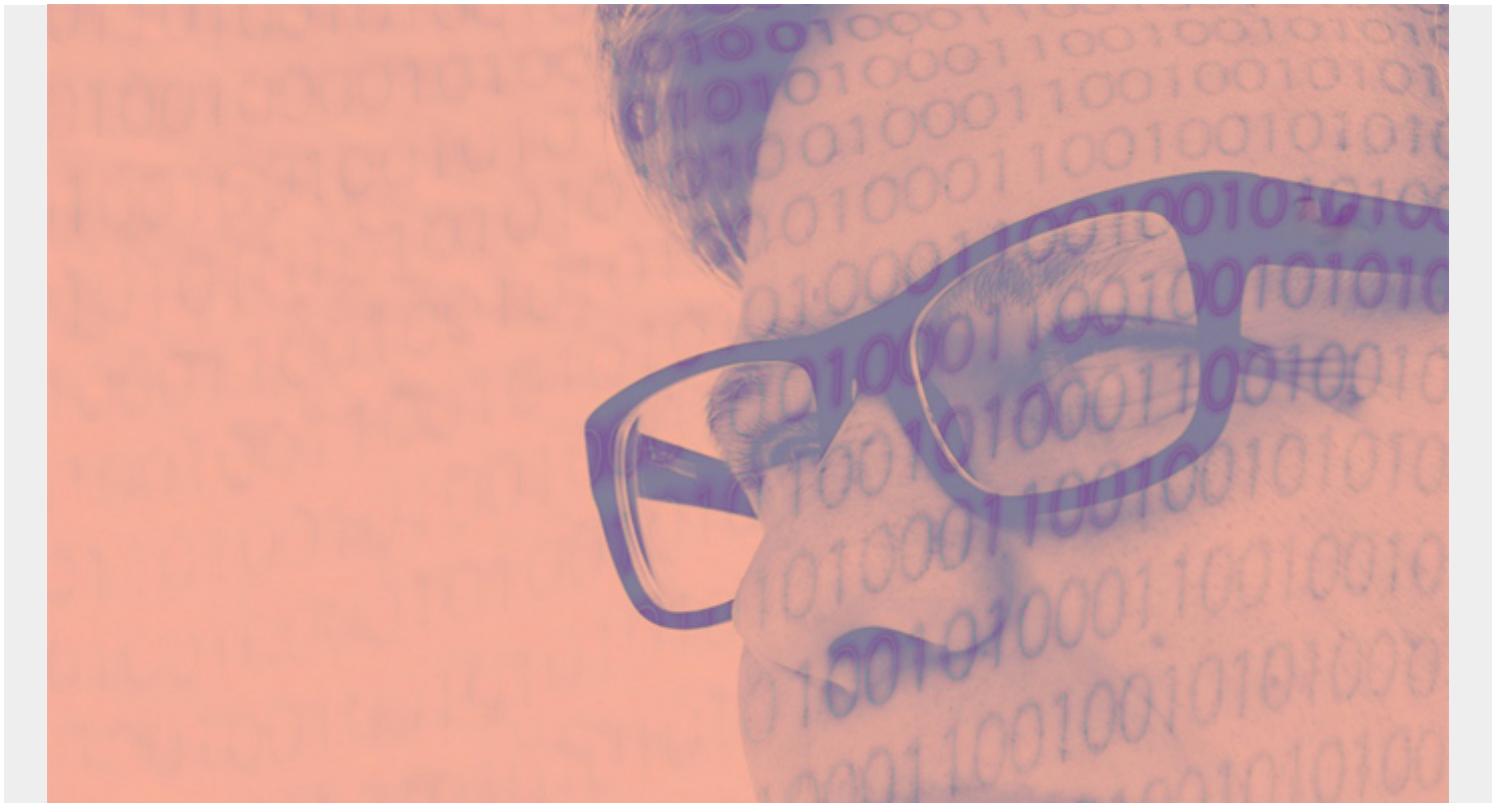


# QUERIES IN DB2 12



## subselect

```
>> __select-clause__ from-clause_____ >  
                                     |_where-clause_|  
> _____ >  
    |_group-by-clause_| |_having-clause_|  
> _____ >  
    |_order-by-clause_| |_offset-clause_| |_fetch-clause_|
```

(This article is part of our [Db2 Guide](#). Use the right-hand menu to navigate.)

## select-clause

```
>> __SELECT__ |_ALL_____  
              |_____ | _____ >  
              |_DISTINCT_|  
> _____ * _____ >> |  
<_, _____ |  
   |_____ expression_____ | |  
   | _____ |_AS_ | _____ |
```

```

|      | |__| |__column-name_| |
|_unpacked-row_____ |
|__table-name_____. * _____ |
  |_view-name_____ |
  |_correlation-name_|

```

unpacked row:

```

                                   <_, _____ >> __UNPACK-
function-invocation_.*_AS_( _field_name_data_type_| _____ >< from-clause:
  <_, _____ >> __FROM__ table-
reference_| _____ >< table reference:
>> _____single-table-reference_____ ><
|_single-view-expression_____ |
  |_nested-table-expression_____ |
  |_table-function-reference_____ |
  |_data-chage-table-reference_____ |
  |_joined-table_____ |
  |_table-locator-reference_____ |
  |_collection-derived-table_____ |
  |_xmltable-expression_____ |

```

single-table-reference:

```

          < _____ >> __table-
name _____ | _____ >< |_period-
specification__| |_correlation-clause_|

```

single-view-reference:

```

          < _____ >> __view-
name _____ | _____ >< |_period_
specification__| |_correlation-clause_| period-specification:
>> __FOR__ SYSTEM_TIME _____ AS OF value _____ ><
|_BUSINESS_TIME_____ | |_FROM_value1_to_value2_____ |
|_BETWEEN_value2_AND_value2_| correlation-clause: __AS__
>> __|__|__correlation-name_____ ><
| <_, _____ | |_( __column-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_____ >
  |_typed-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__ searched DELETE statement_____ |
  | __FINAL TABLE__(MERGE statement)_____ |
```

collection-derived-table:

```
>> __UNNEST__(__ordinary-array-expression_____)_____><
| __associative-array-expression | | WITH ORDINALITY | > __correlation-
clause_____>
```

typed-correlation-clause

```
  __AS__
>> __|____|__ correlation-name_____><
| <_,_____ | | (__column-name_data-type|_) | xmltable-
expression: >>_xmltable-function__ correlation
clause_____>
```

joined-table:

```
  __INNER__
>> __table-reference | _____ | __JOIN__ table-reference ON join-condition_><
| | OUTER | | | | __LEFT__ | _____ | | | | RIGHT | | | | FULL | |
| table-reference CROSS JOIN table-reference_____ |
| (__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 | _____>
  | grouping-set_____ |
  | super-groups_____ |
```

grouping-set:

```
expression | _____) _____>< | _____ | super-groups |
```

```

|
|      <_,_____ | |_(grouping-expression_____|_|
|_super-groups_| super-groups: >__ROLLUP__(grouping-expression-
list)_____>< |_CUBE__(grouping-expression-
list)_____|
|_grand-total_____|

