablespace. For a tablespace in a TEMP database or a database created in a DB2 release prior to Version 5, the value is 0.
MIXED_CCSID	INTEGER	Default mixed CCSID for the tablespace. For a tablespace in a TEMP database or a database created in a DB2 release prior to Version 5, the value is 0.
MAXROWS	SMALLINT	The maximum number of rows that DB2 will place on a data page. The default value is 255. For a LOB tablespace, the value is 0 to indicate that the column is not applicable.
LOCKPART	CHAR(1)	<p>Y LOCKPART YES is specified for the tablespace.</p> <p>blank LOCKPART NO is specified, or LOCKPART is not specified or not a partitioned tablespace.</p>
LOG	CHAR(1)	<p>Whether the changes to a tablespace are to be logged.</p> <p>N This table space has the NOT LOGGED attribute. Undo and redo logging for the table space and all</p>

Column Name	Data Type	Description
		<p>indexes for tables in the table space is suppressed. Logging is also suppressed for the auxiliary indexes for all auxiliary tables associated with tables in the table space.</p> <p>Y This table space has the LOGGED attribute. Normal logging is associated with modifications to this table space, all indexes for tables in this table space, and all auxiliary indexes for all auxiliary tables associated with tables in the table space.</p> <p>X This LOB or XML table space has the NOT LOGGED attribute. Undo and redo logging for the table space is suppressed. Also, the logging attribute for this LOB or XML table space is linked to the logging attribute of the associated base table space and might not be able to be altered independently. If the logging attribute of the base table space is altered to LOGGED, the logging attribute of the LOB or XML table space will also be altered to LOGGED.</p>
NACTIVEF	FLOAT	Number of active pages in the tablespace. A page is termed active if it is formatted for rows, even if it currently contains none. The value is -1 if statistics have not been gathered. This is an updatable column.
DSSIZE	INTEGER	Maximum size of a data set in kilobytes.
OLDEST_VERSION	SMALLINT	Version number of the oldest format of data in the table space and any image copies.
CURRENT_VERSION	SMALLINT	Version number describing the newest format of data in the table space.
AVGROWLEN	INTEGER	Average length of rows for the tables in the table space or part.
SPACEF	FLOAT	Kilobytes of DASD storage for the storage group.
CREATORTYPE	CHAR(1)	Indicates the type of creator: blank Authorization ID L Role
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object. Blank if created prior to Version 9.
INSTANCE	SMALLINT	INSTANCE indicates the column value of the data set instance number of the current base object (table and index).
CLONE	CHAR(1)	<p>Indicates whether the table space contains any objects that are involved in a clone relationship:</p> <p>Y Table space contains objects that are involved in a clone relationship</p> <p>N Table space does not contain any objects that are involved in a clone relationship</p>
MAXPARTITIONS	SMALLINT	Identifies the maximum number of partitions to which the table space can grow. 0 if the table space is not partitioned or is range partitioned but not a universal table space.

SYSIBM.SYSTABLESPACESTATS

Contains real time statistics for table spaces. Rows in this table can be inserted, updated, and deleted.

Column name	Data type	Description
-------------	-----------	-------------

UPDATESTATTIME	TIMESTAMP	The timestamp when the row was inserted or last updated
NACTIVE	INTEGER	The number of active pages in the table space or partition.
NPAGES	INTEGER	The number of distinct pages with active rows in the partition of the table space. This is an updateable column.
EXTENTS	SMALLINT	The number of extents in the table space or partition. For multi-piece table spaces, this value is the number of extents for the last data set. For a data set that is striped across multiple volumes, the value is the number of logical extents. A null value indicates the value is unknown.
LOADRLASTTIME	TIMESTAMP	The timestamp of the last LOAD REPLACE on the table space or partition. A null value indicates that the LOAD REPLACE utility has never been run on the table space or partition or that the timestamp is unknown.
REORGLASTTIME	TIMESTAMP	The timestamp of the last REORG on the table space or partition. A null value indicates that the REORG utility has never been run on the table space or partition or that the timestamp is unknown.
REORGINSERTS	INTEGER	The number of records or LOBs that have been inserted since the last REORG or LOAD REPLACE on the table space or partition. A null value indicates that the number of inserted records or LOBs is unknown.
REORGDELETES	INTEGER	The number of records or LOBs that have been deleted since the last REORG or LOAD REPLACE on the table space or partition. A null value indicates that the number of deleted records or LOBs is unknown.
REORGUPDATES	INTEGER	The number of rows that have been updated since the last REORG or LOAD REPLACE on the table space or partition. This value does not include LOB updates because LOB updates are really deletions followed by insertions. A null value indicates that the number of updated rows is unknown.
REORGDISORGLob	INTEGER	The number of LOBs that were inserted since the last REORG or LOAD REPLACE that are not perfectly chunked. A LOB is perfectly chunked if the allocated pages are in the minimum number of chunks. A null value indicates that the number of not perfectly chunked LOBs is unknown.
REORGUNCLUSTINS	INTEGER	The number of records that were inserted since the last REORG or LOAD REPLACE that are not well-clustered with respect to the clustering index. A record is well-clustered if the record is inserted into a page that is within 16 pages of the ideal candidate page. The clustering index determines the ideal candidate page. A null value indicates that the number of not well clustered pages is unknown.
REORGMASDELETE	INTEGER	The number of mass deletes from a segmented or LOB table space, or the number of dropped tables from a segmented table space, since the last REORG or LOAD REPLACE. A null value indicates that the number of mass deletes is unknown.
REORGNEARINDREF	INTEGER	The number of overflow records that were created since the

		last REORG or LOAD REPLACE and were relocated near the pointer record. For nonsegmented table spaces, a page is near the present page if the two page numbers differ by 16 or less. For segmented table spaces, a page is near the present page if the two page numbers differ by SEGSIZE*2 or less. A null value indicates that the number of overflow records that are near the pointer record is unknown.
REORGFARINDEF	INTEGER	The number of overflow records that were created since the last REORG or LOAD REPLACE and were relocated far from the pointer record. For nonsegmented table spaces, a page is far from the present page if the two page numbers differ by more than 16. For segmented table spaces, a page is far from the present page if the two page numbers differ by at least (SEGSIZE*2)+1. A null value indicates that the number of overflow records that are far from the pointer record is unknown.
STATSLASTTIME	TIMESTAMP	The timestamp of the last RUNSTATS on the table space or partition.
STATSINSERTS	INTEGER	The number of records or LOBs that have been inserted since the last RUNSTATS on the table space or partition. A null value indicates that the number of inserted records or LOBs is unknown.
STATSDELETES	INTEGER	The number of records or LOBs that have been deleted since the last RUNSTATS on the table space or partition. A null value indicates that the number of deleted records or LOBs is unknown.
STATSUPDATES	INTEGER	The number of rows that have been updated since the last RUNSTATS on the table space or partition. This value does not include LOB updates because LOB updates are really deletions followed by insertions. A null value indicates that the number of updated records or LOBs is unknown.
STATSMASSDELETE	INTEGER	The number of mass deletes from a segmented or LOB table space, or the number of dropped tables from a segmented table space, since the last RUNSTATS. A null value indicates that the number of mass deletes is unknown.
COPYLASTTIME	TIMESTAMP	The timestamp of the last full or incremental image copy on the table space or partition. A null value indicates that the COPY utility has never been run on the table space or partition. A null value can also indicate that the timestamp of the last image copy is unknown.
COPYUPDATEDPAGES	INTEGER	The number of distinct pages that have been updated since the last COPY. A null value indicates that the number of updated pages is unknown.
COPYCHANGES	INTEGER	The number of insert, delete, and update operations since the last COPY. A null value indicates that the number of insert, update, and delete operations is unknown.
COPYUPDATELRSN	CHAR(6)	The LRSN or RBA of the first update after the last COPY A null value indicates that the LRSN or RBA is unknown.

COPYUPDATETIME	TIMESTAMP	The timestamp of the first update after the last COPY. A null value indicates that the timestamp is unknown.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.
DBID	SMALLINT	The internal identifier of the database.
PSID	SMALLINT	The internal identifier of the table space page set descriptor.
PARTITION	SMALLINT	The data set number within the table space. This column is used to map a data set number in a table space to its statistics. For partitioned table spaces, this value corresponds to the partition number for a single partition. For non-partitioned table spaces, this value is 0.
INSTANCE	SMALLINT	Indicates if the object is associated with data set instance 1 or 2. This is an updatable column.
SPACE	INTEGER	The amount of space, in KB, that is allocated to the table space or partition. For multi-piece linear page sets, this value is the amount of space in all data sets.
TOTALROWS	BIGINT	The number of rows or LOBs in the table space or partition.
DATASIZE	BIGINT	The total number of bytes that row data occupy in the data rows or LOB rows. This is an updatable column.
UNCOMPRESSED-DATASIZE	BIGINT	The total number of bytes that row data would have occupied in the data rows or LOB rows if the data was not compressed. This is an updatable column.
DBNAME	CHAR(8)	The name of the database. This column is used to map a database to its statistics.
NAME	CHAR(8)	The name of the table space. This column is used to map a table space to its statistics.

SYSIBM.SYSTABSTATS

Contains one row for each partition of a partitioned tablespace. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
CARD	INTEGER	Total number of rows in the partition.
NPAGES	INTEGER	Total number of pages on which rows of the partition appear.
PCTPAGES	SMALLINT	Percentage of total active pages in the partition that contain rows of the table.
NACTIVE	INTEGER	Number of active pages in the partition.
PCTROWCOMP	SMALLINT	Percentage of rows compressed within the total number of active rows in the partition. This includes any row in a table space that is defined with COMPRESS YES.
STATSTIME	TIMESTAMP	If RUNSTATS updated the statistics, the date and time when the last invocation of RUNSTATS updated the statistics.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
DBNAME	VARCHAR(24)	Database that contains the tablespace named in TSNAME.
TSNAME	VARCHAR(24)	Tablespace that contains the table.
PARTITION	SMALLINT	Partition number of the tablespace that contains the table.
OWNER	VARCHAR(128)	Schema of the owner of the table.
NAME	VARCHAR(128)	Name of the table.
CARDF	FLOAT	Total number of rows in the partition.

SYSIBM.SYSTABSTATS_HIST

Contains rows from SYSTABLES. Whenever rows are added or changed in SYSTABLES, the rows are also written to the new history table. Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
NPAGES	INTEGER	Total number of pages on which rows of the partitions appear.
STATSTIME	TIMESTAMP	If RUNSTATS updated the statistics, the date and time when the last invocation of RUNSTATS updated the statistics.
DBNAME	VARCHAR(24)	Database that contains the table space in TSNAME.
TSNAME	VARCHAR(24)	Table space that contains the table.
PARTITION	SMALLINT	Partition number of the table space that contains the table.
OWNER	VARCHAR(128)	Schema of the owner of the table.
NAME	VARCHAR(128)	Name of the table.
CARDF	FLOAT(8)	Total number of rows in the partition. The value is –1 if statistics have not been gathered.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.

SYSIBM.SYSTRIGGERS

Contains one row for each trigger.

Column Name	Data Type	Description
NAME	VARCHAR(128)	Name of the trigger and trigger package.
SCHEMA	VARCHAR(128)	Schema of the trigger. This implicit or explicit qualifier for the trigger name is also used for the collection ID of the trigger package.
SEQNO	SMALLINT	Sequence number of this row; the first portion of the trigger definition is in row 1, and successive rows have increasing SEQNO values.
DBID	SMALLINT	Internal identifier of the database for the trigger.
OBID	SMALLINT	Internal identifier of the trigger.
OWNER	VARCHAR(128)	Owner of the trigger.
CREATEDBY	VARCHAR(128)	Primary authorization ID of the creator of the trigger.
TBNAME	VARCHAR(128)	Name of the table or view.
TBOWNER	VARCHAR(128)	Qualifier of the name of the table to which this trigger applies.
TRIGTIME	CHAR(1)	Time when triggered actions are applied to the base table, relative to the event that activated the trigger: B Trigger is applied before the event. A Trigger is applied after the event. I Trigger is applied instead of the event.
TRIGEVENT	CHAR(1)	Operation that activates the trigger: I Insert D Delete U Update
GRANULARITY	CHAR(1)	Trigger is executed once per: S Statement R Row
CREATEDTS	TIMESTAMP	Time when the CREATE statement was executed for this trigger. The time value is used in resolving functions, distinct types, and

Column Name	Data Type	Description
		stored procedures. It is also used to order the execution of multiple triggers.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
TEXT	VARCHAR(6000)	Full text of the CREATE TRIGGER statement.
REMARKS	VARCHAR(762)	A character string provided by the user with the COMMENT ON statement.
TRIGNAME	VARCHAR(18)	Unused.
OWNERTYPE	CHAR(1)	Indicates the type of creator: blank Authorization ID L Role
ENVID	INTEGER	Internal environment identifier.
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object. Blank if created prior to Version 9.

SYSIBM.SYSUSERAUTH

Records the system privileges that are held by users.

Column Name	Data Type	Description
GRANTOR	VARCHAR(128)	Authorization ID of the user who granted the privileges.
GRANTEE	VARCHAR(128)	Authorization ID of the user that holds the privilege. Could also be PUBLIC for a grant to PUBLIC.
DATEGRANTED	CHAR(6)	Date the privileges were granted; in the form <i>yyymmdd</i> .
TIMEGRANTED	CHAR(8)	Time the privileges were granted; in the form <i>hhmmssst</i> .
AUTHHOWGOT	CHAR(1)	Authorization level of the user from whom the privileges were received. This authorization level is not necessarily the highest authorization level of the grantor. blank Not applicable C DBCTL D DBADM L SYSCTRL M DBMAINT S SYSADM
BINDADDAUTH	CHAR(1)	Whether the GRANTEE can use the BIND subcommand with the ADD option: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
BSDSAUTH	CHAR(1)	Whether the GRANTEE can issue the RECOVER BSDS command: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
CREATEDBAAUTH	CHAR(1)	Whether the GRANTEE can create databases and automatically receive DBADM authority over the new databases: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
CREATEDBCAUTH	CHAR(1)	Whether the GRANTEE can execute the CREATE DATABASE statement to create new databases and automatically receive DBCTRL authority over the new

Column Name	Data Type	Description
		databases: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
CREATESGAUTH	CHAR(1)	Whether the GRANTEE can execute the CREATE STOGROUP statement to create new storage groups: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
DISPLAYAUTH	CHAR(1)	Whether the GRANTEE can use the DISPLAY commands: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
RECOVERAUTH	CHAR(1)	Whether the GRANTEE can use the RECOVER INDOUBT command: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
STOPALLAUTH	CHAR(1)	Whether the GRANTEE can use the STOP command: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
STOSPACEAUTH	CHAR(1)	Whether the GRANTEE can use the STOSPACE utility: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
SYSADMAUTH	CHAR(1)	Whether the GRANTEE has system administration authority: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option GRANTEE has the privilege with the GRANT option for a value of either Y or G.
SYSOPRAUTH	CHAR(1)	Whether the GRANTEE has system operator authority: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
TRACEAUTH	CHAR(1)	Whether the GRANTEE can issue the START TRACE and STOP TRACE commands: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
MON1AUTH	CHAR(1)	Whether the GRANTEE can obtain IFC serviceability data: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
MON2AUTH	CHAR(1)	Whether the GRANTEE can obtain IFC data: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option

Column Name	Data Type	Description
CREATEALIASAUTH	CHAR(1)	Whether the GRANTEE can execute the CREATE ALIAS statement: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
SYSCTRLAUTH	CHAR(1)	Whether the GRANTEE has SYSCTRL authority: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option GRANTEE has the privilege with the GRANT option for a value of either Y or G.
BINDAGENTAUTH	CHAR(1)	Whether the GRANTEE has BINDAGENT privilege: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
ARCHIVEAUTH	CHAR(1)	Whether the GRANTEE is privileged to use the ARCHIVE LOG command: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
GRANTEDTS	TIMESTAMP	Time when the GRANT statement was executed. The value is '1985-04-01.00.00.00.000000' for the one installation row.
CREATETMTABAUTH	CHAR(1)	Whether the GRANTEE has CREATETMTABAUTH privilege: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option
GRANTEETYPE	CHAR(1)	Indicates the type of grantee: blank Authorization ID L Role
GRANTORTYPE	CHAR(1)	Indicates the type of grantor: blank Authorization ID L Role
DEBUGSESSIONAUTH	CHAR(1)	Whether the GRANTEE has DEBUGSESSION privilege: blank Privilege is not held G Privilege is held with the GRANT option Y Privilege is held without the GRANT option

SYSIBM.SYSVIEWDEP

Records the dependencies of views on tables, functions, and other views.

Column Name	Data Type	Description
BNAME	VARCHAR(128)	Name of the object on which the view is dependent. If the object type is a function (BTYPE='F'), the name is the specific name of the function.
BCREATOR	VARCHAR(128)	Authorization ID of the owner of BNAME. For functions, it is the schema name of the BNAME.
BTYPE	CHAR(1)	Type of object: F Function M Materialized query table T Table

Column Name	Data Type	Description
		V View
DNAME	VARCHAR(128)	Name of the view.
DCREATOR	VARCHAR(128)	Schema of the owner of the view.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
BSCHEMA	VARCHAR(128)	Schema of BNAME.
DTYPE	CHAR(1)	Type of table F SQL Function M Materialized V View
DOWNER	VARCHAR(128)	Authorization ID of the owner of the view, blank for views that were created in a DB2 release prior to Version 9.
OWNERTYPE	CHAR(1)	Indicates the type of owner: blank Authorization ID L Role

SYSIBM.SYSVIEWS

Contains one or more rows for each view.

Column Name	Data Type	Description
NAME	VARCHAR(128)	Name of the view.
CREATOR	VARCHAR(128)	Schema of the owner of the view.
SEQNO	SMALLINT	Sequence number of this row; the first portion of the view is on row one and successive rows have increasing values of SEQNO.
CHECK	CHAR(1)	Whether the WITH CHECK OPTION clause was specified in the CREATE VIEW statement: N No C Yes with the <i>cascaded</i> semantic Y Yes with the <i>local</i> semantic The value is N if the view has no WHERE clause.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
TEXT	VARCHAR(1500)	Text or portion of the text of the CREATE VIEW statement.
PATHSCHEMAS	VARCHAR(2048)	SQL path at the time the view was defined. The path is used to resolve unqualified data type and function names used in the view definition.
RELCREATED	CHAR(1)	Release of DB2 that was used to create the object: Blank Created prior to V7 K Create on V7
TYPE	CHAR(1)	Type of table F SQL Function M Materialized Query Table V View
REFRESH	CHAR(1)	Refresh mode D An MQT with a deferred refresh mode Blank Not an MQT
ENABLE	CHAR(1)	Indicates whether an MQT is enabled or disabled for query optimization: Y Enabled N Disabled Blank Row describes a view
MAINTENANCE	CHAR(1)	Maintenance Mode

Column Name	Data Type	Description
		S Maintained by system U Maintained by user Blank Row describes a view
REFRESH_TIME	TIMESTAMP	Timestamp of the REFRESH TABLE statement that last refreshed the data.
ISOLATION	CHAR(1)	Isolation level when the MQT is created or altered from a base table.
SIGNATURE	VARCHAR(1024)	Contains the internal description. Used for MQT tables
APP_ENCODING_CCSID	INTEGER	CCSID of the current application encoding scheme at the time the view was created.
OWNER	VARCHAR(128)	Authorization ID of the owner of the view, blank for views that were created in a DB2 release prior to Version 9.
OWNERTYPE	CHAR(1)	Indicates the type of owner: blank Authorization ID L Role
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object. Blank if created prior to Version 9.

SYSIBM.SYSVOLUMES

Contains one row for each volume of each storage group.

Column Name	Data Type	Description
SGNAME	VARCHAR(128)	Name of the storage group.
SGCREATOR	VARCHAR(128)	Authorization ID of the owner of the storage group.
VOLID	VARCHAR(18)	Serial number of the volume or * if SMS-managed.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object. Blank if created prior to Version 9.

SYSIBM.SYSXMLRELS

Contains one row for each XML table that is created for an XML column.

Column Name	Data Type	Description
TBOWNER	VARCHAR(128)	Schema or qualifier of the base table.
TBNAME	VARCHAR(128)	Name of the base table.
COLNAME	VARCHAR(128)	Name of the XML column in the base table.
XMLTBOWNER	VARCHAR(128)	Schema or qualifier of the XML table.
XMLTBNAME	VARCHAR(128)	Name of the XML table.
XMLRELOBID	INTEGER	Internal identifier of the relationship between the base table and the XML table.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.
CREATEDTS	TIMESTAMP	Time when the XML table was created.
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object.

SYSIBM.SYSXMLSTRINGS

Each row contains a single string and its unique ID that are used to condense XML data. The string can be an element name, attribute name, name space prefix, or a namespace URI.

Column Name	Data Type	Description
STRINGID	INTEGER	Unique ID for the string.
STRING	VARCHAR(1000)	The string data.
IBMREQD	CHAR(1)	A value of Y indicates that the row came from the basic machine-readable material (MRM) tape.

SYSIBM.SYSUSERNAMES

Each row in the table is used to carry out one of the following operations:

- Outbound ID translation
- Inbound ID translation and "come from" checking

Rows in this table can be inserted, updated, and deleted.

Column Name	Data Type	Description
TYPE	CHAR(1)	How the row is to be used: O For outbound translation. I For inbound translation and "come from" checking. S For outbound system AUTHID to establish a trusted connection.
AUTHID	VARCHAR(128)	Authorization ID to be translated. Applies to any authorization ID if blank.
LINKNAME	VARCHAR(24)	Identifies the VTAM or TCP/IP network locations associated with this row. A blank value in this column indicates this name translation rule applies to any TCP/IP or SNA partner. If a nonblank LINKNAME is specified, one or both of the following statements must be true: <ul style="list-style-type: none"> o A row exists in SYSIBM.LUNAMES whose LUNAME matches the value specified in the SYSIBM.USERNAMES LINKNAME column. This row specifies the VTAM site associated with this name translation rule. o A row exists in SYSIBM.IPNAMES whose LINKNAME matches the value specified in the SYSIBM.USERNAMES LINKNAME column. This row specifies the TCP/IP host associated with this name translation rule. Inbound name translation and "come from" checking are not performed for TCP/IP clients.
NEWAUTHID	VARCHAR(128)	Translated value of AUTHID. Blank specifies no translation.
PASSWORD	VARCHAR(24)	Password to accompany an outbound request, if passwords are not encrypted. If passwords are encrypted, or the row is for inbound requests, the column is not used.
IBMREQD	CHAR(1)	Whether the row came from the basic machine-readable material (MRM) tape: N=No, Y=Yes

SYSIBM.XSRCOMPONENT

An auxiliary table for the BLOB column COMPONENT in SYSIBM.SYSXSROBJECTCOMPONENTS. It is in LOB table space SYSXSRA3.

Column Name	Data Type	Description
COMPONENT	BLOB(30M)	Contents of the XML schema document

SYSIBM.XSROBJECTS

SYSIBM.XSROBJECTS contains one row for each registered XML schema. Rows in this table can only be changed using static SQL statements issued by the DB2-supplied XSR stored procedures.

Column Name	Data Type	Description
XSROBJECTID	INTEGER	Internal identifier of the XML schema. XSROBJECTID is generated as an identity column.
XSROBJECT SCHEMA	VARCHAR(128)	Qualifier of the XML schema name. This is always set to 'SYSXSR'.
XSROBJECT NAME	VARCHAR(128)	Name of the XML schema.
TARGET NAMESPACE	INTEGER	The value of the STRINGID column in SYSIBM.SYSXMLSTRINGS when the target namespace URI of the primary XML schema document is stored in SYSIBM.SYSXMLSTRINGS
SCHEMA LOCATION	INTEGER	The value of the STRINGID column in SYSIBM.SYSXMLSTRINGS when the schema location URI of the primary XML schema document is stored in SYSIBM.SYSXMLSTRINGS
ROWID	ROWID	ID that is used to support BLOB data type values.
GRAMMAR	BLOB(250M)	The internal binary representation of the XML schema.
PROPERTIES	BLOB(5M)	Additional property information of the entire XML schema.
CREATEDBY	VARCHAR(128)	Authorization ID under which the XML schema was created.
CREATEDTS	TIMESTAMP	The time that the DB2-supplied stored procedure XSR_REGISTER was executed for the XML schema.
STATUS	CHAR(1)	Registration status of the XML schema: C Complete I Incomplete T Temporary
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object.
DECOMPOSITION	CHAR(1)	Indicates the decomposition status of the XSR object: Y Enabled N Not enabled X Inoperative
DECOMPOSITION_VERSION	VARCHAR(128)	Indicates the version of the XDB map that is used for decomposition
REMARKS	VARCHAR(762)	Character string that contains comments about this XML schema.

SYSIBM.XSROBJECTCOMPONENTS

SYSIBM.XSROBJECTCOMPONENTS contains one row for each component (document) in an XML schema. Rows in this table can only be changed using static SQL statements issued by the DB2-supplied XSR stored procedures.

Column Name	Data Type	Description
XSRCOMPONENTID	INTEGER	Internal identifier of the XML schema document. XSRCOMPONENTID is generated as an identity column.
TARGETNAMESPACE	INTEGER	The value of the STRINGID column in

		SYSIBM.SYSXMLSTRINGS when the target namespace URI of the primary XML schema document is stored in SYSIBM.SYSXMLSTRINGS.
SCHEMALOCATION	INTEGER	The value of the STRINGID column in SYSIBM.SYSXMLSTRINGS when the schema location URI of the primary XML schema document is stored in SYSIBM.SYSXMLSTRINGS.
ROWID	ROWID	The ID that is used to support BLOB data type values.
COMPONENT	BLOB(30M)	Contents of the XML schema document.
PROPERTIES	BLOB(5M)	If available, additional property information of the XML schema document
CREATEDTS	TIMESTAMP	The time that the XML schema document was registered.
STATUS	CHAR(1)	Registration status of the XML schema: C Complete I Incomplete
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object.

SYSIBM.XSROBJECTGRAMMER

SYSIBM.XSROBJECTGRAMMAR is an auxiliary table for the BLOB column GRAMMAR in SYSIBM.SYSXSROBJECTS. It is in LOB table space SYSXSRA1.

Column Name	Data Type	Description
GRAMMAR	BLOB(250M)	Internal binary representation of the XML schema

SYSIBM.XSROBJECTHIERARCHIES

SYSIBM.XSROBJECTHIERARCHIES contains one row for each component (document) in an XML schema to record the XML schema document hierarchy relationship. Rows in this table can only be changed using static SQL statements issued by the DB2-supplied XSR stored procedures.

Column Name	Data Type	Description
XSROBJECTID	INTEGER	Internal identifier of the XML schema.
XSRCOMPONENTID	INTEGER	Internal identifier of the XML schema document.
HTYPE	CHAR(1)	Hierarchy type: D Document P Primary document
TARGETNAMESPACE	INTEGER	The value of the STRINGID column in SYSIBM.SYSXMLSTRINGS when the target namespace URI of the primary XML schema document is stored in SYSIBM.SYSXMLSTRINGS.
SCHEMALOCATION	INTEGER	The value of the STRINGID column in SYSIBM.SYSXMLSTRINGS when the schema location URI of the primary XML schema document is stored in SYSIBM.SYSXMLSTRINGS.
RELCREATED	CHAR(1)	The release of DB2 that is used to create the object.

SYSIBM.XRSOBJECTPROPERTY

An auxiliary table for the BLOB column PROPERTIES in SYSIBM.SYSXSROBJECTS. It is in LOB table space SYSXSRA2.

Column Name	Data Type	Description
PROPERTIES	BLOB(5M)	Contents of the additional property information of the entire XML schema.

SYSIBM.XSRPROPERTY

An auxiliary table for the BLOB column COMPONENT in SYSIBM.SYSXSROBJECTCOMPONENTS. It is in LOB table space SYSXSRA3.

Column Name	Data Type	Description
COMPONENT	BLOB(5M)	Contents of the additional property information of the XML schema document

Updateable Catalog Statistics

The following table shows the catalog statistics that are updateable and used for access path selection.

Table	Statistics
SYSIBM.SYSCOLDIST	CARDF COLGROUPCOLNO COLVALUE FREQUENCYF HIGHVALUE LOWVALUE NUMCOLUMNS QUANTILENO TYPE
SYSIBM.SYSCOLDISTSTATS	HIGHVALUE QUANTILENO
SYSIBM.SYSCOLUMNS	COLCARDF HIGH2KEY LOW2KEY
SYSIBM.SYSINDEXES	CLUSTERRATIOF FIRSTKEYCARDF FULLKEYCARDF NLEAF NLEVELS DATAREPEATFACTORF
SYSIBM.SYSINDEXSTATS	DATAREPEATFACTORF
SYSIBM.SYSKEYTARGETS	HIGH2KEY LOW2KEY STATS_FORMAT
SYSIBM.SYSKEYTARGETSTATS	HIGHKEY HIGH2KEY LOWKEY LOW2KEY STATS_FORMAT
SYSIBM.SYSKEYTGTDIST	CARDF KEYGROUPKEYNO KEYVALUE FREQUENCYF HIGHVALUE LOWVALUE NUMKEYS QUANTILENO TYPE
SYSIBM.SYSKEYTGTDISTSTATS	HIGHVALUE LOWVALUE QUANTILENO
SYSIBM.SYSROUTINES	CARDINALITY INITIAL_INSTS INITIAL_IOS

	INSTS_PER_INVOC IOS_PER_INVOC
SYSIBM.SYSTABLES	CARDF NPAGES NPAGESF PCTROWCOMP
SYSIBM.SYSTABLESPACE	NACTIVE
SYSIBM.SYSTABSTATS	CARDF NPAGES

IBM Utilities

BACKUP SYSTEM

```

      .-FULL-----.
>>-BACKUP SYSTEM--+-----+-----+-----+----->
      '-DATA ONLY-'  '+-ESTABLISH FCINCREMENTAL-+
                      '-END FCINCREMENTAL-----'
>--+-----+-----+-----+-----+-----><
  +-FORCE-----+-----+-----+-----+-----+
  +-DUMP-----+-----+-----+-----+-----+
  |             '- dumpclass-spec---'  '-FORCE-'  |
  '-DUMPOONLY--+-----+-----+-----+-----+'
              '- TOKEN- (X'byte-string')' '- dumpclass-spec -'

```

CATENFM

```

>>-CATENFM--+--START-----+-----+-----><
      +-COMPLETE-----+
      +-ENFMON-----+
      +-CMON-----+
      '-CONVERT--INPUT--table-space-name-'

```

CATMAINT

```

>>-CATMAINT--UPDATE-----+-----+----->
>--+-----+-----+-----+-----+----->
  |             .-----+-----+-----+-----+-----|
  |             V                                           |
  +-SCHEMA---SWITCH(schema_name,new_schema_name)-++-+
  |             .-----+-----+-----+-----+-----|
  |             V                                           |
  '-OWNER--FROM--(---owner_name+---)--TO ROLE-----'
>--+-----+-----+-----+-----+-----><
  |             .-----+-----+-----+-----+-----|
  |             V                                           |
  '-VCAT---SWITCH(vcat_name,new_vcat_name)-+-'

```

CHECK DATA

```

      .-----+-----+-----+-----+-----+
      V                                           |
>>-CHECK--DATA---table-space-spec--+-----+----->
      '-PART--integer-'  .
      .--SHRLEVEL-REFERENCE-.
>--+-----+-----+-----+-----+----->
  '-CLONE-'  '---SHRLEVEL--CHANGE---'
      .-SCOPE--PENDING-----.
>--drain-spec--+-----+-----+-----+----->

```

CHECK INDEX

DB2[®] 9 for z/OS

CHECK LOB

```

>>--CHECK--LOB--lob-table-space-spec--+-----+----->
                                         '-SHRLEVEL--REFERENCE-'
                                         '-SHRLEVEL--CHANGE----'
                                         '.-EXCEPTIONS--0-----.'
>--drain-spec--+-----+----->
                                         '-EXCEPTIONS--integer-'
>+-----+-----+-----+----->
|           '.-SYSPUNCH-'           |   '-SORTDEVT--device-type-'
'-PUNCHDDN--++ddname---++-'
>+-----+-----+-----+----->
'-SORTNUM--integer-'

```

COPY

```
>>-COPY--+copy-spec-----+-----+-----+----->
      |                                     |
      +-concurrent-spec-----+
      |
      +-filterddn-spec-----+
      |
      .-SHRLEVEL--REFERENCE-.  .-SCOPE--ALL-----.
>-----+-----+-----+----->
      '-SHRLEVEL--CHANGE-----'  '-SCOPE--PENDING--'
```

copy-spec:

[illegible]

Concurrent-spec:

```
>>+-LIST--listdef-name--data-set-spec-----+>>
| .------. |
| V          .-DSNUM--ALL-----|. |
|'---++-table-space-spec--+---++-data-set-spec-+'|
|'-index-name-spec--'|   '-DSNUM--integer-----'|
>--CONCURRENT-----><
```

Filterddn-spec:

```
>>+--LIST--listdef-name-----+----->
| .-----|
```

COPYTOCOPY

ts-num-spec:

index-name-spec:

```

.-FROMLASTCOPY-----+
>>+-----+><
.-FROMLASTFULLCOPY-----+
+.-FROMLASTINCRCOPY-----+
'-FROMCOPY-----dsn-+-'
                        '-FROMVOLUME--+-CATALOG-----+-'
                        '-volser-+-----+-'
                        '-FROMSEQNO--n-'

```

```
>>+--COPYDDN(+--+ddname1-+-+-----+---) +----->->  
| | | '- , ddname2-' | | | '-RECOVERYDDN(+--+ddname3-+-+-----+---)-' |  
| | | | | | | '|'- , ddname4-' | | | | | | | |  
|- RECOVERYDDN(+--+ddname3-+-+-----+---) -----|  
| | | '- , ddname4-' | | | | | | | |
```

```
>>-DIAGNOSE--+diagnose statement+-----><
               '-END-----'
```

```

>>+-----+>
| .-,-----.|
| V           |
|'-TYPE(---integer-++)-'|
>+-----+>
|'-ALLDUMPS-+-----+|
| .-,-----.|
| V           |
|'- (---X'abend-code'++)-'|
>+-----+>
|'-NODUMPS-+-----+|
| .-,-----.|
| V           |
|'- (---X'abend-code'++)-'|
>+-----+>
|'-display statement-'| '-wait statement-'| '-abend statement-'|

```

DB2[®] 9 for z/OS

```

>>-DISPLAY----->
>-+OBD-+-----+table-space-name+-----+-----+><
|      '-database-name--.-'      +-ALL-----+ '-CLONE-' |
|                                +-TABLES--+
|                                '-INDEXES-' |
+-SYSUTIL-----+
+-MEPL-----+
+-AVAILABLE-----+
'-DBET+-DATABASE--database-name-----+-----+-'
|      +-TABLESPACE-+-----+table-space-name+ '-CLONE-'
|      |      '-database-name.-'      |
|      '-INDEX--index-name-----'

```

wait-statement:

```

.-----
V
>>-WAIT-----+MESSAGE--message-id-+-----+-----+><
|      |      '-INSTANCE--integer-' |
|      '-TRACEID--X'trace-id'+-----+-'
|      '-integer-----' '-INSTANCE--integer-'

```

abend-statement:

```

>>-ABEND--+MESSAGE--message-id-+-----+-----+><
|      |      '-INSTANCE--integer-' | '-NODUMP-'
|      '-TRACEID--X'trace-id'+-----+-'
|      '-integer-----' '-INSTANCE--integer-'

```

EXEC SQL

```

>>-EXEC--SQL---+declare-cursor-spec-----+ENDEXEC----><
|      '-non-select dynamic SQL statement-'

```

declare-cursor-spec:

```

>>-DECLARE--cursor-name--CURSOR--FOR--select-statement-----><

```

LISTDEF

```

>>-LISTDEF--list-name----->
.-----
V
>-+INCLUDE+-----+LIST-ref-list+-----+-----+><
|      |      |      '-init-obj-spec-' 'CLONED+-YES-+-' '-RI-' +-ALL-+
|      '-type-spec-' |      |      '-NO--' |      +-BASE+
|      |      |      |      |      +-LOB-+
|      |      |      |      |      '-XML-'

```

type-spec:

```

>>-+TABLESPACES-----+-----><
|      '-INDEXSPACES--+-----+-'

```



```

          '-UNICODE-' | V |
                      '-CCSID(---integer-+-)-'
      .-ENFORCE--CONSTRAINTS-. .-ERRDDN--SYSERR-.
>--+-----+-----+-----+-----+-----+-----+-----+----->
      '-NOSUBS-' '-ENFORCE--NO-----' '-ERRDDN--ddname-'

      .-MAPDDN--SYSMAP-. .-DISCARDN--SYSDISC-.
>--+-----+-----+-----+-----+-----+-----+-----+----->
      '-MAPDDN--ddname-' '-DISCARDN--ddname--'
      .-DISCARDS--0-----.
>--+-----+-----+-----+-----+-----+-----+-----+----->
      '-DISCARDS--integer-' '-SORTDEVT--device-type-'
>--+-----+-----+-----+-----+-----+-----+-----+----->
      '-SORTNUM--integer-'
>--+-----+-----+-----+-----+-----+-----+-----+----->
      '-CONTINUEIF(start-+-----+)=--X'byte-string'-----+-'
                      '-:end-' '-character-string'-
>--+-----+-----+-----+-----+-----+-----+-----+----->
      '-DECFLOAT_ROUNDMODE--+-ROUND_CEILING---+-'
                      +-ROUND_DOWN-----+
                      +-ROUND_FLOOR-----+
                      +-ROUND_HALF_DOWN--+
                      +-ROUND_HALF_EVEN--+
                      +-ROUND_HALF_UP---+
                      '-ROUND_UP-----'

      .-----+-----+
      V |
>----INTO-TABLE-spec+-----+-----+-----+-----+-----+-----><

Workkddn-spec

      .-WORKDDN(SYSUT1,SORTOUT)------.
>>+-----+-----+-----+-----+-----+-----+-----+-----><
      '-WORKDDN--+--(ddname1,ddname2)-----+-'
          | .-,SORTOUT-. |
          +--(ddname1+-----+)-+
          | .-SYSUT1-. |
          '-(-+-----+-,ddname2)--'

Copy-spec

>>+-----+-----+-----+-----+-----+-----+-----+----->
      | .-(SYSCOPY)------. |
      '-COPYDDN+-----+-----+-----+-----+-----+-----+-----+----->
          +--(ddname1+-----+)-+
          | '-,ddname2-' |
          '-(,ddname2)-----'
>--+-----+-----+-----+-----+-----+-----+-----+-----><
      '-RECOVERYDDN(ddname3+-----+)-'
                      '-,ddname4-'

```

statistics-spec

[illegible]

```

          '-PREFORMAT-'          +-INDDN-ddname+-----++
                                | 'DISCARDDN-ddname ' |
                                +-INCURSOR--cursor-name-----+'
>--+-----+
  '-WHEN--SQL/DS='table-name'-----+'
    '-field selection criterion-'
>--+-----+><
  | .,-----, |
  | V          |
  '-(---field specification--)-'

```

resume-spec

```

    .-RESUME--NO-.
>>--+-----+-----+-----+-----+-----+-----+-----+
  |                                     '-REPLACE--+'-----+' |
  |                                     '-REUSE-'   '-copy-spec-' |
  '-RESUME--YES-----+'-----+'
>--+-----+-----+-----+-----+-----+-----+-----+><
  '-KEEPDICTIONARY-'

```

Field-selection-criteria

```

>>--+field-name-----+---+X'byte-string'-----+-----+-----+><
  '-(start+-----)-'   +- 'character-string'+-
      '-:end-'          +-G'graphic-string'+-
                        '-N'graphic-string'--'

```

field specification

```

>>--field-name--+-----+-----+-----+-----+-----+-----+>
      '-POSITION(start+-----)-'
                        '-:end-'
>--+-----+-----+-----+-----+-----+-----+-----+>
+-CHAR--+-----+-----+-----+-----+-----+-----+
|          +-BIT--(length)--strip-spec-+ |
|          +-MIXED--strip-spec-----+ |
|          +-BLOBF-----+ |
|          +-CLOBF--+-----+ |
|          |          '-MIXED-' |
|          '-DBCLOBF-----+' |
+-VARCHAR--+-----+-----+-----+-----+-----+-----+strip-spec--+
|          +-BIT-----+ |
|          +-MIXED-----+ |
|          +-BLOBF-----+ |
|          +-CLOBF--+-----+ |
|          |          '-MIXED-' |
|          '-DBCLOBF-----+' |
+-GRAPHIC--+-----+-----+-----+-----+-----+-----+strip-spec--+
|          '-EXTERNAL-' '-(length)-' |
+-VARGRAPHIC--strip-spec-----+-----+-----+-----+-----+-----+
+-SMALLINT-----+-----+-----+-----+-----+-----+
+-INTEGER--+-----+-----+-----+-----+-----+-----+
|          '-EXTERNAL-+-----+-----+' |

```

```

|          '-(length)-'          |
+-BIGINT-----+
+-BINARY-----+strip-spec-----+
|          '-(length)-'          |
+-+VARBINARY-----+strip-spec-----+
| '-BINARY VARYING-'          |
+-decimal-spec-----+
+-FLOAT-----+-----+-----+
|          '-EXTERNAL-' '-(length)-'          |
+-DATE--EXTERNAL-----+
|          '-(length)-'          |
+-TIME--EXTERNAL-----+
|          '-(length)-'          |
+-TIMESTAMP--EXTERNAL-----+
|          '-(length)-'          |
+-ROWID-----+
+-BLOB-----+
+-CLOB-----+
|          '-MIXED-'          |
+-DBCLOB-----+
|          .-(34)-----          |
+-DECFLOAT-----+
|          +-(16)-----+
|          '-EXTERNAL-----+'          |
|          '-(length)-'          |
+-XML-----+
|          .-WHITESPACE-.          |
|          '-PRESERVE-----+'          |
>-----+-----><
+-NULLIF--field selection criterion----+
+-DEFAULTIF--field selection criterion-'

```

Strip spec

```

>-----+----->
| .-BOTH---          |
+-STRIP-----+
|          +-TRAILING-+          |
|          '-LEADING--' +-strip-char'-----+
|          '-X'strip-char'-----'
>-----+-----><
+-TRUNCATE-'

```

decimal spec

```

+-PACKED-----+
>>-DECIMAL-----+-----><
+-ZONED-----+
+-EXTERNAL-----+
|          |          .-,0-----          |
|          '-(length+-----+)-'          |
|          '-,scale-'          |

```

MERGECOPY

```

>>-MERGECOPY----->
>--LIST--listdef-name----->
|
|TABLESPACE--+-+-----+table-space-name-----+
|      '-database-name.-'      '-DSNUM--integer-'
|      .-WORKDDN--SYSUT1-.
|
>--+-+-----+----->
|'-CLONE-'  '-WORKDDN--ddname-'
|      .-NEWCOPY--NO-.  .-COPYDDN--SYSCOPY-----
|
>--+-+-----+-----+><
|      +COPYDDN(ddname1+-+-----+-)-----+
|      |      '-,ddname2-'      |
|      +COPYDDN(,ddname2)-----+
|      '-RECOVERYDDN(ddname3+-+-----+-)-' |
|      |      ',ddname4'      |
|      .-COPYDDN--SYSCOPY-----
|      '-NEWCOPY--YES-+-+-----+-----+
|      |      +COPYDDN(ddname1+-+-----+-)+ '-RECOVERYDDN(ddname3)'
|      |      |      ',ddname2-'      |      ',ddname4'
|      |      +COPYDDN(,ddname2)-----+

```

MODIFY RECOVERY

```

>>-MODIFY--RECOVERY----->
>--LIST--listdef-name----->
|TABLESPACE--+-+-----+table-space-name-'
|      '-database-name.-'
|      .-DSNUM--ALL-----
|
>--+-+-----+----->
|'-DSNUM--integer-'  '-CLONE-'
|
>--+-+-----+-----+><
|      +AGE--+-integer-+-+
|      |      '-(*)-----' |
|      '-DATE--+-integer-+-'
|      |      '-(*)-----' |
|      '-RETAIN-----+LAST--(--integer--)-----+
|      |      +LOGLIMIT-----+
|      |      '-GDGLIMIT-+-+-----+
|      |      +LAST--(--integer--)--+
|      |      '-LOGLIMIT-----'

```

MODIFY STATISTICS

```

>>-MODIFY--STATISTICS----->
>--LIST-- listdef-name----->
|TABLESPACE--+-+-----+table-space-name-+
|      '-database-name.-'      |
|INDEXSPACE--+-+-----+index-space-name-+
|      '-database-name.-'      |
|INDEX--+-+-----+index-name-----+
|      '-creator-id.-'
|
>--DELETE--ALL-----+AGE--+(integer)-+-+-----><

```

```
>>-OPTIONS----->
>--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+>
>|'-PREVIEW-'|'-LISTDEFDD--ddname-'|'-TEMPLATEDD--ddname-'|'-event-spec-'|
>+--OFF-----+
>+--KEY--key-value-----+
>--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+--+>
```

```

>>-EVENT-- (. -ITEMERROR, HALT- . . -WARNING, RC4- .
+-----+ +-----+ +-----+ +-----+ +-----+ +-----+ +-----+ +-----+
' -ITEMERROR, SKIP- ' ' - , - ' + -WARNING, RC0- +
' -WARNING, RC8- '

```

```

>>-QUIESCE----->
>-+--LIST--listdef-name-----+-->
| .-----|
| V-----|
| '---+--TABLESPACE+-----+--table-space-name+-----+--+-'
| | '-database-name.-' | '-PART--integer-' |
| | -TABLESPACESET+-----+--+-----+--table-space-name-'
| | '-TABLESPACE-' '-database-name.-'
| .-WRITE--YES-.
>-+-----+----->
| '- CLONE-' '-WRITE--NO--'

```

```
>> REBUILD----->
      .-,-----|
      v          |
>+--+INDEX--+(----creatorid.index-name--+--+)-+-----+>
      |          |          '-PART--integer-' |          |
      |          |          +-(ALL)--table-space-spec-----+
      |          |          '-LIST--listdef-name-----'
      |          |          .-,-----|
      |          |          v          |
      |          |          '-INDEXSPACE--+(----+-----+--index-space-name--+-----+)-+-'
      |          |          |          |          '-database-name.-'          |          |
      |          |          |          |          '-PART-int-'          |          |
      |          |          |          |          '-(ALL)--table-space-spec-----'
      |          |          |          |          .-SHRLEVEL--REFERENCE-----|
      |          |          |          |          >+-----+--drain-spec--+-----+>
      |          |          |          |          |          |          '-|CLONE-'
      |          |          |          |          |          |          .-SCOPE--ALL-----|
      |          |          |          |          |          |          >+-----+--+-----+>
      |          |          |          |          |          |          '-SCOPE--PENDING-'  '-REUSE-'  '-SORTDEVT--device-type-'
      |          |          |          |          |          |          >+-----+--+-----+><
      |          |          |          |          |          |          '-SORTNUM--integer-'  '-stats-spec-'
      |          |          |          |          |          |          >+-----+--+-----+><
```

table-space-spec

```
>>-TABLESPACE--+-----+--table-space-name----->
                '-database-name.-'
>--+-----+-----><
    '-PART--integer-'
```

change-spec

```
    .-MAXRO--integer-.    .-LONGLOG--CONTINUE-.
>>-+-----+-----+----->
    '-MAXRO--DEFER---'    '+-LONGLOG--TERM-----+
                        '-LONGLOG--DRAIN----'
    .-DELAY--1200----.
>--+-----+-----><
    '-DELAY--integer-'
```

drain-spec

```
    .-DRAIN_WAIT--IRLMRWT value-.    .-RETRY--UTIMOUT value-.
>>-+-----+-----+----->
    '-DRAIN_WAIT--integer-----'    '-RETRY--integer-----'
>--+-----+-----><
    '-RETRY_DELAY--integer-'
```

stats-spec

```
    .-REPORT--NO--.
>>-STATISTICS--+-----+--correlation-stats-spec----->
                '-REPORT--YES-'
    .-UPDATE--ALL-----.
>--+-----+-----+----->
    '-UPDATE--+ACCESSPATH+-'    '-HISTORY--+ALL-----+-'
                +-SPACE-----+    +-ACCESSPATH+-
                '-NONE-----'    +-SPACE-----+
                                '-NONE-----'
>--+-----+-----><
    '-FORCEROLLUP--+YES-+-'
                '-NO--'

```

correlation-stat-spec

```
>>-+-----+----->
    '-KEYCARD-'    .-FREQVAL--NUMCOLS--1--COUNT--10-----.
>--+-----+-----><
    | .-----+-----+-----+-----+-----+-----+
    | V                                         | |
    | ---FREQVAL--NUMCOLS--integer--COUNT--integer+-'