```

grouping-expression-list:

```

|_____>__grouping-
expression_|_____>< |
|_____ | |_(grouping-expression_|_)_| having-clause:
>>__HAVING__search-condition_____><
order-by-clause:
|_____ _ASC_| |>__ORDER BY__sort-
key_|_____>< | | |_DESC_| | | |
|_ORDER OF table-designator_| | |_INPUT SEQUENCE_____ | sort-key:
>__column-name_____><
|_integer_____ | |_sort-key-expression_| offset clause:
>>__OFFSET__offset-row-count__ROW_____><
|_ROWS_| fetch-clause: _1_____ >>__FETCH FIRST_____|_____ |__ROW__
__ONLY_____>< |_NEXT_| |_integer_| |_ROWS_|

```

## fullselect

```

|_____>__subselect_____
|_____>
|_(fullselect)_____| | | | |
|_values-clause_| |_UNION_____ |_____ |__subselect_____ |
|_EXCEPT_____| |_ALL_____ | |_(fullselect)_ |
|_INTERSECT_|
|_____><
|_order-by-clause_| |_offset-clause_| |_fetch-clause_| values-clause:
>__VALUES__sequence-reference_____><
|_____ | |_(sequence-reference_____|_| select-
statement: >__
|_____>
|_WITH__common-table-expression_|
>__fullselect_____ |_____>
|_read-only-clause_____|
|_update-clause_____|
|_optimize-clause_____|
|_isolation-clause_____|
|_queryno-clause_____|
|_SKIP LOCKED DATA_____|

```

common-table-expression:

```
> __table-identifier_____ AS_(fullselect)_____>
| <_,_____ | |_(_____|_)_|
|_column-name_| read-only-clause:
>> __FOR_READ_ONLY_____>>
update-clause:
|_____ >> __FOR UPDATE OF_____column-
name_|_____>> optimize-for-clause:
>> __OPTIMIZE FOR_____integer_____ROWS_____>>
|_ROW_| isolation-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_____>
|_____ | <_,_____ | | |
|_(_____)_| | | |_parameter-type_| | |_SPECIFIC
FUNCTION__specific-name_____ | >_option-
list_____>> 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_ _____ | | ( _length_ ) _____ | | | _CCSID_ _ASCII_ |
| _FOR_ _SCBS_ _DATA_ | | | | | | | _CHARACTER_ _VARYING_ ( _length_ ) _____ |
| _EBCDIC_ | | _MIXED_ | | | | | | | _CHAR_ _____ | | | _UNICODE_ | | _BIT_ | | | | |
| _VARCHAR_ _____ | | | | | _ (1M)_ _____ | | | | | _CHARACTER_ _LARGE
OBJECT_ | _____ | _____ | | | | |
| _CHAR_ _____ | | ( _integer_ ) _____ | | _CCSID_ _ASCII_ | | _FOR_ _SBCS_ _DATA_ | | |
| _CLOB_ _____ | | _EBCDIC_ | | _MIXED_ | | | _ (1)_ _____
| _UNICODE_ | |
| _GRAPHIC_ | _____ | _____
_____ | | | | ( _integer_ ) _____ | | | _CCSID_ _ASCII_ | | | |
| _VARGRAPHIC_ ( _integer_ ) _____ | | _EBCDIC_ | | | | | | | | |
| _ (1M)_ _____ | | _UNICODE_ | | | | | _DBCLOB_ | _____ | | |
| (integer) _____ | | | _ (1)_ _____ | |
| _BINARY_ | _____ | _____
_____ | | | | (integer) _____ | | | | | _BINARY VARYING
_ (integer) _____ | | | | | _VARBINARY_ _____ | | | | |
| _ (1M)_ _____ | | | | | _BINARY LARGE
OBJECT_ _____ | _____ | _____ | | | | | _BLOB_ _____ |
| ( _integer_ ) _____ | | | | | _K_ | | | | | _M_ | | | | | _G_ | |
| _DATE_ _____
_____ | | | | _TIME_ _____ | | | | | _ (6)_ _____ _WITHOUT TIME ZONE_ | |
| _TIMESTAMP_ | _____ | _____ | _____ | _____
_____ | | | | (integer) _____ | | | | _WITH TIME ZONE_ _____ | |
| _ROWID_ _____
_____ | options-list >> _EXTERNAL_NAME_ _external-program name_
| _LANGUAGE_ _ASSEMBLE_ _____ >
| _____ | _identifier_ _____ | _____ | _C_ _____ |
| _COBOL_ _____ |
| _JAVA_ _____ |
| _PLI_ _____ |
> _PARAMETER STYLE_ _SQL_ _____ _NOT DETERMINISTIC_ _____ >
| _____ | _JAVA_ _____ | | _DETERMINISTIC_ _____ |
> _RETURNS NULL ON NULL INPUT_ _____ _MODIFIES SQL_ _____ >
| _CALLED ON NULL INPUT_ _____ | _____ | _READS SQL DATA_ _____ |
| _____ | _____ | _CONTAINS SQL DATA_ _____ |

```

```

                                I_NO SQL_____I
> __ NO EXTERNAL ACTION__ __ NO SCRATCHPAD_____>
  I_EXTERNAL ACTION____I  I_SCRATCHPAD_____length__I
> __ PACKAGE PATH package path_____>
  I_NO PACKAGEPATH_____I
> __ NO FINAL CALL__ __ ALLOW PARALLEL_____ __ NO DBINFO____>
  I_FINAL CALL____I  I_DISALLOW PARALLEL_I  I_DBINFO____I
> __ CARDINALITY__integer_____ __ NO COLLID_____>
                                I_COLLID__collection-id_I
> __ WLM ENVIRONMENT__ __name_____>
                                I_(__name__,*__)_I
> __ ASUTIME__ __ NO LIMIT_____ __ STAY RESIDENT__ __ NO_____>
                                I_LIMIT__integer_I  I_YES_I
> __ PROGRAM TYPE__ __ SUB__ __ SECURITY__ __ DB2_____>
                                I_MAIN_I  I_USER____I
                                I_DEFINER_I
> __ STOP AFTER SYSTEM DEFAULT FAILURES_____>
  I_STOP AFTER-integer-FAILURES_____I
  I_CONTINUE AFTER FAILURE_____I
> __ RUN OPTIONS__run-time-options_____>
> __ INHERIT SPECIAL REGISTERS__ __STATIC DISPATCH __SECURED_____><
I_DEFAULT SPECIAL REGISTERS_I  I_NOT SECURED_I external-java-routine-name: >__
_____method-name_____>
  I_jar-name:I  I_method-signature_I
jar-name:
> _____jar-id_____>
  I_schema-name._I

```

method-name:

```

<_____> _____ I_class-id__ __.____
method-id_____>
  I_package-id__ __.____ __I  I!____I
  I/_____I

```

method-signature:

```

> _____>
  I_(_____)_I
  I <_,_____I
  I java-datatypeI__I

```

## ALTER FUNCTION(compiled SQL scalar)

```

> __ ALTER__ function-designator_____>
  __ALTER__ __ACTIVE VERSION_____
<_____> __I_____I__I_____options-
list_I_____>

```

```

|          |_ALL VERSIONS_____ | |
|          |_VERSION routine-version-id_|
|          |_ACTIVE VERSION_____ |
|_REPLACE_|_____ |_routine-specification_|
|          |_VERSION_routine_version_id_|
|_ADD VERSION_routin-version-id__routine-specification_____ |
|_ACTIVATE VERSION_routin-version-id_____ |
|          |_ACTIVE VERSION_____ | |
|_REGENERATE_____|_____ |_____ |
|          |_VERSION_routing-version-id__|_____ |
|_DROP VERSION_routine-version-id_____ |