```

RECOVER

```
>>-RECOVER----->
>--+--LIST--listdef-name-----+--list-options-spec+-->
```

```
>>>REORG--+-INDEX--LIST--listdef-name+--+-----+--+-----+-->
      '-index-name-spec-----'   '-REUSE-'       '-CLONE-'

      .-SHRLEVEL NONE------.
>-+-----+-----+----->
      '-SHRLEVEL+-REFERENCE--deadline-spec--drain-spec-----+'
      '-CHANGE--deadline-spec--drain-spec--change-spec-'
>-+-----+-----+----->
      '-LEAFDISTLIMIT+-----+-----+'
      '-integer-'   '-REPORTONLY-'
      .-UNLOAD--CONTINUE-----.
>-+-----+-----+----->
      '-UNLOAD--+-PAUSE-----+'   '-stats-spec-----'
      '-ONLY-----'
      .-WORKDDN--(SYSUT1)-.
>-+-----+-----+-----><
      '-WORKDDN--(ddname)-'   '-PREFORMAT-'
```

```
>>+-INDEX-+-----+index-name+----->
    |      '-creator-id.-'      |
    '-INDEXSPACE-+-----+index-space-name-'
                        '-database-name.-'
>-----+----->
    '-PART--integer-'
```

```

.-DEADLINE--NONE-----
>>+-----+
'-DEADLINE--+timestamp-----+'
      '-labeled-duration-expression-'

```

DB2[®] 9 for z/OS


```
>>+-----+-----+-----+----->
    '-DRAIN_WAIT--integer-'      '-RETRY--integer-'
```

```
>--+-----+----->
    '-RETRY_DELAY--integer-'
```

change-spec

```
                                .-DRAIN--WRITERS-.
>>+-----+-----+-----+----->
    |                               | '-DRAIN--ALL-----'
    |'-MAXRO--+-integer-+-----'|
    |'-DEFER---'|
    |'-LONGLOG--CONTINUE--.  .-DELAY--1200----.'
>--+-----+-----+-----+----->
    |'-LONGLOG--+-TERM--+-'  '-DELAY--integer-'
    |'-DRAIN-'|
    |'-TIMEOUT--TERM--.'
>--+-----+-----+-----+----->
    |'-TIMEOUT--ABEND-'|
```

Labeled-duration-expression

```
>>+--CURRENT_DATE-----+----->
    '-CURRENT_TIMESTAMP-'

    .-----
    v
>--+-- + --constant--+-YEAR-----+----->
    | - - - |
    |          +-YEARS-----+
    |          +-MONTH-----+
    |          +-MONTHS-----+
    |          +-DAY-----+
    |          +-DAYS-----+
    |          +-HOUR-----+
    |          +-HOURS-----+
    |          +-MINUTE-----+
    |          +-MINUTES-----+
    |          +-SECOND-----+
    |          +-SECONDS-----+
    |          +-MICROSECOND--+
    |          '-MICROSECONDS-'
```

stats-spec

```
                                .-REPORT--NO--.
>>+--STATISTICS--+-----+-----correlation-stats-spec----->
    |'-REPORT--YES-'|
    |'-UPDATE--ALL-----'|
>--+-----+-----+-----+----->
    |'-UPDATE--+-ACCESSPATH+-'  '-HISTORY--+-ALL-----+-'|
    |          +-SPACE-----+          +-ACCESSPATH-+|
    |          '-NONE-----'          +-SPACE-----+|
    |                                |          '-NONE-----'|
```

```

>--+-----+-----><
  '-FORCEROLLUP--+YES--+-'
      '-NO--'

correlation-stat-spec

>>--+-----+----->
  '-KEYCARD-' .-FREQVAL--NUMCOLS--1--COUNT--10-----
>--+-----+-----><
  | .-----|
  | v      |
  |-----|
  '----FREQVAL--NUMCOLS--integer--COUNT--integer+--'

```

REORG TABLESPACE

```

>>-REORG--TABLESPACE----->
>--+LIST--listdef-name-----+-->
  '-+-----+table-space-name+-----+-'
    '-database-name.-'          '-PART--integer-'
                                '-integer1:integer2-'

                                .-SCOPE ALL-----
>--+-----+-----+-----+----->
  '-|CLONE-' '-REUSE-' '-SCOPE PENDING-' '-REBALANCE-'
                                .-YES-.
  .-LOG--YES-. .-SORTDATA--+NO--+-.
>--+-----+-----+-----+----->
  '-LOG--NO--'          '-NOSYSREC-'
>-copy-spec----->
  .-SHRLEVEL NONE-----
>--+-----+-----+-----+----->
  '-SHRLEVEL--+REFERENCE--deadline-spec--drain-spec-----+-'
    '-CHANGE--deadline-spec--drain-spec--table-change-spec-'
>--+-----+-----+-----+----->
  | .-10-----. .-10-----. |
  '-OFFPOSLIMIT--+-----+INDREFLIMIT--+-----+-----+-'
    '-integer-'          '-integer-' '-REPORTONLY-'
  .-UNLOAD--CONTINUE--.
>--+-----+-----+-----+-----+----->
  | | .-----|
  | '-UNLOAD--PAUSE-----' '-KEEPDICTIONARY-' '-statistics-spec-' |
  +UNLOAD--ONLY-----+
  '-UNLOAD--EXTERNAL--+-----+-----+-----+-----+-'
    '-NOPAD-' | .-----|
               | v      |
               |-----|
               '----FROM-TABLE-spec+--'

  .-PUNCHDDN--SYSPUNCH-. .-DISCARDN--SYSDISC-.
>--+-----+-----+-----+----->
  '-PUNCHDDN--ddname--' '-DISCARDN--ddname--'
>--+-----+-----+-----+----->
  '-reorg tablespace options-'
>--+-----+-----><
  | .-----|
  | v      |
  |-----|

```

DB2® 9 for z/OS
355

statistics-spec

correlation-stat-spec

FROM-TABLE spec

```
selection-condition spec
```

```

>>-+predicate-----+----->
  '-selection condition-'
    .-----
    v                               |
>--+-----+-----><
  '-+-AND-+-+predicate-----+-'
    '-OR--' '-selection condition-'

```

predicate

```

>>-+basic predicate---+-----><
  +-BETWEEN predicate-+
  +-IN predicate-----+
  +-LIKE predicate----+
  '-NULL predicate----'

```

basic predicate

```

>>-column-name--+- = --+----->
      +- <> -+
      +- > --+
      +- < --+
      +- >= -+
      '- <= -'
>--+constant-----+-----><
  '-labeled-duration-expression-'

```

between predicate

```

>>-column-name--+-+---+--BETWEEN----->
      '-NOT-'
>--+constant-----+--AND----->
  '-labeled-duration-expression-'
>--+constant-----+-----><
  '-labeled-duration-expression-'

```

IN predicate

```

      .-,-----
      v       |
>>-column-name--+-+---+--IN--(---constant-+-)-----><
      '-NOT-'

```

LIKE predicate

```

>>-column-name--+-+---+--LIKE--string-constant----->
      '-NOT-'
>--+-----+-----><
  '-ESCAPE--string-constant-'

```

NULL predicate

```
>>-column-name--IS--+-----+--NULL-----><
      '-NOT-'
```

Reorg tablespace options

```
.-UNLDDN--SYSREC-.
>>+-----+-----+-----+----->
      '-UNLDDN--ddname-' '-SORTDEVT--device-type-'
>+-----+-----+-----+-----><
      '-SORTNUM--integer-' '-PREFORMAT-'
```

REPAIR

```
>>-REPAIR----->
>+-----+-----+-----+----->
      | .-OBJECT-. .-LOG--YES-.      V      |
      +-----+-----+-----+-----+
      |           '-LOG--NO--' | '-locate block--' |
      |           |           | '-dbd-statement--' |
      +-----+-----+-----+-----+
      | -level-id statement-----|
      | -versions statement-----|
>+-----+-----+-----+-----><
      '-CLONE-'
```

level-id statement

```
>>-LEVELID----->
>+-----+-----+-----+-----+----->
      |           '-database-name.-' |
      | -index-name-spec-----|
>+-----+-----+-----+-----><
      '-PART--integer-'
```

versions statement

```
>>-VERSIONS----->
>+-----+-----+-----+-----+-----><
      |           '-database-name.-' |
      | -index-name-spec-----|
```

index-name spec

```
>>+--INDEX--+-----+--index-name-----+-----><
      |           '-creator-id.-' |
      | -INDEXSPACE+-----+--index-space-name- |
      |           '-database-name.-' |
```

REPORT

```
>>-REPORT----->
      .-INDEX NONE-.
>+--RECOVERY+--TABLESPACE+--LIST-listdef-name---+-----+-----+-----><
      |           |           '-tablespace-name-spec' '-INDEX ALL-' | 'info' |
```

```
>>--+-INDEXSPACE-+-+-----+-index-space-name-+-+----->
|
|      | '-database-name-' |
|      | -LIST--listdef-name-----' |
| '-INDEX-+-+-----+-index-name-+-----' |
|      | '-creator-id-' |
|      | -LIST--listdef-name-----' |
```

```
>>+-----+-----+-----+-----+-----+-----+-----+-----+-----+>  
'-DSNUM--integer-' '-CURRENT-' '-SUMMARY-'  
'.-ARCHLOG--1-----.'  
>-+-----+-----+-----+-----+-----+-----+-----+-----+-----<  
'-LOCALSITE-' '-RECOVERYSITE-' '-ARCHLOG--+2---+'  
'.-ALL-'
```

```
>>+-----+--table-space-name-----><
'-database-name.-'
```

```
>>-RESTORE SYSTEM----->
>-+-----+>
  +-LOGONLY-----+
  '-+-----+'
    |-----|
    | -FROMDUMP--+-+-----+
    | |          '-DUMPCLASS-(dc1)-' '-RSA-(key-label)--|
    | -TAPEUNITS-+-+-----+'
    |          '-(num-tape-units)-'
```

```

-->> RUNSTATS--TABLESPACE----->

>+--LIST--listdef-name-----+--+>
'|-----+ table-space-name+-----|
'|--database-name--'|
'|-----|
'|--PART-integer--'|
'|-----|
'|--FORCEROLLUP--YES--'|
'|-----|
>+-----+>
'|-----|
'| V |-----|
'|-----|
'|--TABLE--|-----|
'|-----|
'|--SAMPLE-integer--'|
'|-----|
'| V |-----|
'|-----|
'|--TABLE-(table-name)+-----+column-spec+-----+colgroup-spec+-----|
'|-----|
'|--SAMPLE-integer--'|
'|-----|
'|-----|
>+-----+>

```

```

.-COLUMN--(--ALL--)-----
>>+-----+-----><
|               |
|               v               |
|.-COLUMN--(---column-name---)-|

```

```

      |-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
      |V               V               |               |               |               |
>>---COLGROUP--(---column-name+---)|colgroup-stats-spec+--->>

```

```
>>+-----+<<
|               .-MOST--. |
|'-FREQVAL--COUNT--integer--+-----+'|
|               +-BOTH--+
|               '-LEAST-'
>+-----+<
|               .-NUMQUANTILES--100----. |
|'-HISTOGRAM--+-----+'|
|               '-NUMQUANTILES--integer-'
```

```
>>+----->  
'-KEYCARD-'  
-----.  
V .-FREQVAL--NUMCOLS--1-COUNT--10-MOST-----.|  
>-+-----++-><  
|                                                    |  
+-FREQVAL--NUMCOLS--integer-COUNT--integer-+-+-+--+  
|                                                    |  
|                                                    +-BOTH-+|  
|                                                    '-LEAST-'|  
|. -NUMCOLS--1--NUMQUANTILES--100-----|. 
```


STOSPACE

TEMPLATE

```

.-SPACE--CYL-----
>>+-----+
' -SPACE--+-----+--+CYL+-'
      '-(primary,secondary)-'  +-TRK+
                                '-MB--'

.-PCTPRIME--100-----
>+-----+-----+-----+
' -PCTPRIME--integer-'  ' -MAXPRIME--integer-'
.-NBRSECND--10-----
>+-----+-----+-----+
' -NBRSECND--integer-'  ' -DIR--integer-'
>+-----+-----+-----+
' -DSNTYPE--+--LIBRARY+-'
      +-PDS-----+
      +-HFS-----+
      '-NULL-----'

```

```

      .-STACK--NO--.      .-TRTCH--NONE-----.
>>+-----+-----+-----+-----+-----+----->
    '-STACK--YES-'    '-JES3DD--ddname-'    '-TRTCH--+-COMP---+-'
                                   '-NOCOMP-'

```

```

>>-UNLOAD--DATA--from-table-spec-----+----->
|                                     v                                     |
|                                     'from-table-spec-'                   |
|                                     v                                     |
+-----source-spec-----+-----+
|                                     'from-table-spec-'                   |
| -LIST--listdef-name-----+-----+
>--unload-spec-----+----->
| -CLONE- |

```

```
>>-TABLESPACE--+-----+tablespace-name----->
```

DB2® 9 for z/OS
363

```

| .- ,-----|
| v |
|'---field-specification---'|
>----->
|'---WHEN---(selection-condition)---'|

field spec
| .-POSITION(*)-----|
>>--field-name-----|
|'---POSITION(start)---'|
>----->
+--CHAR+-----+
|'---(length)---' +--TRUNCATE-----+
|'---BLOF---+--template-name---'|
|+--CLOBF---+
|'---DBCLOBF---'|
+--VARCHAR+-----+
|'---(length)---' +--strip-spec-----+
|'---BLOF---+--template-name---'|
|+--CLOBF---+
|'---DBCLOBF---'|
+--GRAPHIC+-----+
|'---EXTERNAL---' '---(length)---' '---TRUNCATE---'|
+--VARGRAPHIC+-----+
|'---(length)---' +--strip-spec-----+
+--SMALLINT+-----+
+--INTEGER+-----+
|'---EXTERNAL---' '---(length)---'|
+--BIGINT+-----+
+--BINARY+-----+
|'---(length)---' '---TRUNCATE---'|
+--VARBINARY+-----+
|'---BINARY VARYING---'|
+--strip-spec+-----+
|'---PACKED---'|
+--DECIMAL+-----+
|'---ZONED---' |'---(length)---' |
|'---EXTERNAL---' '---(length)---' |
|'---,scale---'|
+--FLOAT+-----+
|'---EXTERNAL---' '---(length)---'|
+--DOUBLE+-----+
+--REAL+-----+
+--DATE---EXTERNAL+-----+
|'---(length)---'|
+--TIME---EXTERNAL+-----+
|'---(length)---'|
+--TIMESTAMP---EXTERNAL+-----+
|'---(length)---'|
+--CONSTANT---+'string'+-----+
|'---X'hex-string---'|
+--ROWID+-----+
+--BLOB+-----+

```

```

|      '-(length)-'  '-TRUNCATE-'
+-CLOB-----+-----+-----+-----+-----+-----+-----+-----+-----+
|      '-(length)-'  '-TRUNCATE-'
+-DBCLOB-----+-----+-----+-----+-----+-----+-----+-----+-----+
|      '-(length)-'  '-TRUNCATE-'
|      .-(34)-----+-----+-----+-----+-----+-----+-----+-----+-----+
+-DECFLOAT-----+-----+-----+-----+-----+-----+-----+-----+-----+
|      +--(16)-----+-----+-----+-----+-----+-----+-----+-----+-----+
|      '-EXTERNAL--'+-----+-----+-----+-----+-----+-----+-----+-----+
|      '-(length)-'
+-XML-----+-----+-----+-----+-----+-----+-----+-----+-----+

strip spec
>>-----+-----+-----+-----+-----+-----+-----+-----+-----+>
|      .-BOTH---.
+-STRIP-----+-----+-----+-----+-----+-----+-----+-----+-----+
|      +-TRAILING-+ |      +-strip-char'-----+
|      '-LEADING--' +-X'strip-char'-----'
>-----+-----+-----+-----+-----+-----+-----+-----+-----+<
'-TRUNCATE-'
selection-codition spec

>>-----+-----+-----+-----+-----+-----+-----+-----+-----+>
'-selection condition-'
|      .-----+-----+-----+-----+-----+-----+-----+-----+-----+
|      v
>-----+-----+-----+-----+-----+-----+-----+-----+-----+<
'-+-AND-+-+predicate-----+-----+-----+-----+-----+-----+-----+-----+-----+
'-OR--' '-selection condition-'

predicate

>>-----+-----+-----+-----+-----+-----+-----+-----+-----+<
+-BETWEEN predicate-+
+-IN predicate-----+
+-LIKE predicate-----+
'-NULL predicate---'

basic predicate

>>-----+-----+-----+-----+-----+-----+-----+-----+-----+>
+- <> -+
+- > --+
+- < --+
+- >= -+
+- <= -'
>-----+-----+-----+-----+-----+-----+-----+-----+-----+<
'-labeled-duration-expression-'

between predicate

>>-----+-----+-----+-----+-----+-----+-----+-----+-----+>
'-NOT-'

```

```

>--+-constant-----+--AND----->
' -labeled-duration-expression-'
>--+-constant-----+-----><
' -labeled-duration-expression-'

```

IN predicate

```

      .-'.-----'.
      v      |
>>-column-name--+-+---+--IN--(---constant-+-)------><
      '-NOT-'

```

LIKE predicate

```

>>-column-name--+-+---+--LIKE--string-constant----->
      '-NOT-'
>--+-+-----+-----><
      '-ESCAPE--string-constant-'

```

NULL predicate

```

>>-column-name--IS--+-+---+--NULL-----><
      '-NOT-'

```

Labeled-duration-expression

```

>>--+-CURRENT_DATE-----+----->
      '-CURRENT_TIMESTAMP-'

      .-'.-----'.
      v      |
>---+- + -+-constant--+-YEAR-----+-----><
      '- - -'          +-YEARS-----+
                        +-MONTH-----+
                        +-MONTHS-----+
                        +-DAY-----+
                        +-DAYS-----+
                        +-HOUR-----+
                        +-HOURS-----+
                        +-MINUTE-----+
                        +-MINUTES-----+
                        +-SECOND-----+
                        +-SECONDS-----+
                        +-MICROSECOND--+
                        '-MICROSECONDS-'

```

SQL Positive Return Codes

000	SUCCESSFUL EXECUTION
+012	THE UNQUALIFIED COLUMN NAME <i>column-name</i> WAS INTERPRETED AS A CORRELATED REFERENCE
+098	A DYNAMIC SQL STATEMENT ENDS WITH A SEMICOLON
+100	ROW NOT FOUND FOR FETCH, UPDATE OR DELETE, OR THE RESULT OF A QUERY IS AN EMPTY TABLE
+110	SQL UPDATE TO A DATA CAPTURE TABLE NOT SIGNALLED TO ORIGINATING SUBSYSTEM
+111	THE SUBPAGES OPTION IS NOT SUPPORTED FOR TYPE 2 INDEXES
+117	THE NUMBER OF INSERT VALUES IS NOT THE SAME AS THE NUMBER OF OBJECT COLUMNS
+162	TABLESPACE <i>database-name.tablespace-name</i> HAS BEEN PLACED IN CHECK PENDING
+203	THE QUALIFIED COLUMN NAME <i>column-name</i> WAS RESOLVED USING A NON-UNIQUE OR UNEXPOSED NAME
+204	<i>name</i> IS AN UNDEFINED NAME
+205	<i>column-name</i> IS NOT A COLUMN OF TABLE <i>table-name</i>
+206	<i>column-name</i> IS NOT A COLUMN OF AN INSERTED TABLE, UPDATED TABLE, OR ANY TABLE IDENTIFIED IN A FROM CLAUSE
+218	THE SQL STATEMENT REFERENCING A REMOTE OBJECT CANNOT BE EXPLAINED
+219	THE REQUIRED EXPLANATION TABLE <i>table-name</i> DOES NOT EXIST
+220	THE COLUMN <i>column-name</i> IN EXPLANATION TABLE <i>table-name</i> IS NOT DEFINED PROPERLY
+231	CURRENT POSITION OF CURSOR <i>cursor-name</i> IS NOT VALID FOR THE SPECIFIED FETCH ORIENTATION OF THE CURRENT ROW OR ROWSET
+236	SQLDA INCLUDES <i>integer1</i> SQLVAR ENTRIES, BUT <i>integer2</i> ARE REQUIRED FOR <i>integer3</i> COLUMNS
+236	SQLDA INCLUDES <i>integer1</i> SQLVAR ENTRIES, BUT <i>integer2</i> ARE REQUIRED FOR <i>integer3</i> COLUMNS
+238	SQLDA INCLUDES <i>integer1</i> SQLVAR ENTRIES, BUT <i>integer2</i> SQLVAR ENTRIES ARE NEEDED FOR <i>integer3</i> COLUMNS BECAUSE AT LEAST ONE OF THE COLUMNS BEING DESCRIBED IS A LOB
+239	SQLDA INCLUDES <i>integer1</i> SQLVAR ENTRIES, BUT <i>integer2</i> ARE REQUIRED FOR <i>integer3</i> COLUMNS BECAUSE AT LEAST ONE OF THE COLUMNS BEING DESCRIBED IS A DISTINCT TYPE
+252	A NON-ATOMIC statement STATEMENT SUCCESSFULLY PROCESSED ALL REQUESTED ROWS, WITH ONE OR MORE WARNING CONDITION
+304	A VALUE WITH DATA TYPE <i>data-type1</i> CANNOT BE ASSIGNED TO A HOST VARIABLE BECAUSE THE VALUE IS NOT WITHIN THE RANGE OF THE HOST VARIABLE IN POSITION <i>position-number</i> WITH DATA TYPE <i>data-type2</i>
+331	THE NULL VALUE HAS BEEN ASSIGNED TO A HOST VARIABLE BECAUSE THE STRING CANNOT BE TRANSLATED. REASON <i>reason-code</i> , CHARACTER <i>code-point</i> , HOST VARIABLE <i>position-number</i>
+339	THE SQL STATEMENT HAS BEEN SUCCESSFULLY EXECUTED, BUT THERE MAY BE SOME CHARACTER CONVERSION INCONSISTENCIES
+347	THE RECURSIVE COMMON TABLE EXPRESSION name MAY CONTAIN AN INFINITE LOOP
+354	A ROWSET FETCH STATEMENT MAY HAVE RETURNED ONE OR MORE ROWS OF

	DATA. HOWEVER, ONE OR MORE WARNING CONDITIONS WERE ALSO ENCOUNTERED. USE THE GET DIAGNOSTICS STATEMENT FOR MORE INFORMATION REGARDING THE CONDITIONS THAT WERE ENCOUNTERED.
+361	COMMAND WAS SUCCESSFUL BUT RESULTED IN THE FOLLOWING: <i>msg-token</i>
+364	DECFLOAT EXCEPTION <i>exception-type</i> HAS OCCURRED DURING <i>operation-type</i> OPERATION, POSITION <i>position-type</i>
+385	ASSIGNMENT TO AN SQLSTATE OR SQLCODE VARIABLE IN AN SQL ROUTINE <i>routine-name</i> MAY BE OVERWRITTEN AND DOES NOT ACTIVATE ANY HANDLER.
+394	ALL USER SPECIFIED OPTIMIZATION HINTS USED DURING ACCESS PATH SELECTION
+395	USER SPECIFIED OPTIMIZATION HINTS ARE INVALID (REASON CODE = 'reason-code'). THE OPTIMIZATION HINTS ARE IGNORED.
+402	LOCATION <i>location</i> IS UNKNOWN
+403	THE LOCAL OBJECT REFERENCED BY CREATE ALIAS STATEMENT DOES NOT EXIST
+434	<i>clause</i> IS A DEPRECATED FEATURE
+438	APPLICATION RAISED WARNING WITH DIAGNOSTIC TEXT: <i>test</i>
+440	NO <i>routine-type</i> BY THE NAME <i>routine-name</i> HAVING COMPATIBLE ARGUMENTS WAS FOUND
+445	VALUE <i>value</i> HAS BEEN TRUNCATED
+462	EXTERNAL FUNCTION OR PROCEDURE <i>name</i> (SPECIFIC NAME <i>specific-name</i>) HAS RETURNED A WARNING SQLSTATE, WITH DIAGNOSTIC TEXT <i>text</i>
+464	PROCEDURE <i>proc</i> RETURNED <i>num</i> QUERY RESULT SETS, WHICH EXCEEDS THE DEFINED LIMIT <i>integer</i>
+466	CREATE PROCEDURE <i>proc</i> RETURNED <i>num</i> QUERY RESULTS SETS
+494	NUMBER OF RESULT SETS IS GREATER THAN NUMBER OF LOCATORS
+495	ESTIMATED PROCESSOR COST OF <i>estimate-amount1</i> PROCESSOR SECONDS (<i>estimate-amount2</i> SERVICE UNITS) IN COST CATEGORY <i>cost-category</i> EXCEEDS A RESOURCE LIMIT WARNING THRESHOLD OF <i>limit-amount</i> SERVICE UNITS
+535	THE RESULT OF THE POSITIONED UPDATE OR DELETE MAY DEPEND ON THE ORDER OF THE ROWS
+541	THE REFERENTIAL OR UNIQUE CONSTRAINT <i>name</i> HAS BEEN IGNORED BECAUSE IT IS A DUPLICATE
+551	<i>auth-id</i> DOES NOT HAVE THE PRIVILEGE TO PERFORM OPERATION <i>operation</i> ON OBJECT <i>object-name</i>
+552	<i>auth-id</i> DOES NOT HAVE THE PRIVILEGE TO PERFORM OPERATION <i>operation</i>
+558	THE WITH GRANT OPTION IS IGNORED
+561	THE ALTER, INDEX, REFERENCES, AND TRIGGER PRIVILEGES CANNOT BE GRANTED PUBLIC AT ALL LOCATIONS
+562	A GRANT OF A PRIVILEGE WAS IGNORED BECAUSE THE GRANTEE ALREADY HAS THE PRIVILEGE FROM THE GRANTOR
+585	THE SCHEMA NAME <i>schema-name</i> APPEARS MORE THAN ONCE IN THE CURRENT PATH
+599	COMPARISON FUNCTIONS ARE NOT CREATED FOR A DISTINCT TYPE BASED ON A LONG STRING DATA TYPE
+610	A CREATE/ALTER ON OBJECT <i>object-name</i> HAS PLACED OBJECT IN <i>utility</i> PENDING
+625	THE DEFINITION OF TABLE <i>table-name</i> HAS BEEN CHANGED TO INCOMPLETE
+626	DROPPING THE INDEX TERMINATES ENFORCEMENT OF THE UNIQUENESS OF A KEY THAT WAS DEFINED WHEN THE TABLE WAS CREATED
+645	WHERE NOT NULL IS IGNORED BECAUSE THE INDEX KEY CANNOT CONTAIN NULL VALUES OR THE INDEX IS AN XML INDEX
+650	THE TABLE BEING CREATED OR ALTERED CANNOT BECOME A DEPENDENT TABLE

+653	TABLE <i>table-name</i> IN PARTITIONED TABLESPACE <i>tspacename</i> IS NOT AVAILABLE BECAUSE ITS PARTITIONED INDEX HAS NOT BEEN CREATED
+655	STOGROUP <i>stogroup_name</i> HAS BOTH SPECIFIC AND NON-SPECIFIC VOLUME IDS. IT WILL NOT BE ALLOWED IN FUTURE RELEASES
+658	THE SUBPAGES VALUE IS IGNORED FOR THE CATALOG INDEX <i>index-name</i>
+664	THE INTERNAL LENGTH OF THE LIMIT-KEY FIELDS SPECIFIED IN THE PARTITION CLAUSE OF THE <i>statement-name</i> STATEMENT EXCEEDS THE EXISTING INTERNAL LIMIT KEY LENGTH STORED IN CATALOG TABLE <i>table-name</i>
+738	DEFINITION CHANGE OF <i>object object_name</i> MAY REQUIRE SIMILAR CHANGE ON READ-ONLY SYSTEMS
+799	A SET STATEMENT REFERENCES A SPECIAL REGISTER THAT DOES NOT EXIST AT THE SERVER SITE
+802	EXCEPTION ERROR <i>exception-type</i> HAS OCCURRED DURING <i>operation-type</i> OPERATION ON <i>data-type</i> DATA, POSITION <i>position-number</i>
+806	BIND ISOLATION LEVEL RR CONFLICTS WITH TABLESPACE LOCKSIZE PAGE OR LOCKSIZE ROW AND LOCKMAX 0
+807	THE RESULT OF DECIMAL MULTIPLICATION MAY CAUSE OVERFLOW
+863	THE CONNECTION WAS SUCCESSFUL BUT ONLY SBCS WILL BE SUPPORTED
+883	ROLLBACK TO SAVEPOINT OCCURRED WHEN THERE WERE OPERATIONS THAT CANNOT BE UNDONE, OR AN OPERATION THAT CANNOT BE UNDONE WAS PERFORMED WHEN THERE WAS A SAVEPOINT OUTSTANDING
+2000	TYPE 1 INDEXES WITH SUBPAGES GREATER THAN 1 CANNOT BECOME GROUP BUFFER POOL DEPENDENT IN A DATA-SHARING ENVIRONMENT
+20002	THE <i>clause</i> SPECIFICATION IS IGNORED FOR THE OBJECT <i>object-name</i>
+20007	USE OF OPTIMIZATION HINTS IS DISALLOWED BY A DB2 SUBSYSTEM THE SPECIAL REGISTER 'OPTIMIZATION HINT' IS SET TO THE DEFAULT VALUE OF BLANKS.
+20122	DEFINE NO OPTION IS NOT APPLICABLE IN THE CONTEXT SPECIFIED
+20141	TRUNCATION OF VALUE WITH LENGTH <i>length</i> OCCURRED FOR <i>hv-or-param-number</i>
+20187	ROLLBACK TO SAVEPOINT CAUSED A NOT LOGGED TABLE SPACE TO BE PLACED IN THE LPL
+20237	FETCH PRIOR ROWSET FOR CURSOR <i>cursor-name</i> RETURNED A PARTIAL ROWSET
+20245	NOT PADDED CLAUSE IS IGNORED FOR INDEXES CREATED ON AUXILIARY TABLES
+20270	OPTION NOT SPECIFIED FOLLOWING ALTER PARTITION CLAUSE
+20272	TABLE SPACE <i>table-space-name</i> HAS BEEN CONVERTED TO USE TABLE-CONTROLLED PARTITIONING INSTEAD OF INDE CONTROLLED PARTITIONING, ADDITIONAL INFORMATION <i>old-limit-key-value</i>
+20348	THE PATH VALUE HAD BEEN TRUNCATED
+20360	TRUSTED CONNECTION CAN NOT BE ESTABLISHED FOR SYSTEM AUTHID <i>authorization-name</i>
+20365	A SIGNALING NAN WAS ENCOUNTERED, OR AN EXCEPTION OCCURRED IN AN ARITHMETIC OPERATION OR FUNCTION INVOLVING A DECFLOAT
+20371	THE ABILITY TO USE TRUSTED CONTEXT <i>context-name</i> WAS REMOVED FROM SOME, BUT NOT ALL AUTHORIZATION IDS SPECIFIED IN THE STATEMENT
+20378	A NON-ATOMIC <i>statement</i> STATEMENT SUCCESSFULLY COMPLETED FOR SOME OF THE REQUESTED ROWS, POSSIBLY WITH WARNING, AND ONE OR MORE ERRORS, AND THE CURSOR CAN BE USED
+30100	OPERATION COMPLETED SUCCESSFULLY BUT A DISTRIBUTION PROTOCOL VIOLATION HAS BEEN DETECTED. ORIGINAL SQLCODE= <i>original-sqlcode</i> AND ORIGINAL SQLSTATE= <i>original-sqlstate</i>

SQL Error Return Codes

-007	STATEMENT CONTAINS THE ILLEGAL CHARACTER <i>character</i>
-010	THE STRING CONSTANT BEGINNING <i>string</i> IS NOT TERMINATED
-011	COMMENT NOT CLOSED
-029	INTO CLAUSE REQUIRED
-051	Name (<i>sqltype</i>) WAS PREVIOUSLY DECLARED OR REFERENCED
-056	AN SQLSTATE OR SQLCODE VARIABLE DECLARATION IS IN A NESTED COMPOUND STATEMENT
-058	VALUE SPECIFIED ON RETURN STATEMENT MUST BE AN INTEGER
-060	INVALID <i>type</i> SPECIFICATION : <i>spec</i>
-078	PARAMETER NAMES MUST BE SPECIFIED FOR ROUTINE <i>routine-name</i>
-079	QUALIFIER FOR OBJECT <i>name</i> WAS SPECIFIED AS <i>qualifier1</i> but <i>qualifier2</i> IS REQUIRED
-084	UNACCEPTABLE SQL STATEMENT
-087	A NULL VALUE WAS SPECIFIED IN A CONTEXT WHERE A NULL IS NOT ALLOWED
-096	VARIABLE <i>variable-name</i> DOES NOT EXIST OR IS NOT SUPPORTED BY THE SERVER AND A DEFAULT VALUE WAS NOT PROVIDED
-097	THE USE OF LONG VARCHAR OR LONG VARGRAPHIC IS NOT ALLOWED IN THIS CONTEXT
-101	THE STATEMENT IS TOO LONG OR TOO COMPLEX
-102	LITERAL STRING IS TOO LONG. STRING BEGINS <i>string</i>
-103	<i>constant</i> IS AN INVALID NUMERIC constant
-104	ILLEGAL SYMBOL " <i>token</i> ". SOME SYMBOLS THAT MIGHT BE LEGAL ARE: <i>token-list</i>
-105	INVALID STRING
-107	THE NAME <i>name</i> IS TOO LONG. MAXIMUM ALLOWABLE SIZE IS
-108	THE NAME <i>name</i> IS QUALIFIED INCORRECTLY
-109	<i>clause</i> CLAUSE IS NOT PERMITTED
-110	INVALID HEXADECIMAL LITERAL BEGINNING <i>string</i>
-111	AN AGGREGATE FUNCTION DOES NOT INCLUDE A COLUMN NAME
-112	THE OPERAND OF AN AGGREGATE FUNCTION INCLUDES AN AGGREGATE FUNCTION, AND OLAP SPECIFICATION, OR SCALAR FULLSELECT
-113	INVALID CHARACTER FOUND IN <i>string</i> , REASON CODE <i>nnn</i>
-114	THE LOCATION NAME <i>location</i> DOES NOT MATCH THE CURRENT SERVER
-115	A PREDICATE IS INVALID BECAUSE THE COMPARISON OPERATOR <i>operator</i> IS FOLLOWED BY A PARENTHESESIZED LIST OR BY ANY OR ALL WITHOUT A SUBQUERY
-117	THE NUMBER OF VALUES ASSIGNED IS NOT THE SAME AS THE NUMBER OF SPECIFIED OR IMPLIED COLUMNS
-118	THE OBJECT TABLE OR VIEW OF THE DELETE OR UPDATE STATEMENT IS ALSO IDENTIFIED IN A FROM CLAUSE
-119	A COLUMN OR EXPRESSION IN A HAVING CLAUSE IS NOT VALID
-120	AN AGGREGATE FUNCTION OR OLAP SPECIFICATION IS NOT VALID IN THE CONTEXT IN WHICH IS WAS INVOKED
-121	THE COLUMN <i>name</i> IS IDENTIFIED MORE THAN ONCE IN THE INSERT OR UPDATE OR SET TRANSITION VARIABLE STATEMENT
-122	COLUMN OR EXPRESSION IN THE SELECT LIST IS NOT VALID
-123	THE PARAMETER IN POSITION <i>n</i> IN THE FUNCTION <i>name</i> MUST BE A CONSTANT OR KEYWORD
-125	AN INTEGER IN THE ORDER BY CLAUSE DOES NOT IDENTIFY A COLUMN OF THE

	RESULT
-126	THE SELECT STATEMENT CONTAINS BOTH AN UPDATE CLAUSE AND AN ORDER BY CLAUSE
-127	DISTINCT IS SPECIFIED MORE THAN ONCE IN A SUBSELECT
-128	INVALID USE OF NULL IN A PREDICATE
-129	THE STATEMENT CONTAINS TOO MANY TABLE NAMES
-130	THE ESCAPE CLAUSE CONSISTS OF MORE THAN ONE CHARACTER, OR THE STRING PATTERN CONTAINS AN INVALID OCCURRENCE OF THE ESCAPE CHARACTER
-131	STATEMENT WITH LIKE PREDICATE HAS INCOMPATIBLE DATA TYPES
-132	AN OPERAND OF <i>value</i> IS NOT VALID
-133	AN AGGREGATE FUNCTION IN A SUBQUERY OF A HAVING CLAUSE IS INVALID BECAUSE ALL COLUMN REFERENCES IN ITS ARGUMENT ARE NOT CORRELATED TO THE GROUP BY RESULT THAT THE HAVING CLAUSE IS APPLIED TO
-134	IMPROPER USE OF A STRING, LOB, OR XML VALUE
-136	SORT CANNOT BE EXECUTED BECAUSE THE SORT KEY LENGTH IS TOO LONG
-137	THE LENGTH RESULTING FROM <i>operation</i> IS GREATER THAN <i>maximum-length</i>
-138	THE SECOND OR THIRD ARGUMENT OF THE SUBSTR OR SUBSTRING FUNCTION IS OUT OF RANGE
-142	THE SQL STATEMENT IS NOT SUPPORTED
-144	INVALID SECTION NUMBER <i>number</i>
-147	ALTER FUNCTION <i>function-name</i> FAILED BECAUSE SOURCE FUNCTIONS OR NOT FENCED EXTERNAL FUNCTION CANNOT BE ALTERED
-148	THE SOURCE TABLE <i>source-name</i> CANNOT BE RENAMED OR ALTERED, REASON <i>reason-code</i>
-150	THE OBJECT OF THE INSERT, DELETE, UPDATE, MERGE, OR TRUNCATE STATEMENT IS A VIEW, SYSTEM-MAINTAINED MATERIALIZED QUERY TABLE, OR TRANSITION TABLE FOR WHICH THE REQUESTED OPERATION IS NOT PERMITTED
-151	THE UPDATE OPERATION IS INVALID BECAUSE THE CATALOG DESCRIPTION OF COLUMN <i>column-name</i> INDICATES THAT IT CANNOT BE UPDATED
-152	THE DROP <i>clause</i> CLAUSE IN THE ALTER STATEMENT IS INVALID BECAUSE <i>constraint-name</i> IS A <i>constraint-type</i>
-153	THE STATEMENT IS INVALID BECAUSE THE VIEW OR TABLE DEFINITION DOES NOT INCLUDE A UNIQUE NAME FOR EACH COLUMN
-154	THE STATEMENT FAILED BECAUSE VIEW OR TABLE DEFINITION IS NOT VALID
-156	THE STATEMENT DOES NOT IDENTIFY A TABLE
-157	ONLY A TABLE NAME CAN BE SPECIFIED IN A FOREIGN KEY CLAUSE. <i>object-name</i> IS NOT THE NAME OF A TABLE.
-158	THE NUMBER OF COLUMNS SPECIFIED FOR THE VIEW IS NOT THE SAME AS THE NUMBER OF COLUMNS SPECIFIED BY THE SELECT CLAUSE, OR THE NUMBER OF COLUMNS SPECIFIED IN THE CORRELATION CLAUSE IN A FROM CLAUSE IS NOT THE SAME AS THE NUMBER OF COLUMNS IN THE CORRESPONDING TABLE, VIEW, TABLE EXPRESSION, OR TABLE FUNCTION
-159	THE STATEMENT REFERENCES <i>object-name</i> WHICH IDENTIFIES AN <i>object-type</i> RATHER THAN AN <i>expected-object-type</i>
-160	THE WITH CHECK OPTION CANNOT BE USED FOR THE SPECIFIED VIEW
-161	THE INSERT OR UPDATE IS NOT ALLOWED BECAUSE A RESULTING ROW DOES NOT SATISFY THE VIEW DEFINITION
-164	<i>auth-id1</i> DOES NOT HAVE THE PRIVILEGE TO CREATE A VIEW WITH QUALIFICATION <i>authorization ID</i>
-170	THE NUMBER OF ARGUMENTS SPECIFIED FOR <i>function-name</i> IS INVALID

-171	THE DATA TYPE, LENGTH, OR VALUE OF ARGUMENT <i>nn</i> OF ARGUMENT <i>nn</i> OR function-name IS INVALID
-173	UR IS SPECIFIED ON THE WITH CLAUSE BUT THE CURSOR IS NOT READ-ONLY
-180	THE DATE, TIME, OR TIMESTAMP VALUE <i>value</i> IS INVALID
-181	THE STRING REPRESENTATION OF A DATETIME VALUE IS NOT A VALID DATETIME VALUE
-182	AN ARITHMETIC EXPRESSION WITH A DATETIME VALUE IS INVALID
-183	AN ARITHMETIC OPERATION ON A DATE OR TIMESTAMP HAS A RESULT THAT IS NOT WITHIN THE VALID RANGE OF DATES
-184	AN ARITHMETIC EXPRESSION WITH A DATETIME VALUE CONTAINS A PARAMETER MARKER
-185	THE LOCAL FORMAT OPTION HAS BEEN USED WITH A DATE OR TIME AND NO LOCAL EXIT HAS BEEN INSTALLED
-186	THE LOCAL DATE LENGTH OR LOCAL TIME LENGTH HAS BEEN INCREASED AND EXECUTING PROGRAM RELIES ON THE OLD LENGTH
-187	A REFERENCE TO A CURRENT DATE/TIME SPECIAL REGISTER IS INVALID BECAUSE THE MVS TOD CLOCK IS BAD OR THE MVS PARMTZ IS OUT OF RANGE
-188	THE STRING REPRESENTATION OF A NAME IS INVALID
-189	CCSID <i>ccsid</i> IS INVALID
-190	THE ATTRIBUTES SPECIFIED FOR THE COLUMN <i>table-name.column-name</i> ARE NOT COMPATIBLE WITH THE EXISTING COLUMN DEFINITION
-191	A STRING CANNOT BE USED BECAUSE IT IS INVALID MIXED DATA
-197	QUALIFIED COLUMN NAMES IN ORDER BY CLAUSE NOT PERMITTED WHEN UNION OR UNION ALL SPECIFIED
-198	THE OPERAND OF THE PREPARE OR EXECUTE IMMEDIATE STATEMENT IS BLANK OR EMPTY
-199	ILLEGAL USE OF KEYWORD <i>keyword</i> TOKEN <i>token-list</i> WAS EXPECTED
-203	A REFERENCE TO COLUMN <i>column-name</i> IS AMBIGUOUS
-204	<i>name</i> IS AN UNDEFINED NAME
-205	<i>column-name</i> IS NOT A COLUMN OF TABLE <i>table-name</i>
-206	<i>name</i> IS NOT VALID IN THE CONTEXT WHERE IT IS USED
-208	THE ORDER BY CLAUSE IS INVALID BECAUSE COLUMN <i>name</i> IS NOT, PART OF THE RESULT TABLE
-212	<i>name</i> IS SPECIFIED MORE THAN ONCE IN THE REFERENCING CLAUSE OF A TRIGGER DEFINITION
-214	AN EXPRESSION IN THE FOLLOWING POSITION, OR STARTING WITH <i>position-or-expression-start</i> IN THE <i>clause-type</i> CLAUSE IS NOT VALID. REASON CODE = <i>reason-code</i>
-216	THE NUMBER OF ELEMENTS ON EACH SIDE OF A PREDICATE OPERATOR DOES NOT MATCH. PREDICATE OPERATOR IS <i>operator</i> .
-219	THE REQUIRED EXPLANATION TABLE <i>table-name</i> DOES NOT EXIST
-220	THE COLUMN <i>column-name</i> IN EXPLANATION TABLE <i>table-name</i> IS NOT DEFINED PROPERLY
-221	"SET OF OPTIONAL COLUMNS" IN EXPLANATION TABLE <i>table-name</i> IS INCOMPLETE OPTIONAL COLUMN <i>column-name</i> IS MISSING
-222	AN UPDATE OR DELETE OPERATION WAS ATTEMPTED AGAINST A HOLE USING CURSOR <i>cursor-name</i>
-224	THE RESULT TABLE DOES NOT AGREE WITH THE BASE TABLE USING <i>cursor-name</i>
-225	FETCH STATEMENT FOR <i>cursor-name</i> IS NOT VALID FOR THE DECLARATION OF THE CURSOR
-227	FETCH <i>fetch-orientation</i> IS NOT ALLOWED, BECAUSE CURSOR <i>cursor-name</i> HAS AN

	UNKNOWN POSITION (sqlcode,sqlstate)
-228	FOR UPDATE CLAUSE SPECIFIED FOR READ-ONLY CURSOR <i>cursor-name</i>
-229	THE LOCALE <i>locale</i> SPECIFIED IN A SET LOCALE OR OTHER STATEMENT THAT IS LOCALE SENSITIVE WAS NOT FOUND
-240	THE PARTITION CLAUSE OF A LOCK TABLE STATEMENT IS INVALID
-242	THE OBJECT NAMED <i>object-name</i> OF TYPE <i>object-type</i> WAS SPECIFIED MORE THAN ONCE IN THE LIST OF OBJECTS, OR THE NAME IS THE SAME AS AN EXISTING OBJECT
-243	SENSITIVE CURSOR <i>cursor-name</i> CANNOT BE DEFINED FOR THE SPECIFIED SELECT STATEMENT
-244	SENSITIVITY <i>sensitivity</i> SPECIFIED ON THE FETCH IS NOT VALID FOR CURSOR <i>cursor-name</i>
-245	THE INVOCATION OF FUNCTION <i>routine-name</i> IS AMBIGUOUS
-246	STATEMENT USING CURSOR <i>cursor-name</i> SPECIFIED NUMBER OF ROWS <i>num-rows</i> WHICH IS NOT VALID WITH <i>dimension</i>
-247	A HOLE WAS DETECTED ON A MULTIPLE ROW FETCH STATEMENT USING CURSOR <i>cursor-name</i> , BUT INDICATOR VARIABLES WERE NOT PROVIDED TO DETECT THE CONDITION
-248	A POSITIONED DELETE OR UPDATE STATEMENT FOR CURSOR <i>cursor-name</i> SPECIFIED ROW <i>n</i> OF A ROWSET, BUT THE ROW IS NOT CONTAINED WITHIN THE CURRENT ROWSET
-249	DEFINITION OF ROWSET ACCESS FOR CURSOR <i>cursor-name</i> IS INCONSISTENT WITH THE FETCH ORIENTATION CLAUSE <i>clause</i> SPECIFIED
-250	THE LOCAL LOCATION NAME IS NOT DEFINED WHEN PROCESSING A THREE-PART OBJECT NAME
-251	TOKEN <i>name</i> IS NOT VALID
-253	A NON-ATOMIC <i>statement</i> STATEMENT SUCCESSFULLY COMPLETED FOR SOME OF THE REQUESTED ROWS, POSSIBLY WITH WARNINGS, AND ONE OR MORE ERRORS
-254	A NON-ATOMIC <i>statement</i> STATEMENT ATTEMPTED TO PROCESS MULTIPLE ROWS OF DATA, BUT ERRORS OCCURRED
-270	FUNCTION NOT SUPPORTED
-300	THE STRING CONTAINED IN HOST VARIABLE OR PARAMETER <i>position-number</i> IS NOT NUL-TERMINATED
-301	THE VALUE OF INPUT HOST VARIABLE OR PARAMETER NUMBER <i>position-number</i> CANNOT BE USED AS SPECIFIED BECAUSE OF ITS DATA TYPE
-302	THE VALUE OF INPUT VARIABLE OR PARAMETER NUMBER <i>position-number</i> IS INVALID OR TOO LARGE FOR THE TARGET COLUMN OR THE TARGET VALUE
-303	A VALUE CANNOT BE ASSIGNED TO OUTPUT HOST VARIABLE NUMBER <i>position-number</i> BECAUSE THE DATA TYPES ARE NOT COMPARABLE
-304	A VALUE WITH DATA TYPE <i>data-type1</i> CANNOT BE ASSIGNED TO A HOST VARIABLE BECAUSE THE VALUE IS NOT WITHIN THE RANGE OF THE HOST VARIABLE IN POSITION <i>position-number</i> WITH DATA TYPE <i>data-type2</i>
-305	THE NULL VALUE CANNOT BE ASSIGNED TO OUTPUT HOST VARIABLE NUMBER <i>position-number</i> BECAUSE NO INDICATOR VARIABLE IS SPECIFIED
-309	A PREDICATE IS INVALID BECAUSE A REFERENCED HOST VARIABLE HAS THE NULL VALUE
-310	DECIMAL HOST VARIABLE OR PARAMETER <i>number</i> CONTAINS NON-DECIMAL DATA
-311	THE LENGTH OF INPUT HOST VARIABLE NUMBER <i>position-number</i> IS NEGATIVE OR GREATER THAN THE MAXIMUM
-312	VARIABLE <i>variable-name</i> IS NOT DEFINED OR NOT USABLE
-313	THE NUMBER OF HOST VARIABLES SPECIFIED IS NOT EQUAL TO THE NUMBER OF PARAMETER MARKERS