```

function-designator:

```

> _____FUNCTION_____function-name_____>
|          |          |          |          |          |          |
|          |          |          |          |          |          |
|          |          |          |          |          |          |
|_SPECIFIC FUNCTION_____specific-name_____ |

```

routine-specification:

```

> _____<_____>
| _____ ) RETURNS_data_type2_____ | _____>
| </_><_ , _____ | |_options-list_| |_parameter-
name_data-type_| | | _____>_SQL-routine-
body_____>< data-type, data-
type2: >>_____built-in-data-
type_____>< |_distinct-type-name_|
|_array-type-name_____| built-in-data-type:
> _____SMALLINT_____
_____>< | |_INTEGER_| | | | |_INT_| | | | |_BIGINT_| | | |
_____ (5,0) _____ |
|_DECIMAL_| _____ |_____
| | |_DEC_____ | |_( _____ ) _____ | |
| | |_NUMERIC_| | | , integer_| | | _____ (34)_ | |_DECFLOAT_
| _____ |
| | |_(16)_| | | _____ (53) _____ |
| _____ FLOAT_____ |_____
| | | |_( _____ )_| | | | |_REAL_____ | | | |
|_PRECISION_| | | | |_DOUBLE_| _____ | | | | _____ (1) _____ |
| _____ CHARACTER_____ |_____
| | | | |_CHAR_____ | |_( length_)_____ | | | |_CCSID_ASCII_____| | | | | | | | | | | |
|_FOR_SBCS_____DATA_| | | | | | _____ CHARACTER_VARYING_____( length_)_|
|_EBCDIC_| | |_MIXED_| | | | | | |_CHAR_____ | | | |_UNICODE_| | |_BIT_____| | | | |
|_VARCHAR_____ | | | | | _____ (1M) _____ | | | | _____ CHARACTER_____ LARGE
OBJECT_| _____ |_____ | | | |
|_CHAR_____ | |_( _____ )_| | |_CCSID_ASCII_____| |_FOR_SBCS_____DATA_| | |

```



```

I __CLOB_____ | | _EBCDIC_ | | _MIXED_ | | | __ (1) _____
I _UNICODE_ | |
I __GRAPHIC_ | _____ | _____
_____ | | | | (__integer__) _____ | | | _CCSID_ ASCII _____ | | |
I _VARGRAPHIC_ (__integer__) _____ | | _EBCDIC_ _____ | | | | __ (1M) _____
I _UNICODE_ | | | | _DBCLOB_ | _____ | | | | _ (integer) _____ | | |
__ (1) _____ | | |
I _BINARY_ | _____ | _____
_____ | | | | _ (integer) _____ | | | | | _BINARY VARYING
__ (integer) _____ | | | | | _VARBINARY _____ | | | | |
__ (1M) _____ | | | | | _BINARY LARGE
OBJECT _____ | _____ | _____ | | | | | _BLOB _____ |
I (__integer _____) _____ | | | | | _K_ | | | | | _M_ | | | | | _G_ | |
_____
DATE _____
_____ | | | | _TIME _____ | | | | | __ (_6_) _____ _WITHOUT TIME ZONE_ | |
I _TIMESTAMP_ | _____ | _____ | _____ | _____
_____ | | | | _ (integer_ ( | | | _WITH TIME ZONE _____ | |
I _ROWID _____
_____ |
I _XML _____
_____ | SQL-routine-body >> _SQL-control-
statement _____ >< option-list:
> _____ NOT DETERMINISTIC _____ EXTERNAL ACTION _____ >
  I _DETERMINISTIC _____ | _____ I _NO EXTERNAL ACTION_ |
> _____ READS SQL DATA _____ CALLED ON NULL INPUT _____ >
  I _CONTAINS SQL _____ | _____ I _RETURNS NULL ON NULL INPUT_ |
  I _MODIFIES SQL DATA_ |
> _____ STATIC DISPATCH _____ ALLOW PARALLEL _____ >
  I _DISALLOW PARALLEL_ |
> _____ DISALLOW DEBUG MODE _____ QUALIFIER schema-name _____ >
  I _ALLOW DEBUG MODE _____ |
  I _DISABLE DEBUG MODE_ |
> _____ PACKAGE OWNER _____ authorization-name _____ ASUTIME_NO LIMIT _____ >
  I _ASUTIME_LIMIT _____ integer_ |
> _____ INHERIT SPECIAL REGISTERS _____ WLM ENVIRONMENT FOR DEBUG MODE name _____ >
  I _DEFAULT SPECIAL REGISTERS_ |
> _____ CURRENT DATA NO _____ CONCURRENT ACCESS RESOLUTION USE CURRENTLY COMMITTED_ >
  I _CURRENT DATA YES_ | | _CONCURRENT ACCESS RESOLUTION WAIT FOR OUTCOME _____ >
> _____ DYNAMICRULES RUN _____ >
  I _DYNAMICRULES BIND _____ | | _APPLICATION ENCODING SCHEME ASCII _____ |
  I _DYNAMICRULES DEFINEBIND_ | | _APPLICATION ENCODING SCHEME EBCDIC_ |
  I _DYNAMICRULES DEFINERUN_ | | _APPLICATION ENCODING SCHEME UNICODE_ |
  I _DYNAMICRULES INVOKEBIND_ |
  I _DYNAMICRULES INVOKERUN_ |
> _____ WITHOUT EXPLAIN _____ ISOLATION LEVEL CS _____ OPHINT _____ ' ' _____ >
  I _WITH EXPLAIN _____ | | _ISOLATION LEVEL RS_ | _____ I _OPHINT_ string-constant_ |
  I _ISOLATION LEVEL RR_ |

```

```

                I_ISOLATION LEVEL UR_I
                </_><_ , _____ >_SQL PATH__schema-name| _____REOPT
NONE _____ VALIDATE RUN _____>
                I_SCHEMA PATH__I | I_REOPTALWAYS_I | I_VALIDATE BIND_I
                I_SESSION USER_I | I_REOPT ONCE__I
                I_USER_I
> _____>
I_QUERY ACCELERATION NONE _____ | I_GET_ACCEL_ARCHIVE NO__I
I_QUERY ACCELERATION ENABLE _____ | I_GET_ACCEL_ARCHIVE_YES__I
I_QUERY ACCELERATION ENABLE WITH FAILBACK_I
I_QUERY ACCELERATION ELIGIBLE _____ |
I_QUERY ACCELERATION ALL _____ |
> _____>
I_ROUNDING DEC_ROUND_CEILING__I | I_DATE FORMAT ISO__I |
I_ROUNDING DEC_ROUND_DOWN _____ | I_DATE FORMAT EUR__I |
I_ROUNDING DEC_ROUND_FLOOR _____ | I_DATE FORMAT USA__I |
I_ROUNDING DEC_ROUND_HALF_DOWN_I | I_DATE FORMAT JIS__I |
I_ROUNDING DEC_ROUND_HALF_UP__I | I_DATE FORMAT LOCAL_I |
I_ROUNDING DEC_ROUND_UP _____ |
> _____>
                FOR UPDATE CLAUSE REQUIRED _____>
I_DECIMAL(15)____I | I_FOR UPDATE CLAUSE OPTIONAL_I
I_DECIMAL(31)____I
I_DECIMAL(15,s)_I
I_DECIMAL(31,s)_I
> _____>
                SECURED _____>
I_TIME FORMAT ISO__I | I_NOT SECURED_I
I_TIME FORMAT EUR__I
I_TIME FORMAT USA__I
I_TIME FORMAT JIS__I
I_TIME FORMAT LOCAL_I
> _____>
                _BUSINESS TIMESENSITIVE YES_          _SYSTEM TIMESENSITIVE YES_
> _____| _____| _____| _____>
I_BUSINESS TIMESENSITIVE NO__I | I_SYSTEM TIMESENSITIVE NO__I
> _____>
                _ARCHIVE SENSITIVE YES_
> _____| _____>
< I_ARCHIVE SENSITIVE NO__I | I_APPLCOMPAT_compatibility-level_I
> _____>
I_CONCENTRATE STATEMENTS OFF _____I
I_CONCENTRATE STATEMENT WITH LITERALS_I