-314	THE STATEMENT CONTAINS AN AMBIGUOUS HOST VARIABLE REFERENCE
-327	THE ROW CANNOT BE INSERTED BECAUSE IT IS OUTSIDE THE BOUND OF THE PARTITION RANGE FOR THE LAST PARTITION
-330	A STRING CANNOT BE USED BECAUSE IT CANNOT BE PROCESSED. REASON <i>reason-code</i> , CHARACTER <i>code-point</i> , HOST VARIABLE <i>position-number</i>
-331	CHARACTER CONVERSION CANNOT BE PERFORMED BECAUSE A STRING, POSITION <i>position-number</i> , CANNOT BE CONVERTED FROM <i>source-ccsid</i> TO <i>target-ccsid</i> , REASON <i>reason-code</i>
-332	CHARACTER CONVERSION BETWEEN CCSID <i>from-ccsid</i> TO <i>to-ccsid</i> REQUESTED BY <i>reason-code</i> IS NOT SUPPORTED
-333	THE SUBTYPE OF A STRING VARIABLE IS NOT THE SAME AS THE SUBTYPE KNOWN AT BIND TIME AND THE DIFFERENCE CANNOT BE RESOLVED BY CHARACTER CONVERSION
-336	THE SCALE OF THE DECIMAL NUMBER MUST BE ZERO
-338	AN ON CLAUSE IS INVALID
-340	THE COMMON TABLE EXPRESSION <i>name</i> HAS THE SAME IDENTIFIER AS ANOTHER OCCURRENCE OF A COMMON TABLE EXPRESSION DEFINITION WITHIN THE SAME STATEMENT
-341	A CYCLIC REFERENCE EXISTS BETWEEN THE COMMON TABLE EXPRESSIONS <i>name1</i> AND <i>name2</i>
-342	THE COMMON TABLE EXPRESSION <i>name</i> MUST NOT USE SELECT DISTINCT AND MUST USE UNION ALL BECAUSE IT IS RECURSIVE
-343	E COLUMN NAMES ARE REQUIRED FOR THE RECURSIVE COMMON TABLE EXPRESSION <i>name</i>
-344	THE RECURSIVE COMMON TABLE EXPRESSION <i>name</i> HAS MISMATCHED DATA TYPES OR LENGTHS OR CODE PAGE FOR COLUMN <i>column-name</i>
-345	THE FULLSELECT OF THE RECURSIVE COMMON TABLE EXPRESSION <i>name</i> MUST BE A UNION ALL AND MUST NOT INCLUDE AGGREGATE FUNCTIONS, GROUP BY CLAUSE, HAVING CLAUSE, OR AN EXPLICIT JOIN INCLUDING AN ON CLAUSE
-346	AN INVALID REFERENCE TO COMMON TABLE EXPRESSION <i>name</i> OCCURS IN THE FIRST FULLSELECT, AS A SECOND OCCURRENCE IN THE SAME FROM CLAUSE, OR IN THE FROM CLAUSE OF A SUBQUERY
-348	<i>sequence-expression</i> CANNOT BE SPECIFIED IN THIS CONTEXT
-350	<i>column-name</i> WAS IMPLICITLY OR EXPLICITLY REFERENCED IN A CONTEXT IN WHICH IT CANNOT BE USED
-351	AN UNSUPPORTED SQLTYPE WAS ENCOUNTERED IN POSITION <i>position-number</i> OF THE SELECT-LIST
-352	AN UNSUPPORTED SQLTYPE WAS ENCOUNTERED IN POSITION <i>position-number</i> OF THE INPUT-LIST
-353	FETCH IS NOT ALLOWED, BECAUSE CURSOR <i>cursor-name</i> HAS AN UNKNOWN POSITION
-354	A ROWSET FETCH STATEMENT MAY HAVE RETURNED ONE OR MORE ROWS OF DATA. HOWEVER, ONE OR MORE NON-TERMINATING ERROR CONDITIONS WERE ENCOUNTERED. USE THE GET DIAGNOSTICS STATEMENT FOR MORE INFORMATION REGARDING THE CONDITIONS THAT WERE ENCOUNTERED
-355	A LOB COLUMN IS TOO LARGE TO BE LOGGED
-356	KEY EXPRESSION <i>key-expr-num</i> IS NOT VALID, REASON CODE = <i>reason-code</i>
-359	THE RANGE OF VALUES FOR THE IDENTITY COLUMN IS EXHAUSTED
-372	ONLY ONE ROWID, IDENTITY, OR SECURITY LABEL COLUMN IS ALLOWED IN A TABLE
-373	DEFAULT CANNOT BE SPECIFIED FOR COLUMN OR SQL VARIABLE <i>name</i>
-374	THE CLAUSE <i>clause</i> HAS NOT BEEN SPECIFIED IN THE CREATE OR ALTER FUNCTION

	STATEMENT FOR LANGUAGE SQL FUNCTION <i>function-name</i> BUT AN EXAMINATION OF THE FUNCTION BODY REVEALS THAT IT SHOULD BE SPECIFIED
-390	THE FUNCTION <i>function-name</i> , SPECIFIC NAME <i>specific-name</i> , IS NOT VALID IN THE CONTEXT WHERE IT IS USED
-392	SQLDA PROVIDED FOR CURSOR <i>cursor</i> HAS BEEN CHANGED FROM THE PREVIOUS FETCH
-393	THE CONDITION OR CONNECTION NUMBER IS INVALID
-396	<i>object-type</i> <i>object-name</i> ATTEMPTED TO EXECUTE AN SQL STATEMENT DURING FINAL CALL PROCESSING
-397	GENERATED IS SPECIFIED AS PART OF A COLUMN DEFINITION, BUT IT IS NOT VALID FOR THE DEFINITION OF THE COLUMN
-398	A LOCATOR WAS REQUESTED FOR HOST VARIABLE NUMBER <i>position-number</i> BUT THE VARIABLE IS NOT A LOB
-399	INVALID VALUE ROWID WAS SPECIFIED
-400	THE CATALOG HAS THE MAXIMUM NUMBER OF USER DEFINED INDEXES
-401	THE OPERANDS OF AN ARITHMETIC OR COMPARISON OPERATION ARE NOT COMPARABLE
-402	AN ARITHMETIC FUNCTION OR OPERATOR <i>arith-fop</i> IS APPLIED TO CHARACTER OR DATETIME DATA
-404	THE SQL STATEMENT SPECIFIES A STRING THAT IS TOO LONG
-405	THE NUMERIC LITERAL <i>literal</i> CANNOT BE USED AS SPECIFIED BECAUSE IT IS OUT OF RANGE
-406	A CALCULATED OR DERIVED NUMERIC VALUE IS NOT WITHIN THE RANGE OF ITS OBJECT COLUMN
-407	AN UPDATE, INSERT, OR SET VALUE IS NULL, BUT THE OBJECT COLUMN <i>column-name</i> CANNOT CONTAIN NULL VALUES
-408	THE VALUE IS NOT COMPATIBLE WITH THE DATA TYPE OF ITS TARGET
-409	INVALID OPERAND OF A COUNT FUNCTION
-410	A NUMERIC VALUE <i>value</i> IS TOO LONG, OR IT HAS A VALUE THAT IS NOT WITHIN THE RANGE OF ITS DATA TYPE
-411	CURRENT SQLID CANNOT BE USED IN A STATEMENT THAT REFERENCES REMOTE OBJECTS
-412	THE SELECT CLAUSE OF A SUBQUERY SPECIFIES MULTIPLE COLUMNS
-413	OVERFLOW OCCURRED DURING NUMERIC DATA TYPE CONVERSION
-414	A LIKE PREDICATE IS INVALID BECAUSE THE FIRST OPERAND IS NOT A STRING
-415	THE CORRESPONDING COLUMNS, <i>column-number</i> , OF THE OPERANDS OF A SET OPERATOR ARE NOT COMPATIBLE
-416	AN OPERAND OF A UNION CONTAINS A LONG STRING COLUMN
-417	A STATEMENT STRING TO BE PREPARED INCLUDES PARAMETER MARKERS AS THE OPERANDS OF THE SAME OPERATOR
-418	A STATEMENT STRING TO BE PREPARED CONTAINS AN INVALID USE OF PARAMETER MARKERS
-419	THE DECIMAL DIVIDE OPERATION IS INVALID BECAUSE THE RESULT WOULD HAVE A NEGATIVE SCALE
-420	THE VALUE OF A CHARACTER STRING ARGUMENT WAS NOT ACCEPTABLE TO THE <i>function-name</i> FUNCTION
-421	THE OPERANDS OF A UNION OR UNION ALL DO NOT HAVE THE SAME NUMBER OF COLUMNS
-423	INVALID VALUE FOR LOCATOR IN POSITION <i>position-#</i>
-426	DYNAMIC COMMIT NOT VALID AT AN APPLICATION SERVER WHERE UPDATES ARE NOT ALLOWED

-427	DYNAMIC ROLLBACK NOT VALID AT AN APPLICATION SERVER WHERE UPDATES ARE NOT ALLOWED
-430	routine-type routine-name (SPECIFIC NAME specific-name) HAS ABNORMALLY TERMINATED
-431	ROUTINE routine-name (SPECIFIC NAME specific-name) OF TYPE routine-type HAS BEEN INTERRUPTED BY THE USER
-433	VALUE value IS TOO LONG
-435	AN INVALID SQLSTATE sqlstate IS SPECIFIED IN A RAISE_ERROR FUNCTION, RESIGNAL STATEMENT, OR SIGNAL STATEMENT
-438	APPLICATION RAISED ERROR WITH DIAGNOSTIC TEXT: text
-440	NO routine-type BY THE NAME routine-name HAVING COMPATIBLE ARGUMENTS WAS FOUND IN THE CURRENT PATH
-441	INVALID USE OF 'DISTINCT' OR 'ALL' WITH FUNCTION function-name
-443	ROUTINE routine-name (SPECIFIC NAME specific-name) HAS RETURNED AN ERROR SQLSTATE WITH DIAGNOSTIC TEXT msg-txt
-444	USER PROGRAM name COULD NOT BE FOUND
-449	CREATE OR ALTER STATEMENT FOR FUNCTION OR PROCEDURE routine-name CONTAINS AN INVALID FORMAT OF THE EXTERNAL NAME CLAUSE OR IS MISSING THE EXTERNAL NAME CLAUSE
-450	USER-DEFINED FUNCTION OR STORED PROCEDURE name, PARAMETER NUMBER paramnum, OVERLAYED STORAGE BEYOND ITS DECLARED LENGTH
-451	THE data-item DEFINITION IN THE CREATE OR ALTER STATEMENT FOR routine-name CONTAINS DATA TYPE type WHICH IS NOT SUPPORTED FOR THE TYPE AND LANGUAGE OF THE ROUTINE
-452	UNABLE TO ACCESS THE FILE REFERENCED BY HOST VARIABLE variable-position. REASON CODE: reason-code
-453	THERE IS A PROBLEM WITH THE RETURNS CLAUSE IN THE CREATE FUNCTION STATEMENT FOR function-name
-454	THE SIGNATURE PROVIDED IN THE CREATE FUNCTION STATEMENT FOR function-name MATHCES THE SIGNATURE OF SOME OTHER FUNCTION ALREADY EXISTING IN THE SCHEMA
-455	IN CREATE FUNCTION FOR function-name, THE SCHEMA NAME schema-name PROVIDED FOR THE SPECIFIC NAME DOES NOT MATCH THE SCHEMA NAME schema-name2 OF THE FUNCTION
-456	IN CREATE FUNCTION FOR function-name, THE SPECIFIC NAME specific-name ALREADY EXISTS IN THE SCHEMA
-457	A FUNCTION OR DISTINCT TYPE CANNOT BE CALLED name SINCE IT IS RESERVED FOR SYSTEM USE
-458	IN A REFERENCE TO FUNCTION function-name BY SIGNATURE, A MATCHING FUNCTION COULD NOT BE FOUND
-461	A VALUE WITH DATA TYPE source-data-type CANNOT BE CAST TO TYPE target-data-type
-469	SQL CALL STATEMENT MUST SPECIFY AN OUTPUT HOST VARIABLE FOR PARAMETER number
-470	SQL CALL STATEMENT SPECIFIED A NULL VALUE FOR INPUT PARAMETER number, BUT THE STORED PROCEDURE DOES NOT SUPPORT NULL VALUES
-471	INVOCATION OF FUNCTION OR PROCEDURE name FAILED DUE TO REASON rc
-472	CURSOR cursor-name WAS LEFT OPEN BY EXTERNAL FUNCTION function-name (SPECIFIC NAME specific-name)
-473	A USER DEFINED DATA TYPE CANNOT BE CALLED THE SAME NAME AS A SYSTEM PREDEFINED TYPE (BUILT-IN TYPE)
-475	THE RESULT TYPE type-1 OF THE SOURCE FUNCTION CANNOT BE CAST TO THE RETURNS TYPE type-2 OF THE USER-DEFINED FUNCTION

-476	REFERENCE TO FUNCTION <i>function-name</i> WAS NAMED WITHOUT A SIGNATURE, BUT THE FUNCTION IS NOT UNIQUE WITHIN ITS SCHEMA
-478	DROP OR REVOKE ON OBJECT TYPE <i>type1</i> CANNOT BE PROCESSED BECAUSE OBJECT <i>name</i> OF TYPE <i>type2</i> IS DEPENDENT ON IT
-480	THE PROCEDURE <i>procedure-name</i> HAS NOT YET BEEN CALLED
-482	THE PROCEDURE <i>procedure-name</i> RETURNED NO LOCATORS
-483	IN CREATE FUNCTION FOR <i>function-name</i> STATEMENT, THE NUMBER OF PARAMETERS DOES NOT MATCH THE NUMBER OF PARAMETERS OF THE SOURCE FUNCTION
-487	<i>object-type</i> <i>object-name</i> ATTEMPTED TO EXECUTE AN SQL STATEMENT WHEN THE DEFINITION OF THE FUNCTION OR PROCEDURE DID NOT SPECIFY THIS ACTION
-490	NUMBER <i>number</i> DIRECTLY SPECIFIED IN AN SQL STATEMENT IS OUTSIDE THE RANGE OF ALLOWABLE VALUES IN THIS CONTEXT (<i>minval, maxval</i>)
-491	CREATE STATEMENT FOR USER-DEFINED FUNCTION <i>function-name</i> MUST HAVE A RETURNS CLAUSE AND: THE EXTERNAL CLAUSE WITH OTHER REQUIRED KEYWORDS; THE RETURN STATEMENT AND PARAMETER NAMES; OR THE SOURCE CLAUSE
-492	THE CREATE FUNCTION FOR <i>function-name</i> HAS A PROBLEM WITH PARAMETER NUMBER <i>number</i> . IT MAY INVOLVE A MISMATCH WITH A SOURCE FUNCTION
-495	ESTIMATED PROCESSOR COST OF <i>estimate-amount1</i> PROCESSOR SECONDS (<i>estimate-amount2</i> SERVICE UNITS) IN COST CATEGORY <i>cost-category</i> EXCEEDS A RESOURCE LIMIT ERROR THRESHOLD OF <i>limit-amount</i> SERVICE UNITS
-496	THE SQL STATEMENT CANNOT BE EXECUTED BECAUSE IT REFERENCES A RESULT SET THAT WAS NOT CREATED BY THE CURRENT SERVER
-497	THE MAXIMUM LIMIT OF INTERNAL IDENTIFIERS HAS BEEN EXCEEDED FOR DATABASE
-499	CURSOR <i>cursor-name</i> HAS ALREADY BEEN ASSIGNED TO THIS OR ANOTHER RESULT SET FROM PROCEDURE <i>procedure-name</i> .
-500	THE IDENTIFIED CURSOR WAS CLOSED WHEN THE CONNECTION WAS DESTROYED
-501	THE CURSOR IDENTIFIED IN A FETCH OR CLOSE STATEMENT IS NOT OPEN
-502	THE CURSOR IDENTIFIED IN AN OPEN STATEMENT IS ALREADY OPEN
-503	A COLUMN CANNOT BE UPDATED BECAUSE IT IS NOT IDENTIFIED IN THE UPDATE CLAUSE OF THE SELECT STATEMENT OF THE CURSOR
-504	THE CURSOR NAME <i>cursor-name</i> IS NOT DECLARED
-507	THE CURSOR IDENTIFIED IN THE UPDATE OR DELETE STATEMENT IS NOT OPEN
-508	THE CURSOR IDENTIFIED IN THE UPDATE OR DELETE STATEMENT IS NOT POSITIONED ON A ROW OR ROWSET THAT CAN BE UPDATED OR DELETED
-509	THE TABLE IDENTIFIED IN THE UPDATE OR DELETE STATEMENT IS NOT THE SAME TABLE DESIGNATED BY THE CURSOR
-510	THE TABLE DESIGNATED BY THE CURSOR OF THE UPDATE OR DELETE STATEMENT CANNOT BE MODIFIED
-511	THE FOR UPDATE CLAUSE CANNOT BE SPECIFIED BECAUSE THE TABLE DESIGNATED BY THE CURSOR CANNOT BE MODIFIED
-512	STATEMENT REFERENCE TO REMOTE OBJECT IS INVALID
-513	THE ALIAS <i>alias-name</i> MUST NOT BE DEFINED ON ANOTHER LOCAL OR REMOTE ALIAS
-514	THE CURSOR <i>cursor-name</i> IS NOT IN A PREPARED STATE
-516	THE DESCRIBE FOR STATIC STATEMENT DOES NOT IDENTIFY A PREPARED STATEMENT
-517	CURSOR <i>cursor-name</i> CANNOT BE USED BECAUSE ITS STATEMENT NAME DOES NOT IDENTIFY A PREPARED SELECT STATEMENT
-518	THE EXECUTE STATEMENT DOES NOT IDENTIFY A VALID PREPARED STATEMENT
-519	THE PREPARE STATEMENT IDENTIFIES THE SELECT STATEMENT OF THE OPENED CURSOR <i>cursor-name</i>

-525	THE SQL STATEMENT CANNOT BE EXECUTED BECAUSE IT WAS IN ERROR AT BIND TIME FOR SECTION = sectno PACKAGE = pkgname CONSISTENCY TOKEN = X'contoken'
-526	THE REQUESTED OPERATION OR USAGE DOES NOT APPLY TO <i>table-type</i> TEMPORARY TABLE <i>table-name</i>
-530	THE INSERT OR UPDATE VALUE OF FOREIGN KEY <i>constraint-name</i> IS INVALID
-531	PARENT KEY IN A PARENT ROW CANNOT BE UPDATED BECAUSE IT HAS ONE OR MORE DEPENDENT ROWS IN RELATIONSHIP <i>constraint-name</i>
-532	THE RELATIONSHIP <i>constraint-name</i> RESTRICTS THE DELETION OF ROW WITH RID X rid-number
-533	INVALID MULTIPLE-ROW INSERT
-534	THE PRIMARY KEY CANNOT BE UPDATED BECAUSE OF MULTIPLE-ROW UPDATE
-536	THE DELETE STATEMENT IS INVALID BECAUSE TABLE <i>table-name</i> CAN BE AFFECTED BY THE OPERATION
-537	THE PRIMARY KEY CLAUSE, A FOREIGN KEY CLAUSE, OR A UNIQUE CLAUSE IDENTIFIES COLUMN <i>column-name</i> MORE THAN ONCE
-538	FOREIGN KEY <i>name</i> DOES NOT CONFORM TO THE DESCRIPTION OF A PARENT KEY OF TABLE <i>table-name</i>
-539	TABLE <i>table-name</i> DOES NOT HAVE A PRIMARY KEY
-540	THE DEFINITION OF TABLE <i>table-name</i> IS INCOMPLETE BECAUSE IT LACKS A PRIMARY INDEX OR A REQUIRED UNIQUE INDEX
-542	<i>column-name</i> CANNOT BE A COLUMN OF A PRIMARY KEY, A UNIQUE CONSTRAINT, OR A PARENT KEY BECAUSE IT CAN CONTAIN NULL VALUES
-543	A ROW IN A PARENT TABLE CANNOT BE DELETED BECAUSE THE CHECK CONSTRAINT <i>check-constraint</i> RESTRICTS THE DELETION
-544	THE CHECK CONSTRAINT SPECIFIED IN THE ALTER TABLE STATEMENT CANNOT BE ADDED BECAUSE AN EXISTING ROW VIOLATES THE CHECK CONSTRAINT
-545	THE REQUESTED OPERATION IS NOT ALLOWED BECAUSE A ROW DOES NOT SATISFY THE CHECK CONSTRAINT <i>check-constraint</i>
-546	THE CHECK CONSTRAINT <i>constraint-name</i> IS INVALID
-548	A CHECK CONSTRAINT THAT IS DEFINED WITH <i>column-name</i> IS INVALID
-549	THE <i>statement</i> STATEMENT IS NOT ALLOWED FOR <i>object_type1</i> <i>object_name</i> BECAUSE THE BIND OPTION DYNAMICRULES(RUN) IS NOT IN EFFECT FOR <i>object_type2</i>
-551	<i>auth-id</i> DOES NOT HAVE THE PRIVILEGE TO PERFORM OPERATION <i>operation</i> ON OBJECT <i>object-name</i>
-552	<i>auth-id</i> DOES NOT HAVE THE PRIVILEGE TO PERFORM OPERATION <i>operation</i>
-553	<i>auth-id</i> SPECIFIED IS NOT ONE OF THE VALID AUTHORIZATION IDS FOR REQUESTED OPERATION
-554	AN AUTHORIZATION ID CANNOT GRANT A PRIVILEGE TO ITSELF
-555	AN AUTHORIZATION ID CANNOT REVOKE A PRIVILEGE FROM ITSELF
-556	<i>authid2</i> CANNOT HAVE THE <i>privilege</i> PRIVILEGE <i>on_object</i> REVOKED BY <i>authid1</i> BECAUSE THE REVOKEE DOES NOT POSSESS THE PRIVILEGE OR THE REVOKER DID NOT MAKE THE GRANT
-557	INCONSISTENT GRANT/REVOKE KEYWORD <i>keyword</i> . PERMITTED KEYWORDS ARE <i>keyword-list</i>
-558	INVALID CLAUSE OR COMBINATION OF CLAUSES ON A GRANT OR REVOKE
-559	ALL AUTHORIZATION FUNCTIONS HAVE BEEN DISABLED
-567	<i>bind-type</i> AUTHORIZATION ERROR USING <i>auth-id</i> AUTHORITY PACKAGE = <i>package-name</i> PRIVILEGE = <i>privilege</i>
-571	THE STATEMENT WOULD RESULT IN A MULTIPLE SITE UPDATE
-573	TABLE <i>table-name</i> DOES NOT HAVE A UNIQUE KEY WITH THE SPECIFIED COLUMN NAMES