```

</\_></\_\_\_\_\_>

## ALTER FUNCTION (inline SQL scalar)

```
>_ALTER_FUNCTION__funtion-name_____option-list_>
|
| <_,_____|||
|_(_____)|_|||_parameter-type_____|||_SPECIFIC
FUNCTION__specific-name_____Parameter-type: >_data-
type_____>
```

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\_\_\_\_\_|\_|\_(length\_)\_\_\_\_\_|\_|\_|\_|\_CCSID\_\_ASCII\_|

|\_FOR\_\_SBCS\_\_DATA\_|\_|\_|\_|\_|\_|\_CHARACTER\_\_VARYING\_\_(length\_|\_|

|\_EBCDIC\_|\_|\_MIXED\_|\_|\_|\_|\_|\_|\_|\_CHAR\_\_\_\_\_|\_|\_|\_|\_UNICODE\_|\_|\_BIT\_|\_|\_|\_|

|\_VARCHAR\_\_\_\_\_|\_|\_|\_|\_|\_(1M)\_\_\_\_\_||\_|\_|\_|\_CHARACTER\_\_LARGE
OBJECT\_|\_|\_\_\_\_\_|\_\_\_\_\_||\_|\_|

|\_CHAR\_\_\_\_\_|\_|\_(integer\_)\_|\_|\_|\_|\_CCSID\_\_ASCII\_|\_|\_FOR\_\_SBCS\_\_DATA\_|\_|

|\_CLOB\_\_\_\_\_||\_|\_|\_|\_|\_EBCDIC\_|\_|\_MIXED\_|\_|\_|\_|\_(1)\_\_\_\_\_

|\_UNICODE\_|\_|

|\_GRAPHIC\_|\_\_\_\_\_|\_\_\_\_\_
\_\_\_\_\_||\_|\_|\_|\_|\_(integer\_)\_\_\_\_\_|\_|\_|\_|\_CCSID\_\_ASCII\_|\_|

|\_VARGRAPHIC\_\_(integer\_)\_\_\_\_\_|\_|\_|\_|\_|\_EBCDIC\_|\_|\_|\_|\_(1M)\_\_\_\_\_

|\_UNICDOE\_|\_|\_|\_|\_|\_DBCLOB\_|\_\_\_\_\_||\_|\_|\_|\_|\_(integer)\_\_\_\_\_||
|\_(1)\_\_\_\_\_||

\_BINARY\_|\_\_\_\_\_|\_\_\_\_\_
\_\_\_\_\_||\_|\_|\_|\_|\_(integer)\_\_\_\_\_|\_|\_|\_|\_|\_BINARY VARYING

\_(integer)\_\_\_\_\_|\_|\_|\_|\_|\_VARBINARY\_\_\_\_\_|\_|\_|\_|

\_(1M)\_\_\_\_\_||\_|\_|\_|\_|\_BINARY LARGE

OBJECT\_\_\_\_\_|\_\_\_\_\_|\_\_\_\_\_||\_|\_|\_|\_|\_BLOB\_\_\_\_\_

|\_(integer)\_\_\_\_\_|\_|\_|\_|\_|\_K\_|\_|\_|\_|\_|\_M\_|\_|\_|\_|\_|\_G\_|\_|

|\_DATE

\_\_\_\_\_|\_|\_|\_|\_|\_TIME\_\_\_\_\_|\_|\_|\_|\_|\_(6)\_\_\_\_\_ \_WITHOUT TIME ZONE\_|\_|





```

|_gbpcache-block_____|
|__CLUSTER_____|
| |_NOT CLUSTER_| |
|__COMPRESS NO_____|
| |_COMPRESS YES_| |
|__NOT PADDED_____|
| |_PADDED_____| |
|
|_ASC_____|
|_ADD COLUMN_(column name_|_|_)_____| |
|_|_DESC_|_| |
|_|_RANDOM_|_| |
|_INCLUDE COLUMN (column-name)|_|

```

```

>_____>
|<_,_____|| | | | | |
| |<_,_____||
| |<_____||
|_|_ALTER_|_|_partition-element_|_|_|_|
|_|_using-block_|_|
|_|_free-block_|_|
|_|_gbpcache-block_|_|
|_|_DSSIZE int G_|_|

```

#### 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 MASK

```
>> __ALTER MASK__mask-name__ENABLE_____>
      |_DISABLE_____|
      |_REGENERATE_|
```

# ALTER PERMISSION

```
>> __ALTER PERMISSION__permission-name__ENABLE_____>
      |_DISABLE_____|
      |_REGENERATE_|
```

# ALTER PROCEDURE (external)

```
>> __ALTER PROCEDURE__procedure-name__option-list_____>
```

option-list

```
>_____DYNAMIC__RESULT____SETS____integer_____><
|_EXTERNAL NAME__external-program-name_____|
|          |_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_____||
| |_DBIINFO_____| |
|_NO COLLID_____||
| |_COLLID__collection-id_| |
|_WLM ENVIRONMENT__name_____||
|          |_(__name__,*__)_| |
```

```

|_ASUTIME___NO LIMIT_____|
|          |_LIMIT__integer_| |
|_STAY RESIDENT___NO_____|
|          |_YES_| |
|_PROGRAM TYPE___SUB_____|
|          |_MAIN_| |
|_SECURITY___DB2_____|
|          |_USER___| |
|          |_DEFINER_| |
|_RUN OPTIONS__run-time-options_____|
|_COMMIT ON RETURN___NO_____|
|          |_YES_| |
|_INHERIT SPECIAL REGISTERS___| |
| |_DEFAULT SPECIAL REGISTERS_| |
|_CALLED ON NULL INPUT_____|
|___STOP AFTER SYSTEM DEFAULT FAILURES_____|
| |_STOP AFTER integer FAILURES_____| |
| |_CONTINUE AFTER FAILURE_____| |
|_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_| |

```



## ALTER PROCEDURE (SQL-external)

```
>> __ALTER PROCEDURE __procedure-name__ option-list _____ >
< _____ > _____ DYNAMIC __RESULT__ SETS _____
__integer_____ | _____ >< | _EXTERNAL
NAME ____ 'string' _____ |
| _____ |_identifier_| |
| ____ NOT DETERMINISTIC _____ |
| | _DETERMINISTIC _____ | |
| ____ CONTAINS SQL _____ |
| | _READS SQL DATA _____ | |
| | _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_ | _____ | _____ | |
| _VERSION-routine-version-id_ | | | _DROP VERSION_ routine-version-
id _____ | routine-specification:
> _____ SQL-routine-body_>
| _____ | | _option-list_ |
|_( _____ )_|
|< _____ , _____ | | _parameter-declaration | | parameter-
declaration: _IN_ >_| _____ | _parameter-name_ _data-
type _____ >
| _OUT_ |
| _INOUT_ |

```

data-type:

```

>> _____ built-in-data-type _____ >>
| _distinct-type-name_ | | _array-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_ _____ | |_( _length_ ) _____ | | | | _CCSID_ _ASCII_ |
| _FOR_ _SBCS_ _____ _DATA_ | | | | | | | _CHARACTER_ _VARYING_ ( _length_ )_|
| _EBCDIC_ | | _MIXED_ | | | | | | | _CHAR_ _____ | | | | _UNICODE_ | | | | |
| _VARCHAR_ _____ | | | | | _ (1M)_ _____ | | | | | _____ _CHARACTER_ _____ _LARGE
OBJECT_ | _____ | _____ | | | |
| _CHAR_ _____ | |_( _integer_ )_| | _CCSID_ _ASCII_ _____ | | _FOR_ _SBCS_ _____ _DATA_ | | |
| _CLOB_ _____ | | _EBCDIC_ | | _MIXED_ | | |
_____ (1) _____ | _UNICODE_ | |
| _GRAPHIC_ _____ | _____
_____ | | | |_( _integer_ ) _____ | | | | _CCSID_ _ASCII_ _____ | | |
| _VARGRAPHIC_ ( _integer_ ) _____ | | _EBCDIC_ | | | |
_____ (1M) _____ | _UNICODE_ | | | | | _DBCLOB_ | _____ | | |
| (integer) _____ | | | _ (1M)_ _____ | |
| _BINARY_ _____ | _____
_____ | | | |_(integer)_ _____ | | | | | _____ _BINARY VARYING
_____ (integer) _____ | | | | | _____ _VARBINARY_ _____ | | | |
| _____ (1M) _____ | | | | | _____ _BINARY LARGE
OBJECT _____ | _____ | _____ | | |

```

```

I_BLOB_____I I_(integer_____)____I I I I_K_I I I I_M_I
I I I_G_I I
I DATE_____
_____I I I_TIME_____I I I I __(_6_)____ _WITHOUT TIME ZONE_ I I
I_TIMESTAMP_I_____I____I_____I_____
_____I I I_(integer)_I I_WITH TIME ZONE____I I
I_XML_____
_____I option-list: >____NOT
DETERMINISTIC_____>
I_DETERMINISTIC_____I I_DYNAMIC RESULT SETS integer_I
>____READS SQL
DATA_____>
I_CONTAINS SQL_____I I_CALLED ON NULL INPUT_I
I_MODIFIES SQL DATA_I
>____STATIC DISPATCH_____ALLOW
PARALLEL_____>
I_DISALLOW PARALLEL_I
>_DISALLOW DEBUG MODE_____PARAMETER CCSID ASCII____QUALIFIER schema-
name____>
I_ALLOW DEBUG MODE____I I_PARAMETER CCSID EBCDIC__I
I_DISABLE DEBUG MODE__I I_PARAMETER CCSID UNICDOE_I
>_PACKAGE OWNER_auth-name_____ASUTIME_NO_LIMIT_____COMMIT ON RETURN
YES____>
I_ASUTIME_LIMIT__int_I I_COMMIT ON RETURN NO_I
I_AUTONOMOUS_____I
>_INHERIT SPECIAL REGISTERS_____WLM ENVIRONMENT FOR DEBUG MODE
name____>
I_DEFAULT SPECIAL REGISTERS_I
>_CURRENT DATA NO____CONCURRENT ACCESS RESOLUTION USE CURRENTLY
COMMITTED____>
I_CURRENT DATA YES_I I_CONCURRENT ACCESS RESOLUTION WAIT FOR OUTCOME_____I
>_____DEGREE
1_____>
I_DEFER PREPARE____I I_DEGREE ANY 1_I
I_NODEFER PREPARE_I
>____DYNAMICRULES
RUN_____>
I_DYNAMICRULES BIND_____I I_APPLICATION ENCODING SCHEME ASCII____I
I_DYNAMICRULES DEFINEBIND_I I_APPLICATION ENCODING SCHEME EBCDIC__I
I_DYNAMICRULES DEFINERUN_I I_APPLICATION ENCODING SCHEME UNICODE_I
I_DYNAMICRULES INVOKEBIND_I
I_DYNAMICRULES INVOKERUN_I
>_WITHOUT EXPLAIN____ISOLATION LEVEL CS_____OPHINT__'
'_____>
I_WITH EXPLAIN____I I_ISOLATION LEVEL RS_I I_OPHINT_string-constant_I
I_ISOLATION LEVEL RR_I
I_ISOLATION LEVEL UR_I

```

```
<_ , _____ >_SQL PATH__schema-name| _____REOPT
NONE _____ VALIDATE RUN _____>
|_SCHEMA PATH__| |_REOPT ALWAYS_| |_VALIDATE BIND_|
|_SESSION USER_| |_REOPT ONCE__|
|_USER_|
```

>

|>

```
|_ROUNDING DEC_ROUND_CEILING__| |_DATE FORMAT ISO__|
|_ROUNDING DEC_ROUND_DOWN_____| |_DATE FORMAT EUR__|
|_ROUNDING DEC_ROUND_FLOOR_____| |_DATE FORMAT USA__|
|_ROUNDING DEC_ROUND_HALF_DOWN_| |_DATE FORMAT JIS__|
|_ROUNDING DEC_ROUND_HALF_EVEN_| |_DATE FORMAT LOCAL_|
|_ROUNDING DEC_ROUND_HALF_UP__|
|_ROUNDING DEC_ROUND_UP_____|
```

> \_\_\_\_\_ FOR UPDATE CLAUSE

REQUIRED \_\_\_\_\_>

```
|_DECIMAL(15)____| |_FOR UPDATE CLAUSE OPTIONAL_|
|_DECIMAL(31)____|
|_DECIMAL(15,s)_|
|_DECIMAL(31,s)_|
```

>

|>

```
|_TIME FORMAT ISO__|
|_TIME FORMAT EUR__|
|_TIME FORMAT USA__|
|_TIME FORMAT JIS__|
|_TIME FORMAT LOCAL_|
```

>

```
| ______YES_| | ______YES_|
|_SYSTIMESENSITIVE( |_NO_| )_| |_BUSTIMESENSITIVE( |_NO_| )_|
```

>

```
| ______YES_| | ______|
|_ARCHIVESENSITIVE( |_NO_| )_| |_APPLCOMPAT( __level__ )_|
```

>

```
|_CONCENTRATE STATEMENTS OFF _____|
|_CONCENTRATE STATEMENTS WITH LITERALS_|
```

><

## 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_____ >
    <_____ _COLUMN_
> _____ ADD_ | _____ | _column-definition_____ >
| _____ _COLUMN_ |
| _ALTER_ | _____ | _column-alteration_____ |
| _RENAME COLUMN source-column-name_____ |
| _____ | _TO target-column-name___ | |
| _DROP COLUMN_ column-name_ _RESTRICT_____ |
| _ADD PERIOD FOR period-definition_____ |
| _ADD__ unique constraint_____ |
```