-574	THE SPECIFIED DEFAULT VALUE OR IDENTITY ATTRIBUTE VALUE CONFLICTS WITH THE DEFINITION OF COLUMN <i>column-name</i>
-575	VIEW <i>view-name</i> CANNOT BE REFERENCED
-577	<i>object-type</i> <i>object-name</i> ATTEMPTED TO MODIFY DATA WHEN THE DEFINITION OF THE FUNCTION OR PROCEDURE DID NOT SPECIFY THIS ACTION
-579	<i>object-type</i> <i>object-name</i> ATTEMPTED TO READ OR MODIFY DATA WHEN THE DEFINITION OF THE FUNCTION OR PROCEDURE DID NOT SPECIFY THIS ACTION
-580	THE RESULT-EXPRESSIONS OF A CASE EXPRESSION CANNOT ALL BE NULL
-581	THE DATA TYPES OF THE RESULT-EXPRESSIONS OF A CASE EXPRESSION ARE NOT COMPATIBLE
-582	THE SEARCH-CONDITION IN A SEARCHED-WHEN-CLAUSE CANNOT BE A QUANTIFIED PREDICATE, IN PREDICATE, OR AN EXISTS PREDICATE.
-583	THE USE OF FUNCTION OR EXPRESSION <i>name</i> IS INVALID BECAUSE IT IS NOT DETERMINISTIC OR HAS AN EXTERNAL ACTION
-584	INVALID USE OF NULL
-585	THE COLLECTION <i>collection-id</i> APPEARS MORE THAN ONCE IN THE SET <i>special-register</i> STATEMENT
-586	THE TOTAL LENGTH OF THE CURRENT PATH SPECIAL REGISTER CANNOT EXCEED 2048 CHARACTERS
-589	A POSITIONED DELETE OR UPDATE STATEMENT FOR CURSOR <i>cursor-name</i> SPECIFIED A ROW OF A ROWSET, BUT THE CURSOR IS NOT POSITIONED ON A ROWSET
-590	NAME <i>name</i> IS NOT UNIQUE IN THE CREATE OR ALTER FOR ROUTINE <i>routine-name</i>
-592	NOT AUTHORIZED TO CREATE FUNCTIONS OR PROCEDURES IN WLM ENVIRONMENT
-593	NOT NULL MUST BE SPECIFIED FOR ROWID (OR DISTINCT TYPE FOR ROWID) OR ROW CHANGE TIMESTAMP COLUMN <i>column-name</i>
-594	ATTEMPT TO CREATE A NULLABLE ROWID OR DISTINCT TYPE COLUMN <i>column-name</i>
-601	THE NAME (VERSION OR VOLUME SERIAL NUMBER) OF THE OBJECT TO BE DEFINED OR THE TARGET OF A RENAME STATEMENT IS IDENTICAL TO THE EXISTING NAME (VERSION OR VOLUME SERIAL NUMBER) <i>name</i> OF THE OBJECT TYPE <i>obj-type</i>
-602	TOO MANY COLUMNS OR KEY-EXPRESSIONS SPECIFIED IN A CREATE INDEX OR ALTER INDEX STATEMENT
-603	A UNIQUE INDEX CANNOT BE CREATED BECAUSE THE TABLE CONTAINS ROWS WHICH ARE DUPLICATES WITH RESPECT TO THE VALUES OF THE IDENTIFIED COLUMNS
-604	A DATA TYPE DEFINITION SPECIFIES AN INVALID LENGTH, PRECISION, OR SCALE ATTRIBUTE
-607	OPERATION OR OPTION <i>operation</i> IS NOT DEFINED FOR THIS OBJECT
-611	ONLY LOCKMAX 0 CAN BE SPECIFIED WHEN THE LOCK SIZE OF THE TABLESPACE IS TABLESPACE OR TABLE
-612	<i>identifier</i> IS A DUPLICATE NAME
-613	THE PRIMARY KEY OR A UNIQUE CONSTRAINT IS TOO LONG OR HAS TOO MANY COLUMNS
-614	THE INDEX CANNOT BE CREATED OR THE LENGTH OF A COLUMN CANNOT BE CHANGED BECAUSE THE SUM OF THE INTERNAL LENGTHS OF THE IDENTIFIED COLUMNS IS GREATER THAN THE ALLOWABLE MAXIMUM
-615	<i>operation-type</i> IS NOT ALLOWED ON A PACKAGE IN USE
-616	<i>obj-type1</i> <i>obj-name1</i> CANNOT BE DROPPED BECAUSE IT IS REFERENCED BY <i>obj-type2</i> <i>obj-name2</i>
-618	OPERATION <i>operation</i> IS NOT ALLOWED ON SYSTEM DATABASES
-619	OPERATION DISALLOWED BECAUSE THE WORK FILE DATABASE IS NOT STOPPED
-620	KEYWORD <i>keyword</i> IN <i>stmt-type</i> STATEMENT IS NOT PERMITTED FOR A <i>space-type</i> SPACE IN THE <i>database-type</i> DATABASE

-621	DUPLICATE DBID <i>dbid</i> WAS DETECTED AND PREVIOUSLY ASSIGNED TO <i>database-name</i>
-622	FOR MIXED DATA IS INVALID BECAUSE THE MIXED DATA INSTALL OPTION IS NO
-623	A CLUSTERING INDEX ALREADY EXISTS ON TABLE <i>table-name</i>
-624	TABLE <i>table-name</i> ALREADY HAS A PRIMARY KEY OR UNIQUE CONSTRAINT WITH SPECIFIED COLUMNS
-625	TABLE <i>table-name</i> DOES NOT HAVE AN INDEX TO ENFORCE THE UNIQUENESS OF THE PRIMARY OR UNIQUE KEY
-626	THE ALTER STATEMENT IS NOT EXECUTABLE BECAUSE THE PAGE SET IS NOT STOPPED
-627	THE ALTER STATEMENT IS INVALID BECAUSE THE TABLE SPACE OR INDEX HAS USER-MANAGED DATA SETS
-628	THE CLAUSES ARE MUTUALLY EXCLUSIVE.
-629	SET NULL CANNOT BE SPECIFIED BECAUSE FOREIGN KEY <i>name</i> CANNOT CONTAIN NULL VALUES
-631	FOREIGN KEY <i>name</i> IS TOO LONG OR HAS TOO MANY COLUMNS
-632	THE TABLE CANNOT BE DEFINED AS A DEPENDENT OF <i>table-name</i> BECAUSE OF DELETE RULE RESTRICTIONS
-633	THE DELETE RULE MUST BE <i>delete-rule</i>
-634	THE DELETE RULE MUST NOT BE CASCADE
-635	THE DELETE RULES CANNOT BE DIFFERENT OR CANNOT BE SET NULL
-636	RANGES SPECIFIED FOR PARTITION <i>part-num</i> ARE NOT VALID
-637	DUPLICATE <i>keyword</i> KEYWORD OR CLAUSE
-638	TABLE <i>table-name</i> CANNOT BE CREATED BECAUSE COLUMN DEFINITION IS MISSING
-639	A NULLABLE COLUMN OF A FOREIGN KEY WITH A DELETE RULE OF SET NULL CANNOT BE A COLUMN OF THE KEY OF A PARTITIONED INDEX
-642	TOO MANY COLUMNS IN UNIQUE CONSTRAINTS
-643	A CHECK CONSTRAINT OR THE VALUE OF AN EXPRESSION FOR A COLUMN OF AN INDEX EXCEEDS THE MAXIMUM ALLOWABLE LENGTH KEY EXPRESSION
-644	INVALID VALUE SPECIFIED FOR KEYWORD <i>keyword</i> IN OR CLAUSE <i>keyword-or-clause</i> IN STATEMENT <i>stmt-type</i>
-646	TABLE <i>table-name</i> CANNOT BE CREATED IN SPECIFIED TABLE SPACE <i>table-space-name</i> BECAUSE IT ALREADY CONTAINS A TABLE
-647	BUFFERPOOL <i>bp-name</i> FOR IMPLICIT OR EXPLICIT TABLESPACE OR INDEXSPACE <i>name</i> HAS NOT BEEN ACTIVATED
-650	THE ALTER INDEX CANNOT BE EXECUTED, REASON <i>reason</i>
-651	TABLE DESCRIPTION EXCEEDS MAXIMUM SIZE OF OBJECT DESCRIPTOR.
-652	VIOLATION OF INSTALLATION DEFINED EDIT OR VALIDATION PROCEDURE
-653	TABLE <i>table-name</i> IN PARTITIONED TABLESPACE <i>tspace-name</i> IS NOT AVAILABLE BECAUSE ITS PARTITIONED INDEX HAS NOT BEEN CREATED
-655	THE CREATE OR ALTER STOGROUP IS INVALID BECAUSE THE STORAGE GROUP WOULD HAVE BOTH SPECIFIC AND NON-SPECIFIC VOLUME IDS
-658	A <i>object-type</i> CANNOT BE DROPPED USING THE <i>statement</i> STATEMENT
-660	INDEX <i>index-name</i> CANNOT BE CREATED OR ALTERED ON PARTITIONED TABLESPACE <i>tspace-name</i> BECAUSE KEY LIMITS ARE NOT SPECIFIED
-661	<i>object-type index-name</i> CANNOT BE CREATED ON PARTITIONED TABLE SPACE <i>tspace-name</i> BECAUSE THE NUMBER OF PARTITION SPECIFICATIONS IS NOT EQUAL TO THE NUMBER OF PARTITIONS OF THE TABLE SPACE
-662	A PARTITIONED INDEX CANNOT BE CREATED ON A NON-PARTITIONED, PARTITION-BY-GROWTH OR RANGE-PARTITIONED UNIVERSAL TABLE SPACE <i>tspace-name</i>

-663	THE NUMBER OF KEY LIMIT VALUES IS EITHER ZERO, OR GREATER THAN THE NUMBER OF COLUMNS IN THE KEY OF INDEX <i>index-name</i>
-665	THE PART CLAUSE OF AN ALTER STATEMENT IS OMITTED OR INVALID
-666	<i>stmt-verb</i> object CANNOT BE EXECUTED BECAUSE <i>function</i> IS IN PROGRESS
-667	THE CLUSTERING INDEX FOR A PARTITIONED TABLESPACE CANNOT BE EXPLICITLY DROPPED
-668	THE COLUMN CANNOT BE ADDED TO THE TABLE BECAUSE THE TABLE HAS AN EDIT PROCEDURE
-669	THE OBJECT CANNOT BE EXPLICITLY DROPPED. REASON <i>reason-code</i>
-670	THE RECORD LENGTH OF THE TABLE EXCEEDS THE PAGE SIZE LIMIT
-671	THE BUFFERPOOL ATTRIBUTE OF THE TABLESPACE CANNOT BE ALTERED AS SPECIFIED BECAUSE IT WOULD CHANGE THE PAGE SIZE OF THE TABLESPACE
-672	OPERATION DROP NOT ALLOWED ON TABLE <i>table_name</i>
-676	THE PHYSICAL CHARACTERISTICS OF THE INDEX ARE INCOMPATIBLE WITH RESPECT TO THE SPECIFIED STATEMENT. THE STATEMENT HAS FAILED. REASON <i>reason-code</i>
-677	INSUFFICIENT VIRTUAL STORAGE FOR BUFFERPOOL EXPANSION
-678	THE CONSTANT <i>constant</i> SPECIFIED FOR THE INDEX LIMIT KEY MUST CONFORM TO THE DATA TYPE <i>data-type</i> OF THE CORRESPONDING COLUMN <i>column-name</i>
-679	THE OBJECT <i>name</i> CANNOT BE CREATED BECAUSE A DROP IS PENDING ON THE OBJECT
-680	TOO MANY COLUMNS SPECIFIED FOR A TABLE, VIEW or TABLE FUNCTION
-681	COLUMN <i>column-name</i> IN VIOLATION OF INSTALLATION DEFINED FIELD PROCEDURE. RT: <i>return-code</i> , RS:
-682	FIELD PROCEDURE <i>procedure-name</i> COULD NOT BE LOADED
-683	THE SPECIFICATION FOR COLUMN, DISTINCT TYPE, FUNCTION, OR PROCEDURE <i>data-item</i> CONTAINS INCOMPATIBLE CLAUSES
-684	THE LENGTH OF LITERAL LIST BEGINNING <i>string</i> IS TOO LONG
-685	INVALID FIELD TYPE, <i>column-name</i>
-686	COLUMN DEFINED WITH A FIELD PROCEDURE CAN NOT COMPARE WITH ANOTHER COLUMN WITH DIFFERENT FIELD PROCEDURE
-687	FIELD TYPES INCOMPARABLE
-688	INCORRECT DATA RETURNED FROM FIELD PROCEDURE, <i>column-name</i> ,
-689	TOO MANY COLUMNS DEFINED FOR A DEPENDENT TABLE
-690	THE STATEMENT IS REJECTED BY DATA DEFINITION CONTROL SUPPORT.
-691	THE REQUIRED REGISTRATION TABLE <i>table-name</i> DOES NOT EXIST
-692	THE REQUIRED UNIQUE INDEX <i>index-name</i> FOR DDL REGISTRATION TABLE <i>table-name</i> DOES NOT EXIST
-693	THE COLUMN <i>column-name</i> IN DDL REGISTRATION TABLE OR INDEX <i>table-name</i> (<i>index-name</i>) IS NOT DEFINED PROPERLY
-694	THE SCHEMA STATEMENT CANNOT BE EXECUTED BECAUSE A DROP IS PENDING ON THE DDL REGISTRATION TABLE <i>table-name</i>
-695	INVALID VALUE <i>seclabel</i> SPECIFIED FOR SECURITY LABEL COLUMN OF TABLE <i>table-name</i>
-696	THE DEFINITION OF TRIGGER <i>trigger-name</i> INCLUDES AN INVALID USE OF CORRELATION NAME OR TRANSITION TABLE NAME <i>name</i> . REASON CODE= <i>reason-code</i>
-697	OLD OR NEW CORRELATION NAMES ARE NOT ALLOWED IN A TRIGGER DEFINED WITH THE FOR EACH STATEMENT CLAUSE. OLD_TABLE OR NEW_TABLE NAMES ARE NOT ALLOWED IN A TRIGGER WITH THE BEFORE CLAUSE.
-713	THE REPLACEMENT VALUE <i>value</i> FOR <i>special-register</i> IS INVALID

-715	PROGRAM program-name WITH MARK release-dependency-mark FAILED BECAUSE IT DEPENDS ON FUNCTIONS OF THE RELEASE FROM WHICH FALLBACK HAS OCCURRED
-716	PROGRAM program-name PRECOMPILED WITH INCORRECT LEVEL FOR THIS RELEASE
-717	bind-type FOR object-type object-name WITH MARK release-dependency-mark FAILED BECAUSE object-type DEPENDS ON FUNCTIONS OF THE RELEASE FROM WHICH THE FALLBACK OCCURRED
-718	REBIND OF PACKAGE package-name FAILED BECAUSE IBMREQD OF ibmreqd IS INVALID
-719	BIND ADD ERROR USING auth-id AUTHORITY PACKAGE
-720	BIND ERROR, ATTEMPTING TO REPLACE PACKAGE = package_name WITH VERSION = version2 BUT THIS VERSION ALREADY EXISTS
-721	BIND ERROR FOR PACKAGE = pkg-id CONTOKEN = 'contoken'X IS NOT UNIQUE SO IT CANNOT BE CREATED
-722	bind-type ERROR USING auth-id AUTHORITY PACKAGE package-name DOES NOT EXIST
-723	AN ERROR OCCURRED IN A TRIGGERED SQL STATEMENT IN TRIGGER trigger-name, SECTION NUMBER section-number, INFORMATION RETURNED: SQLCODE sqlerror, SQLSTATE sqlstate, AND MESSAGE TOKENS token-list
-724	THE ACTIVATION OF THE object-type OBJECT object-name WOULD EXCEED THE MAXIMUM LEVEL OF INDIRECT SQL CASCADING
-725	THE SPECIAL REGISTER register AT LOCATION location WAS SUPPLIED AN INVALID VALUE
-726	BIND ERROR ATTEMPTING TO REPLACE PACKAGE = <package_name>. THERE ARE ENABLE OR DISABLE ENTRIES CURRENTLY ASSOCIATED WITH THE PACKAGE
-728	DATA TYPE data-type IS NOT ALLOWED IN DB2 PRIVATE PROTOCOL PROCESSING
-729	A STORED PROCEDURE SPECIFYING COMMIT ON RETURN CANNOT BE THE TARGET OF A NESTED CALL STATEMENT
-730	THE PARENT OF A TABLE IN A READ-ONLY SHARED DATABASE MUST ALSO BE A TABLE IN A READ-ONLY SHARED DATABASE
-731	USER-DEFINED DATA SET dsname MUST BE DEFINED WITH SHAREOPTIONS(1,3)
-732	THE DATABASE IS DEFINED ON THIS SUBSYSTEM WITH THE ROSHARE READ ATTRIBUTE BUT THE TABLESPACE OR INDEX SPACE HAS NOT BEEN DEFINED ON THE OWNING SUBSYSTEM
-733	THE DESCRIPTION OF A TABLESPACE, INDEX SPACE, OR TABLE IN A ROSHARE READ DATABASE MUST BE CONSISTENT WITH ITS DESCRIPTION IN THE OWNER SYSTEM
-734	THE ROSHARE ATTRIBUTE OF A DATABASE CANNOT BE ALTERED FROM ROSHARE READ
-735	DATABASE dbid CANNOT BE ACCESSED BECAUSE IT IS NO LONGER A SHARED DATABASE
-736	INVALID OBID obid SPECIFIED
-737	IMPLICIT TABLESPACE NOT ALLOWED
-739	ALTER FUNCTION function-name FAILED BECAUSE FUNCTIONS CANNOT MODIFY DATA WHEN THEY ARE PROCESSED IN PARALLEL
-740	FUNCTION name IS DEFINED WITH THE OPTION MODIFIES SQL DATA WHICH IS NOT VALID IN THE CONTEXT IN WHICH IT WAS INVOKED
-741	A WORK FILE DATABASE IS ALREADY DEFINED FOR MEMBER member-name
-742	DSNDB07 IS THE IMPLICIT WORK FILE DATABASE
-746	THE SQL STATEMENT IN AN EXTERNAL FUNCTION, TRIGGER, OR IN STORED PROCEDURE name VIOLATES THE NESTING SQL RESTRICTION
-747	TABLE table-name IS NOT AVAILABLE UNTIL THE AUXILIARY TABLES AND INDEXES FOR ITS EXTERNALLY STORED COLUMNS HAVE BEEN CREATED
-748	AN INDEX ALREADY EXISTS ON AUXILIARY TABLE

-750	THE SOURCE TABLE <i>table-name</i> CANNOT BE RENAMED BECAUSE IT IS REFERENCED IN EXISTING VIEW, MATERIALIZED QUERY TABLE, OR TRIGGER DEFINITIONS, IS A CLONE TABLE, OR HAS A CLONE TABLE DEFINED FOR IT
-751	<i>object-type object-name</i> (SPECIFIC NAME <i>specific name</i>) ATTEMPTED TO EXECUTE AN SQL STATEMENT <i>statement</i> THAT IS NOT ALLOWED
-752	THE CONNECT STATEMENT IS INVALID BECAUSE THE PROCESS IS NOT IN THE CONNECTABLE STATE
-763	INVALID TABLESPACE NAME <i>table-space-name</i>
-764	A LOB TABLESPACE AND ITS ASSOCIATED BASE TABLESPACE MUST BE IN THE SAME DATABASE
-765	TABLE IS NOT COMPATIBLE WITH DATABASE
-766	THE OBJECT OF A STATEMENT IS AN AUXILIARY TABLE FOR WHICH THE REQUESTED OPERATION IS NOT PERMITTED
-767	MISSING OR INVALID COLUMN SPECIFICATION FOR INDEX
-768	AN AUXILIARY TABLE ALREADY EXISTS FOR THE SPECIFIED COLUMN OR PARTITION
-769	SPECIFICATION OF CREATE AUX TABLE DOES NOT MATCH THE CHARACTERISTICS OF THE BASE TABLE
-770	TABLE <i>table-name</i> CANNOT HAVE A LOB COLUMN UNLESS IT ALSO HAS A ROWID, OR AN XML COLUMN UNLESS IT ALSO HAS A DOCID COLUMN
-771	INVALID SPECIFICATION OF A ROWID COLUMN
-773	CASE NOT FOUND FOR CASE STATEMENT
-776	USE OF CURSOR <i>cursor-name</i> IS NOT VALID
-778	ENDING LABEL <i>label</i> DOES NOT MATCH THE BEGINNING LABEL
-779	LABEL <i>label</i> SPECIFIED ON A GOTO, ITERATE, OR LEAVE STATEMENT IS NOT VALID
-780	UNDO SPECIFIED FOR A HANDLER
-781	CONDITION <i>condition-name</i> IS NOT DEFINED OR THE DEFINITION IS NOT IN SCOPE
-782	A CONDITION OR SQLSTATE <i>value</i> SPECIFIED IS NOT VALID
-783	SELECT LIST FOR CURSOR <i>cursor-name</i> IN FOR STATEMENT IS NOT VALID. COLUMN <i>column-name</i> IS NOT UNIQUE
-785	USE OF SQLCODE OR SQLSTATE IS NOT VALID
-787	RESIGNAL STATEMENT ISSUED OUTSIDE OF A HANDLER
-797	THE TRIGGER <i>trigger-name</i> IS DEFINED WITH AN UNSUPPORTED TRIGGERED SQL STATEMENT
-798	A VALUE CANNOT BE SPECIFIED FOR COLUMN <i>column-name</i> WHICH IS DEFINED AS GENERATED ALWAYS
-802	EXCEPTION ERROR 'exception-type' HAS OCCURRED DURING 'operation-type' OPERATION ON 'data-type' DATA, POSITION 'position-number'
-803	AN INSERTED OR UPDATED VALUE IS INVALID BECAUSE THE INDEX IN INDEX SPACE <i>indexspace-name</i> CONSTRAINS COLUMNS OF THE TABLE SO NO TWO ROWS CAN CONTAIN DUPLICATE VALUES IN THOSE COLUMNS. RID OF EXISTING ROW IS X'rid'
-804	AN ERROR WAS FOUND IN THE APPLICATION PROGRAM INPUT PARAMETERS FOR THE SQL STATEMENT, REASON <i>reason</i>
-805	DBRM OR PACKAGE NAME <i>location-name.collection-id.dbrm-name-consistency-token</i> NOT FOUND IN PLAN <i>plan-name</i> . REASON <i>reason</i>
-807	ACCESS DENIED: PACKAGE <i>package-name</i> IS NOT ENABLED FOR ACCESS FROM <i>connection-type connection-name</i>
-808	THE CONNECT STATEMENT IS NOT CONSISTENT WITH THE FIRST CONNECT STATEMENT
-811	THE RESULT OF AN EMBEDDED SELECT STATEMENT IS A TABLE OF MORE THAN ONE ROW, OR THE RESULT OF THE SUBQUERY OF A BASIC PREDICATE IS MORE THAN ONE VALUE

-812	THE SQL STATEMENT CANNOT BE PROCESSED BECAUSE A BLANK COLLECTION-ID WAS FOUND IN THE CURRENT PACKAGESET SPECIAL REGISTER WHILE TRYING TO FORM A QUALIFIED PACKAGE NAME FOR PROGRAM <i>program-name</i> .consistency-token USING PLAN <i>plan-name</i>
-817	THE SQL STATEMENT CANNOT BE EXECUTED BECAUSE THE STATEMENT WILL RESULT IN A PROHIBITED UPDATE OPERATION.
-818	THE PRECOMPILER-GENERATED TIMESTAMP <i>x</i> IN THE LOAD MODULE IS DIFFERENT FROM THE BIND TIMESTAMP <i>y</i> BUILT FROM THE DBRM <i>z</i>
-819	THE VIEW CANNOT BE PROCESSED BECAUSE THE LENGTH OF ITS PARSE TREE IN THE CATALOG IS ZERO
-820	THE SQL STATEMENT CANNOT BE PROCESSED BECAUSE <i>catalog-table</i> CONTAINS A VALUE THAT IS NOT VALID IN THIS RELEASE
-822	THE SQLDA CONTAINS AN INVALID DATA ADDRESS OR INDICATOR VARIABLE ADDRESS
-840	TOO MANY ITEMS RETURNED IN A SELECT OR INSERT LIST
-842	A CONNECTION TO <i>location-name</i> ALREADY EXISTS
-843	THE SET CONNECTION OR RELEASE STATEMENT MUST SPECIFY AN EXISTING CONNECTION
-845	A PREVIOUS VALUE EXPRESSION CANNOT BE USED BEFORE THE NEXT VALUE EXPRESSION GENERATES A VALUE IN THE CURRENT APPLICATION PROCESS FOR SEQUENCE <i>sequence-name</i>
-846	INVALID SPECIFICATION OF AN IDENTITY COLUMN OR SEQUENCE OBJECT <i>object_type object_name</i> . REASON CODE = <i>reason_code</i>
-867	INVALID SPECIFICATION OF A ROWID COLUMN
-870	THE NUMBER OF HOST VARIABLES IN THE STATEMENT IS NOT EQUAL TO THE NUMBER OF DESCRIPTORS
-872	A VALID CCSID HAS NOT YET BEEN SPECIFIED FOR THIS SUBSYSTEM
-873	THE STATEMENT REFERENCED DATA ENCODED WITH DIFFERENT ENCODING SCHEMES OR CCSIDS IN AN INVALID CONTEXT
-874	THE ENCODING SCHEME SPECIFIED FOR THE <i>object-type</i> MUST BE THE SAME AS THE CONTAINING TABLESPACE OR OTHER PARAMETERS
-875	<i>operand</i> CANNOT BE USED WITH THE ASCII DATA REFERENCED
-876	' <i>object</i> ' CANNOT BE CREATED OR ALTERED, REASON ' <i>reason</i> '
-877	CCSID ASCII IS NOT ALLOWED FOR THIS DATABASE OR TABLE SPACE
-878	THE PLAN <i>TABLE</i> USED FOR EXPLAIN CANNOT BE ASCII
-879	CREATE or ALTER STATEMENT FOR <i>obj-name</i> CANNOT DEFINE A COLUMN, DISTINCT TYPE, FUNCTION OR STORED PROCEDURE PARAMETER AS MIXED OR GRAPHIC WITH ENCODING SCHEME <i>encoding-scheme</i>
-880	SAVEPOINT <i>savepoint-name</i> DOES NOT EXIST OR IS INVALID IN THIS CONTEXT
-881	A SAVEPOINT WITH NAME <i>savepoint-name</i> ALREADY EXISTS, BUT THIS SAVEPOINT NAME CANNOT BE REUSED
-882	SAVEPOINT DOES NOT EXIST
-900	THE SQL STATEMENT CANNOT BE EXECUTED BECAUSE THE APPLICATION PROCESS IS NOT CONNECTED TO AN APPLICATION SERVER
-901	UNSUCCESSFUL EXECUTION CAUSED BY A SYSTEM ERROR THAT DOES NOT PRECLUDE THE SUCCESSFUL EXECUTION OF SUBSEQUENT SQL STATEMENTS
-904	UNSUCCESSFUL EXECUTION CAUSED BY AN UNAVAILABLE RESOURCE. REASON <i>reason-code</i> , TYPE OR RESOURCE <i>resource-type</i> , AND RESOURCE NAME <i>resource-name</i>
-905	UNSUCCESSFUL EXECUTION DUE TO RESOURCE LIMIT BEING EXCEEDED, RESOURCE NAME = <i>resource-name</i> LIMIT = <i>limit-amount1</i> CPU SECONDS (<i>limit-amount2</i> SERVICE UNITS) DERIVED FROM <i>limit-source</i>