```

|      |_referential-constraint_|
|      |_check-constraint_____|
|_DROP__ PRIMARY KEY_____
|      |_FOREIGN KEY_constraint-name_|
|      |_UNIQUE_____|
|      |_CHECK_____|
|      |_CONSTRAINT_|
|_ADD PARTITION BY_partitioning-clause_____
|_ADD PARTITION_partitioning-clause_____
|_ALTER PARTITION_integer_partition clause_____
|_ROTATE_FIRST__TO LAST_rotate-part-clause_____
|      |_integer_|
|_ADD ORGANIZE BY HASH organization-clause_____
|_ALTER ORGANIZATION_SET HASH SPACE int_K_____
|                                     |_M_|
|                                     |_G_|
|_DROP ORGANIZATION_____
|      |_SYSTEM_| |
|_ADD_|_____|_VERSIONING USE HISTORY TABLE hist-table_|
|      |_SYSTEM_|
|_DROP_|_____|_VERSIONING_____
|      |__MATERIALIZED_|
|      |__|_____|_QUERY_|
|_ADD_|_____|_mqt-def_____
|      |_MATERIALIZED_|
|_DROP_|_____|_QUERY_____
|      |_MATERIALIZED_|
|_ALTER_|_____|_QUERY_____mqt-alt_____
|      |_CHANGES_|
|      |_ALL_____|
|_DATA CAPTURE____NONE_____
|      |_CHANGES_|
|      |__CARDINALITY_|
|_NOT VOLATILE_____|_____|
|_|_VOLATILE_____|
|_ADD CLONE_clone-table-name_____
|_DROP CLONE_____
|_ADD RESTRICT ON DROP_____
|_DROP RESTRICT ON DROP_____
|_ACTIVATE_____ROW ACCESS CONTROL_____
|_|_DEACTIVATE_|
|_ACTIVATE_____COLUMN ACCESS CONTROL_____
|_|_DEACTIVATE_|
|_APPEND____NO_____
|      |_YES_|
|_VALIDPROC____program-name_____
|      |_NULL_____|

```

```

|_AUDIT__NONE_____|
|      |_CHANGES_| |
|      |_ALL_____| |
|_ENABLE ARCHIVE _USE_ archive-table-name_____|
|_DISABLE ARCHIVE_____|

```

column-definition:

```

>_____column-name_data-type_____>
<_____>
|_____><
|_default-clause_____|
|_NOT NULL_____|
|_column-constraint_____|
|_generated-clause_____|
|_check-constraint_____|
|_FIELDPROD__program-name_____|
|
|<_,_____|||
|_(____constant_|_)_| | |_AS SECURITY
LABEL_____| |_IMPLICITLY
HIDDEN_____| |_INLINE
LENGTH__integer_____| data-type:
>>_____built-in-data-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_____| | |_(length_____)_____| | | |
|_FOR__SBCS__DATA_| | | | | | | | | | |_CHARACTER_VARYING__(length_____)_| | | | | | | | | | | |
|_MIXED_| | | | | | | | | | |_CHAR_____| | | | | |_BIT_| | | | | |
|_VARCHAR_____| | |_CCSID 1208_____|| | | | |_(1M)_____ | | |
| | | | |_CHARACTER__LARGE OBJECT_
|_____|| | | | | | | | | | | | | | | | | |
|_CHAR_____| | |_(integer_____)_| | | | |_FOR__SBCS__DATA_| | | | |
|_CLOB_____| | | | |_MIXED_| | | | | | | | |_BIT_| | | | |
|(1)_____ | |_CCSID1208_____|| | |
|_GRAPHIC_|_____|
_____|| | | | |_(integer_____)_____| | | | | | | |
|_VARGRAPHIC__(integer_____)_____|| | | | |_CCSID 1200_| | | | |

```

```

__(1M)_____ | | | _DBCLOB_ | _____ | | |
|_(integer)_____ | | | |(1)_____ | | |
_BINARY_ | _____ | _____
_____ | | | |(integer)_ | | | | | _BINARY
VARYING_(integer)_____ | | | | | _VARBINARY_____ | | |
| | | |(1M)_____ | | | | | _BINARY LARGE
OBJECT_____ | _____ | _____ | | | | _BLOB_____ |
|_(integer_____ )_____ | | | | _K_ | | | | _M_ | | | | _G_ | | |
| _DATE_____
_____ | | | | _TIME_____ | | | | |(6_)_____ _WITHOUT TIME ZONE_ |
|
|_TIMESTAMP_ | _____ | _____ | _____ | _____
_____ | | | |(integer)_ | | | _WITH TIME ZONE_____ | | |
|_ROWID_____
_____ | | | _XML_( XML-type-
modifier_)_____
| XML-type-modifier: >> _XMLSCHEMA XML-schema-
specification_____ >
_____ | _ELEMENT_ element-name_ |

```

XML-schema-specification:

```

>> _ID registered-XML-schema-name_____ >
| _URL target-namespace_____ |
| _NO NAMESPACE_____ | | | _LOCATION_ schema-location_ |

```

default-clause:

```

_ WITH_
>> | _____ | _DEFAULT_____ >>
| _constant_____ |
| _SESSION_USER_____ | | | | _USER_____ | | | | _CURRENT
SQLID_____ | | | | _NULL_____ |
| _cast-function-name_( _constant_____ )_ | | | | _SESSION_USER_ | | |
| _USER_____ | | | | _CURRENT SQLID_ | | | | _NULL_____ | column-constraint:
>> _reference-clause_____ >
| _check-constraint_ |

```

generated-clause:

```

_ ALWAYS_
>> _GENERATED_ | _____ | _____ >> |
| _BY DEFAULT_ | | | | _as-identity-clause_____ | | | | _ALWAYS_ | _as-row-
change-timestamp-clause_ | | | | _GENERATED_ | _____ | _as-row-transaction-
start-id clause_____ | | | | _as-ow-transaction-timestamp-clause_____ | | | | _as-
generated-expression-clause_____ | 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_____>
```

as-row-transaction-timestamp-clause:

```
>>_AS ROW__BEGIN_____>
|_END_|
```

as-row-transaction-id-clause:

```
>>_AS TRANSACTION START ID_____>
```

non-deterministic-expression:

```
>>_DATA CHANGE OPERATION_____>
|_special-register_____|
|_session-variable_____|
```

special-register:

```
>>_CURRENT CLIENT_ACCTING_____>
|_CURRENT CLIENT_APPLAME_____|
|_CURRENT CLIENT_CORR_TOKEN_____|
|_CURRENT CLIENT_USERID_____|
|_CURRENT CLIENT_WRKSTNNAME_____|
|_CURRENT SERVER_____|
|_CURRENT SQLID_____|
|_SESSION_USER_____|
```

session-variable:

```
>>_SYSIBM.PACKAGE_NAME_____>
|_SYSIBM.PACKAGE_SCHEMA_____|
|_SYSIBM.PACKAGE_VERSION_____|
```

column-alteration:

```
>>_column-name_SET_DATATYPE_altered-data-type_____>
| | | |_INLINE LENGTH__integer_| | | |
| | |_default-clause_____ | |
| | |_INLINE LENGTH__integer_| | |
| | |_GENERATED__ALWAYS_____ | |
| | | |_BY DEFAULT_| |_identity-alteration_____ | |
| | | | |_as-row-transaction-tmsp-clc_| | |
| | | | |_as-row-transaction-id-clc_| | |
| | |_DROP DEFAULT_____ | |
```



```

| ____ WITH__ numeric-constant ____ |
| SET INCREMENT BY__ numeric-constant ____ |
| SET NO MINVALUE ____ |
| ____ | MINVALUE__ numeric-constant ____ |
| SET NO MAXVALUE ____ |
| ____ | MAXVALUE__ numeric-constant ____ |
| SET NO CACHE ____ |
| ____ | CACHE__ integer ____ |
| SET NO CYCLE ____ |
| ____ | CYCLE ____ |
| SET NO ORDER ____ |
| ____ | ORDER ____ |

```

unique-constraint:

```

>> _____ PRIMARY KEY_ (<_ , _____
| CONSTRAINT__ constraint-name_ | | UNIQUE ____ |
> _____ ><
| , BUSINESS TIME WITHOUT OVERLAPS_ | referential-constraint:
>> _____ FOREIGN KEY _____ >
| CONSTRAINT__ constraint-name_ |
| _____ , _____
> (<_ column-name _____ | ) _____ >
| PERIOD BUSINESS TIME_ |
> references-clause _____ ><
references-clause: >> REFERENCES_ table-
name _____ >
| _____ , _____ |
| (<_ column-name _____ | )_ | | PERIOD BUSINESS TIME_ |
> _____ ><
| ON DELETE__ RESTRICT ____ | | NO ACTION_ | | CASCADE ____ | | SET NULL_ |
| ENFORCED ____ | ENABLE QUERY OPTIMIZATION_
> | _____ | _____ | _____ | _____ ><
| NOT ENFORCED_ | check-constraint:
>> _____ CHECK_ (check-condition) _____ ><
| CONSTRAINT__ constraint-name_ |

```

partitioning-clause:

```

| RANGE_ <_ , _____ >> _____ | _____ | _____ (____ partition-
expression_ | ) _____ >
| _____ , _____ > (<_ partition-
element_ | ) _____ >< partitioning-
expression: _NULLS LAST_ _ASC_ >> _column-
name_ | _____ | _____ | _____ >
| DESC_ |

```

partition-element:

```

    _AT_ </_><_ , _____ INCLUSIVE_ >>_
ENDING_ | _____ | ( _____ constant_ | ) | _____ | _____ >< |
|_MAXVALUE_ | _____ |
| _____ | _____ |
|_HASH SPACE_ integer_ _____ K _____ |
| _____ |
|_M_ |
|_G_ |

```

partition-clause:

```

    _AT_ <_ , _____ INCLUSIVE_ >>_
ENDING_ | _____ | ( _____ constant_ | ) | _____ | _____ >< |
|_MAXVALUE_ | _____ |
| _____ | _____ |
|_HASH SPACE_ integer_ _____ K _____ |
| _____ |
|_M_ |
|_G_ |

```

partition-rotation:

```

>>_ ENDING_ | _____ | ( _____ constant_ | ) | _____ | _____ RESET_ _____ >
| _____ |
|_MAXVALUE_ |
|_MINVALUE_ |

```

extra-row-option:

```
>>_ ON DELETE ADD EXTRA ROW _____ ><
```

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 _____ MAINTAINED BY
SYSTEM _____ | _____ >
```

```
| |_MAINTAINED BY USER_ | _____ |
```

```
|_ENABLE_QUERY OPTIMIZATION_ | _____ |
```

```
|_DISABLE_QUERY OPTIMIZATION_ | _____ |
```

period-definition:

```
>>_SYSTEM_TIME_( _begin-column-name,end-column-name_)_____>
|
|_EXCLUSIVE_|
|_BUSINESS_TIME_( _begin-column-name,end-column-name_)_|_____||
|_INCLUSIVE_|
```

organization-clause:

```
<_____HASH SPACE_64M_____>>_UNIQUE_( _column-
name_)_|_____|_____>
|_HASH SPACE_integer_K_|
|_M_|
|_G_|

</_____></_____></_____></_____>
_____>
```

## 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_____||_|
|_COMPASS_____YES_____||_|_NO_|_|_|_DROP PENDING
CHANGES_____||_|_DSSIZE__integer_G_____||_|_MEMBER
CLUSTER YES_____||_|_MEMBER CLUSTER NO_____||_|
|_SEGSIZE__integer_____||_|_GBPCACHE_____CHANGED_____||_| | | | | | |
|_|_ALL_____||_|_|_SYSTEM_____||_|_|_NONE_____||_|
|_LOCKPART_____YES_____||_|_|_NO_|_|
|_MAXROWS__integer_____||_|_MAXPARTITIONS__integer_____||_|
|_TRACKMOD_____YES_____||_|_|_NO_|_|
|_LOGGED_____||_|_|_NOT LOGGED_____||_|_|_CCSID__ccsid-
value_____||_|_PAGENUM RELATIVE_____||_|_PAGENUM
ABSOLUTE_|>>_ALTER
PARTITION__integer_____>
|_USING_____VCAT__catalog-name_____||_| | | |
|_____||_|_STOGROUP__stogroup-name_|_|_|
|_PRIQTY__integer_____||_|
|_SECQTY__integer_____||_|
|_ERASE_____YES_____||_|
```

```

|      |_NO_|
|_FREPAGE_ integer_____
|_PCTFREE_ integer_____
|_COMPRESS_ YES_____
|      |_NO_|
|_GPBCACHE_ CHANGED_____
|      |_ALL_|
|      |_SYSTEM_|
|      |_NONE_|
|_DSSIZE_ integer_G_____
|_TRACKMOD_ YES_____
|      |_NO_|

```

</\_\_\_\_\_>

## ALTER TRIGGER (advanced)

>> ALTER TRIGGER\_trigger\_-name\_\_\_\_\_>

```

|_ALTER_|_ACTIVE VERSION_____
> |_____|_|_____|_option-
list_____>< ||||| |_VERSION trigger-version-id____| || | _
ACTIVE VERSION_____ |
|_REPLACE_|_____|_trigger-specification____| || | | |
| |_VERSION trigger-version-id____| | |_ADD VERSION_ trigger-version-
id_ trigger-specification_____ | |_ACTIVATE VERSION_ trigger-version-
id_____ | |_ACTIVE VERSION_____ |
|_REGENERATE_|_____|_trigger-specification____| || | | |
| |_VERSION trigger-version-id_| | |_DROP VERSION_ trigger-version-
id_____ | trigger-specification: >>_trigger-
activation-time_ trigger-event_ ON_ table-name_____ >
|_view-name_____|

```

```

> _____>
|      | <_____ | |_AS_| | |
|_REFERENCING_ _OLD_|_____|_correlation-name_____|_____| |_AS_| |
|_NEW_|_____|_correlation-name_____| |_AS_| | |_OLD_
TABLE_____|_____|_identifier_| | |_AS_| | |_NEW TABLE_____|_____|_identifier_|
> ___trigger-granularity_____triggered-action_____>
|_option-list_____|

```

```

trigger-activation-time
>> ___NO CASCADE BEFORE_____>
|_AFTER_____|
|_INSTEAD OF_____|

```

trigger-event:

```
> INSERT _____ >
  I_DELETE _____ I
  I_UPDATE _____ I
      I <_ , _____ I I_OF__column-name_I__I trigger-
granularity: > _____ FOR EACH
ROW _____ >< I FOR EACH
STATEMENT_I option-list: > DISALLOW DEBUG MODE _____ APPLICATION ENCODING
SCHEME ASCII _____ >
  I_ALLOW DEBUG MODE__ I I_APPLICATION ENCODING SCHEME EBCDIC_ I
  I_DISABLE DEBUG MODE_I I_APPLICATION ENCODING SCHEME UNICODE_I