-906	THE SQL STATEMENT CANNOT BE EXECUTED BECAUSE THIS FUNCTION IS DISABLED DUE TO A PRIOR ERROR
-908	bind-type ERROR USING auth-id AUTHORITY. BIND, REBIND OR AUTO-REBIND OPERATION IS NOT ALLOWED
-909	THE OBJECT HAS BEEN DELETED
-910	THE SQL STATEMENT CANNOT ACCESS AN OBJECT ON WHICH A DROP OR ALTER IS PENDING
-911	THE CURRENT UNIT OF WORK HAS BEEN ROLLED BACK DUE TO DEADLOCK OR TIMEOUT. REASON reason-code, TYPE OF RESOURCE resource-type, AND RESOURCE NAME resource-name
-913	UNSUCCESSFUL EXECUTION CAUSED BY DEADLOCK OR TIMEOUT. REASON CODE reason-code, TYPE OF RESOURCE resource-type, AND RESOURCE NAME resource-name
-917	BIND PACKAGE FAILED
-918	THE SQL STATEMENT CANNOT BE EXECUTED BECAUSE A CONNECTION HAS BEEN LOST
-919	A ROLLBACK OPERATION IS REQUIRED
-922	AUTHORIZATION FAILURE: error-type ERROR. REASON reason-code
-923	CONNECTION NOT ESTABLISHED: DB2 condition REASON reason-code, TYPE resource-type, NAME resource-name
-924	DB2 CONNECTION INTERNAL ERROR, function-code, return-code, reason-code
-925	COMMIT NOT VALID IN IMS OR CICS ENVIRONMENT
-926	ROLLBACK NOT VALID IN IMS, CICS OR RRSF ENVIRONMENT
-927	THE LANGUAGE INTERFACE (LI) WAS CALLED WHEN THE CONNECTING ENVIRONMENT WAS NOT ESTABLISHED. THE PROGRAM SHOULD BE INVOKED UNDER THE DSN COMMAND
-929	FAILURE IN A DATA CAPTURE EXIT: token
-939	ROLLBACK REQUIRED DUE TO UNREQUESTED ROLLBACK OF A REMOTE SERVER
-947	THE SQL STATEMENT FAILED BECAUSE IT WILL CHANGE A TABLE DEFINED WITH DATA CAPTURE CHANGES, BUT THE DATA CANNOT BE PROPAGATED
-948	DISTRIBUTED OPERATION IS INVALID
-950	THE LOCATION NAME SPECIFIED IN THE CONNECT STATEMENT IS INVALID OR NOT LISTED IN THE COMMUNICATIONS DATABASE
-951	OBJECT <i>object-name</i> OBJECT TYPE <i>object-type</i> IS IN USE AND CANNOT BE THE TARGET OF THE SPECIFIED ALTER STATEMENT
-952	PROCESSING WAS INTERRUPTED BY A CANCEL REQUEST FROM A CLIENT PROGRAM
-981	THE SQL STATEMENT FAILED BECAUSE THE RRSF CONNECTION IS NOT IN A STATE THAT ALLOWS SQL OPERATIONS, REASON reason-code.
-989	AFTER TRIGGER <i>trigger-name</i> ATTEMPTED TO MODIFY A ROW IN TABLE <i>table-name</i> THAT WAS MODIFIED BY AN SQL DATA CHANGE STATEMENT WITHIN A FROM CLAUSE
-991	CALL ATTACH WAS UNABLE TO ESTABLISH AN IMPLICIT CONNECT OR OPEN TO DB2. RC1= rc1 RC2= rc2
-992	PACKAGE <i>package-name</i> CANNOT BE EXECUTED OR DEPLOYED ON LOCATION <i>location-name</i>
-1403	THE USERNAME AND/OR PASSWORD SUPPLIED IS INCORRECT
-1706	CREATE PROCEDURE FOR <i>procedure-name</i> MUST HAVE VALID LANGUAGE AND EXTERNAL CLAUSES
-2001	THE NUMBER OF HOST VARIABLE PARAMETERS FOR A STORED PROCEDURE IS NOT EQUAL TO THE NUMBER OF EXPECTED HOST VARIABLE PARAMETERS. ACTUAL NUMBER

-4302	JAVA STORED PROCEDURE OR USER-DEFINED FUNCTION <i>routine-name</i> (SPECIFIC NAME <i>specific-name</i>) HAS EXITED WITH AN EXCEPTION <i>exception-string</i>
-4700	ATTEMPT TO USE NEW FUNCTION BEFORE NEW FUNCTION MODE
-4701	THE NUMBER OF PARTITIONS, OR THE COMBINATION OF THE NUMBER OF TABLE SPACE PARTITIONS AND THE CORRESPONDING LENGTH OF THE PARTITIONING LIMIT KEY EXCEEDS THE SYSTEM LIMIT
-4702	THE MAXIMUM NUMBER OF ALTERS ALLOWED HAS BEEN EXCEEDED FOR <i>object-type</i>
-4703	THE ALTER TABLE STATEMENT CANNOT BE EXECUTED BECAUSE COLUMN <i>column-name</i> IS MIXED DATA, OR THE DATA TYPE OR LENGTH SPECIFIED DOES NOT AGREE WITH THE EXISTING DATA TYPE OR LENGTH
-4704	AN UNSUPPORTED DATA TYPE WAS ENCOUNTERED AS AN INCLUDE COLUMN
-4705	<i>option</i> SPECIFIED ON ALTER PROCEDURE FOR PROCEDURE <i>routine-name</i> IS NOT VALID
-4706	ALTER PROCEDURE STATEMENT CANNOT BE PROCESSED BECAUSE THE OPTIONS IN EFFECT ARE NOT THE SAME AS THE ONES THAT WERE IN EFFECT (ENVID <i>envid</i>) WHEN THE PROCEDURE OR VERSION WAS FIRST DEFINED
-4707	STATEMENT <i>statement</i> IS NOT ALLOWED WHEN USING A TRUSTED CONNECTION
-4708	TABLE <i>table-name</i> CANNOT BE DEFINED AS SPECIFIED IN THE <i>statement</i> STATEMENT IN A COMMON CRITERIA ENVIRONMENT
-4709	EXPLAIN MONITORED STMTS FAILED WITH REASON CODE = <i>yyyyy</i>
-4710	EXCHANGE DATA STATEMENT SPECIFIED <i>table1</i> and <i>table2</i> BUT THE TABLES DO NOT HAVE A DEFINED CLONE RELATIONSHIP
-5001	TABLE <i>table-name</i> IS NOT VALID
-5012	HOST VARIABLE <i>host-variable</i> IS NOT EXACT NUMERIC WITH SCALE ZERO
-7008	<i>object-name</i> NOT VALID FOR OPERATION (<i>reason-code</i>)
-16000	AN XQUERY EXPRESSION CANNOT BE PROCESSED BECAUSE THE <i>context-component</i> COMPONENT OF THE STATIC CONTEXT HAS NOT BEEN ASSIGNED. ERROR QNAME = <i>err:XPST0001</i>
-16001	AN XQUERY EXPRESSION STARTING WITH TOKEN <i>token</i> CANNOT BE PROCESSED BECAUSE THE FOCUS COMPONENT OF THE DYNAMIC CONTEXT HAS NOT BEEN ASSIGNED. ERROR QNAME = <i>err:XPDY0002</i>
-16002	AN XQUERY EXPRESSION HAS AN UNEXPECTED TOKEN <i>token</i> FOLLOWING <i>text</i> . EXPECTED TOKENS MAY INCLUDE: <i>token-list</i> . ERROR QNAME= <i>err:XPST0003</i>
-16003	AN EXPRESSION OF DATA TYPE <i>value-type</i> CANNOT BE USED WHEN THE DATA TYPE <i>expected-type</i> IS EXPECTED IN THE CONTEXT. ERROR QNAME= <i>err:XPTY0004</i>
-16005	AN XQUERY EXPRESSION REFERENCES AN ELEMENT NAME, ATTRIBUTE NAME, TYPE NAME, FUNCTION NAME, NAMESPACE PREFIX, OR VARIABLE NAME <i>undefined-name</i> THAT IS NOT DEFINED WITHIN THE STATIC CONTEXT. ERROR QNAME= <i>err:XPST0008</i>
-16007	THE XQUERY PATH EXPRESSION REFERENCES AN AXIS <i>axis-type</i> THAT IS NOT SUPPORTED. ERROR QNAME = <i>err:XQST0010</i>
-16009	AN XQUERY FUNCTION NAMED <i>function-name</i> WITH <i>number-of-parms</i> PARAMETERS IS NOT DEFINED IN THE STATIC CONTEXT. ERROR QNAME= <i>err:XPST0017</i>
-16011	THE RESULT OF AN INTERMEDIATE STEP EXPRESSION IN AN XQUERY PATH EXPRESSION CONTAINS AN ATOMIC VALUE. ERROR QNAME = <i>err:XPTY0019</i>
-16012	THE CONTEXT ITEM IN AN AXIS STEP MUST BE A NODE. ERROR QNAME = <i>err:XPTY0020</i>
-16015	AN ELEMENT CONSTRUCTOR CONTAINS AN ATTRIBUTE NODE NAMED <i>attribute-name</i> THAT FOLLOWS AN XQUERY NODE THAT IS NOT AN ATTRIBUTE NODE. ERROR QNAME = <i>err:XQTY0024</i>
-16016	THE ATTRIBUTE NAME <i>attribute-name</i> CANNOT BE USED MORE THAN ONCE IN AN ELEMENT CONSTRUCTOR. ERROR QNAME = <i>err:XQTY0025</i>

-16020	THE CONTEXT NODE IN A PATH EXPRESSION THAT BEGINS WITH AN INITIAL "/" OR "/" DOES NOT HAVE AN XQUERY DOCUMENT NODE ROOT. ERROR QNAME = <i>err:XPDY0050</i>
-16022	OPERANDS OF TYPES <i>xquery-data-types</i> ARE NOT VALID FOR OPERATOR <i>operator-name</i> . ERROR QNAME = <i>err:XPTY0004</i>
-16023	THE XQUERY PROLOG CANNOT CONTAIN MULTIPLE DECLARATIONS FOR THE SAME NAMESPACE PREFIX <i>ns-prefix</i> . ERROR QNAME = <i>err:XQST0033</i>
-16024	THE NAMESPACE PREFIX <i>prefix-name</i> CANNOT BE REDECLARED OR CANNOT BE BOUND TO THE SPECIFIED URI. ERROR QNAME = <i>err:XQST0070</i>
-16031	XQUERY LANGUAGE FEATURE USING SYNTAX <i>string</i> IS NOT SUPPORTED
-16032	THE STRING <i>string</i> IS NOT A VALID URI. ERROR QNAME = <i>err:XQST0046</i>
-16036	THE URI THAT IS SPECIFIED IN A NAMESPACE DECLARATION CANNOT BE A ZERO-LENGTH STRING
-16046	A NUMERIC XQUERY EXPRESSION ATTEMPTED TO DIVIDE BY ZERO. ERROR QNAME = <i>err:FOAR0001</i>
-16047	AN XQUERY EXPRESSION RESULTED IN ARITHMETIC OVERFLOW OR UNDERFLOW. ERROR QNAME = <i>err:FOAR0002</i>
-16048	AN XQUERY PROLOG CANNOT CONTAIN MORE THAN ONE <i>decl-type</i> DECLARATION. ERROR QNAME = <i>error-qname</i>
-16049	THE LEXICAL VALUE <i>value</i> IS NOT VALID FOR THE <i>type-name</i> DATA TYPE IN THE FUNCTION OR CAST. ERROR QNAME = <i>err:FOCA0002</i>
-16051	THE VALUE <i>value</i> OF DATA TYPE <i>source-type</i> IS OUT OF RANGE FOR AN IMPLICIT OR EXPLICIT CAST TO TARGET DATA TYPE <i>target-type</i> . ERROR QNAME = <i>err:error-qname</i>
-16061	THE VALUE <i>value</i> CANNOT BE CONSTRUCTED AS, OR CAST (USING AN IMPLICIT OR EXPLICIT CAST) TO THE DATA TYPE <i>data-type</i> . ERROR QNAME = <i>err:FORG0001</i>
-16065	AN EMPTY SEQUENCE CANNOT BE CAST TO THE DATA TYPE <i>data-type</i> , ERROR QNAME = <i>err:FORG0006</i>
-16066	THE ARGUMENT PASSED TO THE AGGREGATE FUNCTION <i>function-name</i> IS NOT VALID. ERROR QNAME = <i>err:FORG0006</i>
-16075	THE SEQUENCE TO BE SERIALIZED CONTAINS AN ITEM THAT IS AN ATTRIBUTE NODE. ERROR QNAME = <i>err:SEN0001</i>
-16246	INCOMPLETE ANNOTATION MAPPING AT OR NEAR LINE <i>lineno</i> IN XML SCHEMA DOCUMENT <i>uri</i> . REASON CODE = <i>reason-code</i> .
-16247	SOURCE XML TYPE <i>source-data-type</i> CANNOT BE MAPPED TO TARGET SQL TYPE <i>target-data-type</i> IN THE ANNOTATION AT OR NEAR LINE <i>lineno</i> IN XML SCHEMA DOCUMENT <i>uri</i>
-16248	UNKNOWN ANNOTATION <i>annotation-name</i> AT OR NEAR LINE <i>lineno</i> IN XML SCHEMA DOCUMENT <i>uri</i>
-16249	THE <i>db2-xdb:expression</i> ANNOTATION <i>expression</i> AT OR NEAR LINE <i>lineno</i> IN XML SCHEMA DOCUMENT <i>uri</i> IS TOO LONG.
-16250	THE <i>db2-xdb:defaultSQLSchema</i> WITH VALUE <i>schema-name</i> AT OR NEAR LINE <i>lineno</i> IN XML SCHEMA DOCUMENT <i>uri</i> CONFLICTS WITH ANOTHER <i>db2-xdb:defaultSQLSchema</i> SPECIFIED IN ONE OF THE XML SCHEMA DOCUMENTS WITHIN THE SAME XML SCHEMA.
-16251	DUPLICATE ANNOTATION DEFINED FOR <i>object-name</i> AT OR NEAR <i>location</i> IN XML SCHEMA DOCUMENT <i>uri</i>
-16252	THE <i>db2-xdb:rowSet</i> NAME <i>rowset-name</i> SPECIFIED AT OR NEAR LINE <i>lineno</i> IN THE XML SCHEMA DOCUMENT <i>uri</i> IS ALREADY ASSOCIATED WITH ANOTHER TABLE

-16253	THE <i>db2-xdb:condition</i> ANNOTATION <i>condition</i> AT OR NEAR LINE <i>lineno</i> IN XML SCHEMA DOCUMENT <i>uri</i> IS TOO LONG.
-16254	A <i>db2-xdb:locationPath</i> <i>locationpath</i> AT OR NEAR LINE <i>lineno</i> IN XML SCHEMA DOCUMENT <i>uri</i> IS NOT VALID WITH REASON CODE <i>reason-code</i> .
-16255	A <i>db2-xdb:rowSet</i> VALUE <i>rowset-name</i> USED AT OR NEAR LINE <i>lineno</i> IN XML SCHEMA DOCUMENT <i>uri</i> CONFLICTS WITH A <i>db2-xdb:table</i> ANNOTATION WITH THE SAME NAME.
-16257	XML SCHEMA FEATURE <i>feature</i> SPECIFIED IS NOT SUPPORTED FOR DECOMPOSITION.
-16258	THE XML SCHEMA CONTAINS A RECURSIVE ELEMENT WHICH IS AN UNSUPPORTED FEATURE FOR DECOMPOSITION. THE RECURSIVE ELEMENT IS IDENTIFIED AS <i>elementnamespace:elementname</i> OF TYPE <i>typenamespace:typename</i> .
-16259	INVALID MANY-TO-MANY MAPPINGS DETECTED IN XML SCHEMA DOCUMENT <i>uri1</i> NEAR LINE <i>lineno1</i> AND IN XML SCHEMA DOCUMENT <i>uri2</i> NEAR LINE <i>lineno2</i> .
-16260	XML SCHEMA ANNOTATIONS INCLUDE NO MAPPINGS TO ANY COLUMN OF ANY TABLE.
-16262	THE ANNOTATED XML SCHEMA HAS NO COLUMNS MAPPED FOR ROWSET <i>rowsetname</i> .
-16265	THE XML DOCUMENT CANNOT BE DECOMPOSED USING XML SCHEMA <i>xsobject-name</i> WHICH IS NOT ENABLED OR IS INOPERATIVE FOR DECOMPOSITION.
-16266	AN SQL ERROR OCCURRED DURING DECOMPOSITION OF DOCUMENT <i>docid</i> WHILE ATTEMPTING TO INSERT DATA. INFORMATION RETURNED FOR THE ERROR INCLUDES SQLCODE <i>sqlcode</i> , SQLSTATE <i>sqlstate</i> , AND MESSAGE TOKENS <i>token-list</i> .
-20003	GBPCACHE NONE CANNOT BE SPECIFIED FOR TABLESPACE OR INDEX IN GRECP
-20004	8K or 16K BUFFERPOOL PAGESIZE INVALID FOR A WORKFILE OBJECT
-20005	THE INTERNAL ID LIMIT OF <i>limit</i> HAS BEEN EXCEEDED FOR OBJECT TYPE <i>object-type</i>
-20006	LOBS CANNOT BE SPECIFIED AS PARAMETERS WHEN NO WLM ENVIRONMENT IS SPECIFIED
-20008	UNSUPPORTED OPTION <i>keyword</i> SPECIFIED
-20019	THE RESULT TYPE RETURNED FROM THE FUNCTION BODY CANNOT BE ASSIGNED TO THE DATA TYPE DEFINED IN THE RETURNS CLAUSE
-20058	THE FULLSELECT SPECIFIED FOR MATERIALIZED QUERY TABLE <i>table-name</i> IS NOT VALID
-20060	UNSUPPORTED DATA TYPE <i>data-type</i> ENCOUNTERED IN SQL <i>object-type object-name</i>
-20070	AUXILIARY TABLE <i>table-name</i> CANNOT BE CREATED BECAUSE COLUMN <i>column-name</i> IS NOT A LOB COLUMN
-20071	WLM ENVIRONMENT NAME MUST BE SPECIFIED <i>function-name</i>
-20072	<i>csect-name bind-type bind-subtype</i> ERROR USING <i>auth-id</i> AUTHORITY OPERATION IS NOT ALLOWED ON A <i>package-type</i> PACKAGE <i>package-name</i>
-20073	THE FUNCTION <i>function-name</i> CANNOT BE ALTERED BECAUSE IT IS REFERENCED IN EXISTING VIEW OR MATERIALIZED QUERY TABLE DEFINITIONS
-20074	THE OBJECT <i>object-name</i> CANNOT BE CREATED BECAUSE THE FIRST THREE CHARACTERS ARE RESERVED FOR SYSTEM OBJECTS
-20091	A VIEW NAME WAS SPECIFIED AFTER LIKE IN ADDITION TO THE INCLUDING IDENTITY COLUMN ATTRIBUTES CLAUSE
-20092	A TABLE OR VIEW WAS SPECIFIED IN THE LIKE CLAUSE, BUT THE OBJECT CANNOT BE USED IN THIS CNTEXT
-20093	THE TABLE <i>table-name</i> CANNOT BE CONVERTED TO OR FROM A MATERIALIZED QUERY TABLE, OR THE MATERIALIZED QUERY TABLE PROPERTY CANNOT BE ALTERED. REASON CODE = <i>reason-code</i> .
-20100	AN ERROR OCCURRED WHEN BINDING A TRIGGERED SQL STATEMENT. INFORMATION RETURNED: SECTION NUMBER : <i>section-number</i> SQLCODE <i>sqlerror</i> , SQLSTATE <i>sqlstate</i> , AND MESSAGE TOKENS

-20101	THE FUNCTION <i>function</i> FAILED WITH REASON <i>rc</i>
-20102	CREATE OR ALTER STATEMENT FOR USER-DEFINED FUNCTION <i>function-name</i> SPECIFIED THE <i>option</i> OPTION WHICH IS NOT ALLOWED FOR THE TYPE OF ROUTINE
-20104	AN ATTEMPT TO ALTER A CCSID FROM <i>from-ccsid</i> TO <i>to-ccsid</i> FAILED
-20106	THE CCSID FOR THE TABLE SPACE OR DATABASE CANNOT BE CHANGED BECAUSE THE TABLE SPACE OR DATABASE ALREADY CONTAINS A TABLE THAT IS REFERENCED IN EXISTING VIEW, OR MATERIALIZED QUERY TABLE DEFINITIONS OR AN EXTENDED INDEX
-20107	HOST VARIABLE OR PARAMETER NUMBER <i>position-number</i> CANNOT BE USED AS SPECIFIED BECAUSE REASON <i>reason</i>
-20108	A RESULT SET CONTAINS AN UNSUPPORTED DATA TYPE IN POSITION NUMBER <i>position-number</i> FOR CURSOR <i>cursor-name</i> OPENED BY STORED PROCEDURE <i>procedure-name</i>
-20110	CANNOT IMPLICITLY CONNECT TO A REMOTE SITE WITH A SAVEPOINT OUTSTANDING
-20111	CANNOT ISSUE SAVEPOINT, RELEASE SAVEPOINT, ROLLBACK TO SAVEPOINT FROM A TRIGGER, FROM A USER-DEFINED FUNCTION, OR FROM A GLOBAL TRANSACTION
-20123	CALL TO STORED PROCEDURE <i>procedure</i> FAILED BECAUSE THE RESULT SET RETURNED FOR CURSOR <i>cursor</i> IS SCROLLABLE, BUT THE CURSOR IS NOT POSITIONED BEFORE THE FIRST ROW
-20124	OPEN CURSOR <i>cursor</i> FAILED BECAUSE THE CURSOR IS SCROLLABLE BUT THE CLIENT DOES NOT SUPPORT THIS
-20125	CALL TO STORED PROCEDURE <i>procedure</i> FAILED BECAUSE THE RESULT SET FOR CURSOR <i>cursor</i> IS SCROLLABLE, BUT THE CLIENT DOES NOT SUPPORT THIS
-20127	VALUE SPECIFIED ON FETCH STATEMENT FOR ABSOLUTE OR RELATIVE IS TOO LARGE FOR DRDA
-20129	LOCAL SPECIAL REGISTER IS NOT VALID AS USED
-20142	SEQUENCE <i>sequence-name</i> CANNOT BE USED AS SPECIFIED
-20143	THE ENCRYPTION OR DECRYPTION FUNCTION FAILED, BECAUSE THE ENCRYPTION PASSWORD VALUE IS NOT SET
-20144	THE ENCRYPTION IS INVALID BECAUSE THE LENGTH OF THE PASSWORD WAS LESS THAN 6 BYTES OR GREATER THAN 127 BYTES
-20146	THE DECRYPTION FAILED. THE DATA IS NOT ENCRYPTED
-20147	THE ENCRYPTION FUNCTION FAILED. MULTIPLE PASS ENCRYPTION IS NOT SUPPORTED
-20163	HEXADECIMAL CONSTANT GX IS NOT ALLOWED
-20165	AN SQL DATA CHANGE STATEMENT WITHIN A FROM CLAUSE IS NOT ALLOWED IN THE CONTEXT IN WHICH IT WAS SPECIFIED
-20166	AN SQL DATA CHANGE STATEMENT WITHIN A SELECT SPECIFIED A VIEW <i>view-name</i> WHICH IS NOT A SYMMETRIC VIEW OR COULD NOT HAVE BEEN DEFINED AS A SYMMETRIC VIEW
-20177	SET DATA TYPE CLAUSE ON ALTER TABLE SPECIFIED FLOATING POINT, BUT THIS CHANGE IS DISALLOWED
-20178	VIEW <i>view-name</i> ALREADY HAS AN INSTEAD OF <i>operation</i> TRIGGER DEFINED
-20179	THE INSTEAD OF TRIGGER CANNOT BE CREATED BECAUSE THE VIEW <i>view-name</i> IS DEFINED USING THE WITH CHECK OPTION
-20180	COLUMN <i>column-name</i> IN TABLE <i>table-name</i> CANNOT BE ALTERED AS SPECIFIED
-20181	COLUMN CANNOT BE ADDED TO INDEX <i>index-name</i>
-20182	PARTITIONING CLAUSE <i>clause</i> ON <i>stmt-type</i> STATEMENT FOR <i>index-name</i> IS NOT VALID
-20183	THE PARTITIONED, ADD PARTITION, ADD PARTITIONING KEY, ALTER PARTITION, ROTATE PARTITION, OR PARTITION BY RANGE CLAUSE SPECIFIED ON CREATE OR ALTER FOR <i>name</i> IS NOT VALID

-20185	CURSOR <i>cursor-name</i> IS NOT DEFINED TO ACCESS ROWSETS, BUT A CLAUSE WAS SPECIFIED THAT IS VALID ONLY WITH ROWSET ACCESS
-20186	A CLAUSE SPECIFIED FOR THE DYNAMIC SQL STATEMENT BEING PROCESSED IS NOT VALID
-20200	THE INSTALL OR REPLACE OF <i>jar-id</i> WITH URL <i>url</i> FAILED DUE TO REASON <i>reason-code-(reason-string)</i> .
-20201	THE INSTALL, REPLACE, REMOVE, OR ALTER OF <i>jar-name</i> FAILED DUE TO REASON <i>reason-code-(reason-string)</i>
-20202	THE REMOVE OF <i>jar-name</i> FAILED AS <i>class</i> IS IN USE
-20203	USER-DEFINED FUNCTION OR PROCEDURE <i>name</i> HAS A JAVA METHOD WITH AN INVALID SIGNATURE. THE ERROR IS AT OR NEAR PARAMETER <i>number</i> . THE SIGNATURE IS <i>signature</i> .
-20204	THE USER-DEFINED FUNCTION OR PROCEDURE <i>routine-name</i> WAS UNABLE TO MAP TO A SINGLE JAVA METHOD
-20207	THE INSTALL OR REMOVE OF <i>jar-name</i> SPECIFIED THE USE OF A DEPLOYMENT DESCRIPTOR.
-20210	THE SQL STATEMENT CANNOT BE EXECUTED BECAUSE IT WAS PRECOMPILED AT A LEVEL THAT IS INCOMPATIBLE WITH THE CURRENT VALUE OF THE ENCODING BIND OPTION OR SPECIAL REGISTER
-20211	THE SPECIFICATION ORDER BY OR FETCH FIRST N ROWS ONLY IS INVALID
-20212	USER-DEFINED ROUTINE <i>name</i> ENCOUNTERED AN EXCEPTION ATTEMPTING TO LOAD JAVA CLASS <i>class-name</i> FROM JAR <i>jar-name</i> . ORIGINAL EXCEPTION: <i>exception-string</i>
-20213	STORED PROCEDURE <i>procedure-name</i> HAS RETURNED A DYNAMIC RESULT SET, PARAMETER <i>number</i> , THAT IS NOT VALID
-20223	THE ENCRYPT_TDES OR DECRYPT FUNCTION FAILED. ENCRYPTION FACILITY NOT AVAILABLE <i>return-code, reason-code</i>
-20224	ENCRYPTED DATA THAT WAS ORIGINALLY A BINARY STRING CANNOT BE DECRYPTED TO A CHARACTER STRING
-20227	REQUIRED CLAUSE IS MISSING FOR ARGUMENT <i>number</i> OF <i>expression</i>
-20232	CHARACTER CONVERSION FROM CCSID <i>from-ccsid</i> TO <i>to-ccsid</i> FAILED WITH ERROR CODE <i>error-code</i> FOR TABLE <i>dbid.obid</i> COLUMN <i>column-number</i> REQUESTED BY <i>csect-name</i>
-20235	THE COLUMN <i>column-name</i> CANNOT BE ADDED OR ALTERED BECAUSE <i>table-name</i> IS A MATERIALIZED QUERY TABLE
-20240	INVALID SPECIFICATION OF A SECURITY LABEL COLUMN <i>column-name</i> REASON CODE <i>reason-code</i>
-20248	ATTEMPTED TO EXPLAIN ALL CACHED STATEMENTS OR A CACHED STATEMENT WITH STMTID OR STMTOKEN <i>ID-token</i> BUT THE REQUIRED EXPLAIN INFORMATION IS NOT ACCESSIBLE.
-20252	THE PACKAGE <i>package-name</i> NEEDS TO BE REBOUND IN ORDER TO BE SUCCESSFULLY EXECUTED (<i>token</i>)
-20257	FINAL TABLE IS NOT VALID WHEN THE TARGET VIEW <i>view-name</i> OF THE SQL DATA CHANGE STATEMENT IN A FULLSELECT HAS AN INSTEAD OF TRIGGER DEFINED
-20258	INVALID USE OF INPUT SEQUENCE ORDERING
-20260	THE ASSIGNMENT CLAUSE OF THE UPDATE OPERATION AND THE VALUES CLAUSE OF THE INSERT OPERATION MUST SPECIFY AT LEAST ONE COLUMN THAT IS NOT AN INCLUDE COLUMN
-20264	FOR TABLE <i>table-name</i> , <i>primary-auth-id</i> WITH SECURITY LABEL <i>primary-auth-id-seclabel</i> IS NOT AUTHORIZED TO PERFORM <i>operation</i> ON A ROW WITH SECURITY LABEL <i>row-seclabel</i> . THE RECORD IDENTIFIER (RID) OF THIS ROW IS <i>rid-number</i> .
-20265	SECURITY LABEL IS <i>reason</i> FOR <i>primary-auth-id</i>

-20266	ALTER VIEW FOR <i>view-name</i> FAILED
-20275	The XML NAME <i>name</i> IS NOT VALID. REASON CODE = <i>reason-code</i>
-20281	<i>primary-auth-id</i> DOES NOT HAVE THE MLS WRITE-DOWN PRIVILEGE
-20283	A DYNAMIC CREATE STATEMENT CANNOT BE PROCESSED WHEN THE VALUE OF CURRENT SCHEMA DIFFERS FROM CURRENT SQLID
-20287	DB2 CONVERTED STRING <i>token-type token</i> FROM <i>from-ccsid</i> TO <i>to-ccsid</i> , AND RESULTED IN SUBSTITUTION CHARACTER
-20289	INVALID STRING UNIT <i>unit</i> SPECIFIED FOR FUNCTION <i>function-name</i>
-20295	THE EXECUTION OF A BUILT IN FUNCTION <i>function</i> RESULTED IN AN ERROR REASON CODE <i>reason-code</i>
-20304	INVALID INDEX DEFINITION INVOLVING AN XMLPATTERN CLAUSE OR A COLUMN OF DATA TYPE XML. REASON CODE = <i>reason-code</i>
-20304	AN XML VALUE CANNOT BE INSERTED OR UPDATED BECAUSE OF AN ERROR DETECTED WHEN INSERTING OR UPDATING THE INDEX IDENTIFIED BY <i>index-id</i> ON TABLE <i>table-name</i> . REASON CODE = <i>reason-code</i>
-20305	AN XML VALUE CANNOT BE INSERTED OR UPDATED BECAUSE OF AN ERROR DETECTED WHEN INSERTING OR UPDATING THE INDEX IDENTIFIED BY <i>index-id</i> ON TABLE <i>table-name</i> . REASON CODE = <i>reason-code</i>
-20306	AN INDEX ON AN XML COLUMN CANNOT BE CREATED BECAUSE OF AN ERROR DETECTED WHEN INSERTING THE XML VALUES INTO THE INDEX. REASON CODE = <i>reason-code</i>
-20310	THE REMOVE OF <i>jar-name1</i> FAILED, AS IT IS IN USE BY <i>jar-name2</i>
-20311	THE VALUE PROVIDED FOR THE NEW JAVA PATH IS ILLEGAL
-20312	THE ALTER OF JAR <i>jar-id</i> FAILED BECAUSE THE SPECIFIED PATH REFERENCES ITSELF
-20314	THE PARAMETER LIST DOES NOT MATCH THE PARAMETER LIST FOR ALL OTHER VERSIONS OF ROUTINE <i>routine-name</i>
-20313	DEBUG MODE OPTION FOR ROUTINE <i>routine-name</i> CANNOT BE CHANGED
-20316	THE CURRENTLY ACTIVE VERSION FOR ROUTINE <i>routine-name (type)</i> CANNOT BE DROPPED
-20327	THE DEPTH OF AN XML DOCUMENT EXCEEDS THE LIMIT OF 128 LEVELS
-20328	THE DOCUMENT WITH TARGET NAMESPACE <i>namespace</i> AND SCHEMA LOCATION <i>location</i> HAS ALREADY BEEN ADDED FOR THE XML SCHEMA IDENTIFIED BY <i>schema n</i>
-20329	THE DOCUMENT WITH TARGET NAMESPACE <i>namespace</i> AND SCHEMA LOCATION <i>location</i> HAS ALREADY BEEN ADDED FOR THE XML SCHEMA IDENTIFIED BY <i>schema n</i>
-20330	THE <i>xsrobject-type</i> IDENTIFIED BY XML <i>uri-type1 uri1</i> AND XML <i>uri-type2 uri2</i> IS NOT FOUND IN THE XML SCHEMA REPOSITORY
-20331	THE XML COMMENT VALUE <i>string</i> IS NOT VALID
-20332	THE XML PROCESSING INSTRUCTION VALUE <i>string</i> IS NOT VALID
-20337	MORE THAN ONE <i>xsrobject-type</i> EXISTS IDENTIFIED BY XML <i>uri-type1 uri1</i> AND <i>uri-type2 uri2</i> EXISTS IN THE XML SCHEMA REPOSITORY.
-20339	XML SCHEMA <i>name</i> IS NOT IN THE CORRECT STATE TO PERFORM OPERATION <i>operation</i>
-20340	XML SCHEMA <i>xmlschema-name</i> INCLUDES AT LEAST ONE XML SCHEMA DOCUMENT IN NAMESPACE <i>namespace</i> THAT IS NOT CONNECTED TO THE OTHER XML SCHEMA DOCUMENTS
-20345	THE XML VALUE IS NOT A WELL-FORMED DOCUMENT WITH A SINGLE ROOT ELEMENT
-20353	AN OPERATION INVOLVING COMPARISON CANNOT USE OPERAND <i>name</i> DEFINED AS DATA TYPE <i>type-name</i>
-20354	INVALID SPECIFICATION OF A ROW CHANGE TIMESTAMP COLUMN FOR TABLE <i>table-name</i>

-20355	THE STATEMENT COULD NOT BE PROCESSED BECAUSE ONE OR MORE IMPLICITLY CREATED OBJECTS ARE INVOLVED <i>reason-code</i>
-20356	THE TABLE WITH DBID = <i>dbid</i> AND OBID = <i>obid</i> CANNOT BE TRUNCATED BECAUSE DELETE TRIGGERS EXIST FOR THE TABLE, OR THE TABLE IS THE PARENT TABLE IN A REFERENTIAL CONSTRAINT
-20361	AUTHORIZATION ID <i>authorization-name</i> IS NOT DEFINED FOR THE TRUSTED CONTEXT <i>context-name</i>
-20362	ATTRIBUTE <i>attribute-name</i> WITH VALUE <i>value</i> CANNOT BE DROPPED BECAUSE IT IS NOT PART OF THE DEFINITION OF TRUSTED CONTEXT <i>context-name</i>
-20363	ATTRIBUTE <i>attribute-name</i> WITH VALUE <i>value</i> IS NOT A UNIQUE SPECIFICATION FOR TRUSTED CONTEXT <i>context-name</i>
-20365	A SIGNALING NAN WAS ENCOUNTERED, OR AN EXCEPTION OCCURRED IN AN ARITHMETIC OPERATION OR FUNCTION INVOLVING A DECFLOAT
-20366	TABLE WITH DBID= <i>dbid.obid</i> AND OBID= <i>obid</i> CANNOT BE TRUNCATED BECAUSE UNCOMMITTED UPDATES EXIST ON THE TABLE WITH 'IMMEDIATE' OPTION SPECIFIED IN THE STATEMENT
-20369	AN ALTER TRUSTED CONTEXT STATEMENT FOR <i>context-name</i> ATTEMPTED TO REMOVE THE LAST CONNECTION TRUST ATTRIBUTE ASSOCIATED WITH THE TRUSTED CONTEXT
-20372	THE SYSTEM AUTHID CLAUSE OF A CREATE OR ALTER TRUSTED CONTEXT STATEMENT FOR <i>context-name</i> SPECIFIED <i>authorization-name</i> , BUT ANOTHER TRUSTED CONTEXT IS ALREADY DEFINED FOR THAT AUTHORIZATION ID.
-20373	A CREATE OR ALTER TRUSTED CONTEXT STATEMENT SPECIFIED <i>authorization-name</i> MORE THAN ONCE OR THE TRUSTED CONTEXT IS ALREADY DEFINED TO BE USED BY THIS AUTHORIZATION ID OR PUBLIC.
-20374	AN ALTER TRUSTED CONTEXT STATEMENT FOR <i>context-name</i> SPECIFIED <i>authorization-name</i> BUT THE TRUSTED CONTEXT IS NOT CURRENTLY DEFINED TO BE USED BY THIS AUTHORIZATION ID OR PUBLIC
-20377	AN ILLEGAL XML CHARACTER <i>hex-char</i> WAS FOUND IN AN SQL/XML EXPRESSION OR FUNCTION ARGUMENT THAT BEGINS WITH STRING <i>start-string</i>
-20380	ALTER INDEX WITH REGENERATE OPTION FOR <i>index-name</i> FAILED. INFORMATION RETURNED: SQLCODE <i>sqlcode</i> , SQLSTATE <i>sqlstate</i> , MESSAGE TOKENS <i>token-list</i>
-20381	ALTER INDEX WITH REGENERATE OPTION IS NOT VALID FOR <i>index-name</i>
-20382	CONTEXT ITEM CANNOT BE A SEQUENCE WITH MORE THAN ONE ITEM
-20398	ERROR ENCOUNTERED DURING XML PARSING AT LOCATION <i>n text</i>
-20399	XML PARSING OR VALIDATION ERROR ENCOUNTERED DURING XML SCHEMA VALIDATION AT LOCATION <i>n text</i>
-20400	XML SCHEMA ERROR <i>n text</i>
-20409	AN XML DOCUMENT OR CONSTRUCTED XML VALUE CONTAINS A COMBINATION OF XML NODES THAT CAUSES AN INTERNAL IDENTIFIER LIMIT TO BE EXCEEDED
-20410	THE NUMBER OF CHILDREN NODES OF AN XML NODE IN AN XML VALUE HAS EXCEEDED THE LIMIT NUMBER OF CHILDREN NODES
-20411	A FETCH CURRENT CONTINUE OPERATION WAS REQUESTED FOR <i>cursor-name</i> BUT THERE IS NO PRESERVED, TRUNCATED DATA TO RETURN
-20412	SERIALIZATION OF AN XML VALUE RESULTED IN CHARACTERS THAT COULD NOT BE REPRESENTED IN THE TARGET ENCODING
-20423	A CREATE TABLE, OR DECLARE GLOBAL TEMPORARY TABLE STATEMENT FOR <i>table-name</i> ATTEMPTED TO CREATE A TABLE WITH ALL THE COLUMNS DEFINED AS HIDDEN
-20433	AN UNTYPED PARAMETER MARKER WAS SPECIFIED, BUT AN ASSUMED DATA TYPE CANNOT BE DETERMINED FROM ITS USE

-30000	EXECUTION FAILED DUE TO A DISTRIBUTION PROTOCOL ERROR THAT WILL NOT AFFECT THE SUCCESSFUL EXECUTION OF SUBSEQUENT COMMANDS OR SQL STATEMENTS: REASON <i>reason-code</i> (sub-code)
-30002	THE SQL STATEMENT CANNOT BE EXECUTED DUE TO A PRIOR CONDITION IN A CHAIN OF STATEMENTS
-30020	EXECUTION FAILED DUE TO A DISTRIBUTION PROTOCOL ERROR THAT CAUSED DEALLOCATION OF THE CONVERSATION: REASON < <i>reason-code</i> (sub-code)>
-30021	EXECUTION FAILED DUE TO A DISTRIBUTION PROTOCOL ERROR THAT WILL AFFECT THE SUCCESSFUL EXECUTION OF SUBSEQUENT COMMANDS OR SQL STATEMENTS: MANAGER <i>manager</i> AT LEVEL <i>level</i> NOT SUPPORTED ERROR
-30025	EXECUTION FAILED BECAUSE FUNCTION IS NOT SUPPORTED BY THE SERVER WHICH CAUSED TERMINATION OF THE CONNECTION: LOCATION <i>location</i> PRODUCT ID <i>pppvvrr</i> REASON <i>reason-code</i> (sub-code)
-30030	COMMIT REQUEST WAS UNSUCCESSFUL, A DISTRIBUTION PROTOCOL VIOLATION HAS BEEN DETECTED, THE CONVERSATION HAS BEEN DEALLOCATED. ORIGINAL SQLCODE= <i>original-sqlcode</i> AND ORIGINAL SQLSTATE= <i>original-sqlstate</i>
-30040	EXECUTION FAILED DUE TO UNAVAILABLE RESOURCES THAT WILL NOT AFFECT THE SUCCESSFUL EXECUTION OF SUBSEQUENT COMMANDS OR SQL STATEMENTS. REASON < <i>reason-code</i> > TYPE OF RESOURCE < <i>resource-type</i> > RESOURCE NAME < <i>resource-name</i> > PRODUCT ID < <i>pppvvrrm</i> > RDBNAME < <i>rdbname</i> >
-30041	EXECUTION FAILED DUE TO UNAVAILABLE RESOURCES THAT WILL AFFECT THE SUCCESSFUL EXECUTION OF SUBSEQUENT COMMANDS AND SQL STATEMENTS. REASON < <i>reason-code</i> > TYPE OF RESOURCE < <i>resource-type</i> > RESOURCE NAME < <i>resource-name</i> > PRODUCT ID < <i>pppvvrrm</i> > RDBNAME < <i>rdbname</i> >
-30050	< <i>command-or-sql-statement-type</i> > COMMAND OR SQL STATEMENT INVALID WHILE BIND PROCESS IN PROGRESS
-30051	BIND PROCESS WITH SPECIFIED PACKAGE NAME AND CONSISTENCY TOKEN NOT ACTIVE
-30052	PROGRAM PREPARATION ASSUMPTIONS ARE INCORRECT
-30053	OWNER AUTHORIZATION FAILURE
-30060	RDB AUTHORIZATION FAILURE
-30061	RDB NOT FOUND
-30070	< <i>command</i> > COMMAND NOT SUPPORTED ERROR
-30071	< <i>object-type</i> > OBJECT NOT SUPPORTED ERROR
-30072	< <i>parameter</i> >:< <i>subcode</i> > PARAMETER NOT SUPPORTED ERROR
-30073	< <i>parameter</i> >:< <i>subcode</i> > PARAMETER VALUE NOT SUPPORTED ERROR
-30074	REPLY MESSAGE WITH <i>codepoint</i> (svr <code>cod</code>) NOT SUPPORTED ERROR
-30080	COMMUNICATION ERROR <i>code</i> (subcode)
-30081	prot COMMUNICATION ERROR DETECTED. API= <i>api</i> , LOCATION= <i>loc</i> , FUNCTION= <i>func</i> , ERROR CODES= <i>rc1 rc2 rc3</i>
-30082	CONNECTION FAILED FOR SECURITY REASON <i>reason-code</i> (<i>reason-string</i>)
-30090	REMOTE OPERATION INVALID FOR APPLICATION EXECUTION ENVIRONMENT
-30104	ERROR IN BIND OPTION <i>option</i> AND BIND VALUE <i>value</i>
-30105	BIND OPTION <i>option1</i> IS NOT ALLOWED WITH BIND OPTION
-30106	INVALID INPUT DATA DETECTED FOR A MULTIPLE ROW INSERT OPERATION. INSERT PROCESSING IS TERMINATED

Resource Types

Type Code	Type of Resource	Name, Content, Format
00000100	Database	DB

00000200	Table space	DB.SP
00000201	Index space	DB.SP
00000202	Table space	RD.DB.TS
00000205	Compression Dictionary	DB.SP
00000210	Partition	DB.SP.PT
00000220	Data set	DSN
00000230	Temporary file	SZ
00000240	Database procedure	DBP
00000300	Page	DB.SP.PG
00000301	Index minipage	DB.SP.PG.MP
00000302	Table space page	DB.SP.PG
00000303	Index space page	DB.SP.PG
00000304	Table space RID	DB.SP.RID
00000305	Index access/table space RID	DB.SP.RID
00000306	Index access/table space page	DB.SP.PG
00000307	Index space EOF	DB.SP.01
00000400	ICF catalog	IC
00000401	Authorization function	
00000402	Security Server	SAF/RACF return/reason codes
00000500	Storage group	SG
00000600	EDM pool space	
00000602	EDM DBD Space	
00000603	EDM DYNAMIC STATEMENT Space	
00000700	Buffer pool space	BP
00000701	Group buffer pool	GBP
00000800	Plan	PL
00000801	Package	COLLECTION. PACKAGE. CONTOKEN
00000802	BINDLOCK01 through BINDLOCK20	BINDLOCK01 through BINDLOCK20
00000900	32KB data area	
00000901	Sort storage	
00000903	Hash anchor	DB.SP.PG.AI
00000904	RIDLIST storage	
00000905	IRLM storage	
00000906	DB2	MEMBER
00000907	Data Space	MEMBER
00000908	Basic Floating Point Extensions Facility	
00000909	Extended Time-of-Day (TOD) Clock	
0000090A	XML storage	
00000A00	Table	RD.CR.TB
00000A10	Alias	RELDEP. OWNER. ALIAS. RD.CR.AL
00000A11	Distinct type	SC.DT
00000A12	User-defined function	SC.SN
00000A13	Stored procedure	SC.SN
00000A14	Sequence	
00000B00	View	RD.CR.VW
00000C00	Index	RD.CR.IX
00000C01	Index	CR.IX
00000D00	DBID/OBID	RD.DI.OI
00000D01	DBID/OBID	DI.OI
00000D02	OBID	OI

00000E00	SU limit exceeded	CN
00000F00	Auxiliary column	DI.OI. ROWID. COLN
00000F01	LOB lock	DIX.PIX. ROWID. VRSN
00001000	DDF	LOCATION or SUBSYSTEM ID
00001001	System conversation	LU.MODE. RTNCD. FDBK2. RCPRI. RCSEC. SENSE
00001002	Agent conversation	LU.MODE. RTNCD. FDBK2. RCPRI. RCSEC. SENSE
00001003	CNOS processing	LU. MODE. RTNCD. FDBK2. RCPRI. RCSEC. SENSE
00001004	CDB (Communication database)	LOCATION. AUTHORIZATION ID. PL
00001005	DB access agent	LOCATION
00001007	TCP/IP domain name	LINKNAME. DOMAIN. ERRNO
00001008	TCP/IP service name	LOCATION. SERVICE. ERRNO
00001102	Bootstrap data set (BSDS)	MEMBER
00002000	Table space CS-claim class	DB.SP
00002001	Table space RR-claim class	DB.SP
00002002	Table space write-claim class	DB.SP
00002003	Index space CS-claim class	DB.SP
00002004	Index space RR-claim class	DB.SP
00002005	Index space write-claim class	DB.SP
00002006	Table space partition CS-claim class	DB.SP.PT
00002007	Table space partition RR-claim class	DB.SP.PT
00002008	Table space partition write-claim class	DB.SP.PT
00002009	Index space partition CS-claim class	DB.SP.PT
00002010	Index space partition RR-claim class	DB.SP.PT
00002011	Index space partition Write-claim class	DB.SP.PT
00002100	Table space DBET entry	DB.SP
00002101	Index space DBET entry	DB.SP
00002102	Table space partition DBET entry	DB.SP.PT
00002103	Index space partition DBET entry	DB.SP.PT
00002104	DBET hash chain lock timeout	INTERNAL LOCK NN
00002105	Logical partition DBET entry	DB.SP.PT
00002200	Routine Parameter Storage	DBP
00002201	Debug Agent Storage	DBP
00002300	ICSF encryption and decryption facilities	
00003000	Code (release maintenance level or system parameter)	REL, APAR, ZPARM
00003002	Number of Stored Procedures	
00003072	Index	
00003073	Index	
00003328	Release dependency	
00003329		
00003330	OBID limit exceeded	
00003840	LOB column	