> QUALIFIER schema-name__ ASUTIME_NO LIMIT _____ >
      I_ASUTIME LIMIT_int_I

> _____ >
  I_WLM ENVIRONMENT FOR DEBUG MODE name__ I

> CURRENT DATA NO _____ CONCURRENT ACCESS RESOLUTION USE CURRENTLY COMMITTED_ >
  I_CURRENT DATA YES_II_CONCURRENT ACCESS RESOLUTION WAIT FOR OUTCOME_____ I

> DYNAMICRULES RUN _____ WITHOUT IMMEDIATE WRITE _____ >
  I_DYNAMICRULES BIND_____ I I_WITH IMMEDIATE WRITE__ I

> WITHOUT EXPLAIN _____ ISOLATION LEVEL CS _____ OPHINT_ ' ' _____ >
  I_WITH EXPLAIN__ II_ISOLATION LEVEL RS_I I_OPHINT_string-constant_I
      I_ISOLATION LEVEL RR_I
      I_ISOLATION LEVEL UR_I
      </_><_ , _____ >_SQL PATH__schema-nameI_____RELEASE AT
COMMIT _____ >
      I_SCHEMA PATH__ I I_RELEASE AT DEALLOCATE_I
      I_SESSION USER_I
      I_USER_I

> _____ >
  I_ROUNDING DEC_ROUND_CEILING__ I I_DATE FORMAT ISO__ I
  I_ROUNDING DEC_ROUND_DOWN_____ I I_DATE FORMAT EUR__ I
  I_ROUNDING DEC_ROUND_FLOOR_____ I I_DATE FORMAT USA__ I
  I_ROUNDING DEC_ROUND_HALF_DOWN_I I_DATE FORMAT JIS__ I
  I_ROUNDING DEC_ROUND_HALF_UP__ I I_DATE FORMAT LOCAL_ I
  I_ROUNDING DEC_ROUND_UP_____ I

> _____ FOR UPDATE CLAUSE REQUIRED _____ >
  I_DECIMAL(15)____ I I_FOR UPDATE CLAUSE OPTIONAL_I
  I_DECIMAL(31)____ I
  I_DECIMAL(15,s)_ I
  I_DECIMAL(31,s)_ I
```

```
> _____>
|_TIME FORMAT ISO___|    |_NOT SECURED_|
|_TIME FORMAT EUR___|    |_SECURED_____|
|_TIME FORMAT USA___|
|_TIME FORMAT JIS___|
|_TIME FORMAT LOCAL_|
```

```
> _____>
|           _YES_ |    |           _YES_ |
|_SYSTIMESENSITIVE( |_NO_|_)|  |_BUSTIMESENSITIVE( |_NO_|_)|
```

```
> _____>
|           _YES_ |    |           |
|_ARCHIVESENSITIVE( |_NO_|_)|  |_APPLCOMPAT(__level___)|
```

```
> _____>>
|_CONCENTRATE STATEMENTS OFF_____| |_CONCENTRATE STATEMENT WITH
LITERALS_| triggered-action: >> _____SQL
trigger body_____>
|_WHEN__(__search-condition___)|
```

SQL-trigger-body:

```
> _____>>
|_SQL-control-statement_____|
|_trigger-SQL-statement___|
```

## ALTER TRIGGER (basic)

```
>>_ALTER TRIGGER_trigger-name_____NOT SECURED_____>
|_SECURED_|
```

## 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_____ | |
|      | |_DEFAULT SECURITY LABEL_seclabel-name_| | |
```



```

|      |
|      |      <_,_____ |      | | | | |
|      |      |_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___ ( _____ ADDRESS_ address-value _____ |_) _____ |
|      |      |      | |_ SERVAUTH_ servauth-value _____ | |      |
|      |      |      | |_ JOBNAME_ jobname-value _____ | |      |
|_user-clause_____ |_____ |

```

user-clause:

```

|_____ |_____ |_____ >>_ADD
USE FOR _____ authorization-name _____ |_____ >< |
|      |      |_ use-options _|      | | | |
|      |      | |_ EXTERNAL SECURITY PROFILE profile-name _____ | |
|      |      |      |_ WITHOUT AUTHENTICATION_ |_ use-options_ | |
|      |      | |_ PUBLIC _____ |_____ |_____ | |
|      |      |      | |_ WITH AUTHENTICATION _____ | |
|      |      |      |_____ |_____ |
|_REPLACE USE FOR _____ authorization-name _____ |_____ |
|      |      |      |_ use-options _|      | |
|      |      |      |_ WITHOUT AUTHENTICATION_ |      | |
|      |      | |_ PUBLIC _____ |_____ |_____ | |
|      |      |      | |_ WITH AUTHENTICATION _____ | |
|      |      |      |_____ |_____ |
|_____ |_____ | |_ DROP
USE FOR _____ authorization-name _____ |_____ | |_ EXTERNAL
SECURITY PROFILE_profile-name_| |_ PUBLIC _____ | use-options:
>> _____ >
|_ROLE_role-name_| |_ SECURITY LABEL-seclabel-name_|
|_____ |_____ |
|_____ |_____ |_____ |_____ |_____ |_____ |_____ ><
|_WITH AUTHENTICATION_____ |

```

## ALTER VIEW

```

>>_ALTER VIEW__view-name__REGENERATE_____ >

```

## ASSOCIATE LOCATORS

```

>> __RESULTS SET_
>> __ASSOCIATE__ | _____ | _____ LOCATOR _____ >
                | _____ |
                <_ , _____ > (__rs-locator-
variable_|_ ) _____ >

> __WITH PROCEDURE__ procedure-name _____ >>
  |_host-variable_|

```

## BEGIN DECLARE SECTION

```

>> __BEGIN DECLARE SECTION _____ >>

```

## CALL

```

>> __CALL__ procedure-name _____ >
        |_variable_|
> _____ >>
|_( _____ )_|
  | | <_ , _____ | |
  | | _____ expression _____ | |
  | | _____ | _____ |
  | | _____ | _____ |
  | | _____ transition-table-name_| |
  | _____ descriptor-name _____ |
  | _____ |

```

## CLOSE

```

>> __CLOSE__ cursor-name _____ >>

```

## COMMENT ON

```

>> __COMMENT ON _____ >
> _____ alias-designator _____ IS_string-constant_>< |
|_COLUMN_____ table-name____.column-name_____ || | | |_view-name_| ||
| | _ACTIVE VERSION_____ || | | |_function-
designator_| _____ || | | |_VERSION_routine-version-
id_| || | | |_INDEX_index-name_____ || |
|_PACKAGE_collection-id.package-name_____ || | | |_VERSION_ || | |
| | _____ |_id_| || | | |_PLAN_plan-
name_____ || | | |_ACTIVE VERSION_____ || |
|_PROCEDURE_procedure-name_| _____ || | | |_VERSION_rt-ver-
id_____ || | | |_ROLE_role-name_____ || |

```

```

|_SEQUENCE_sequence-name_____|| | |_TABLE___table-
name_____|| | | |_view-name_| || |
|_TRIGGER_trigger-name_____|| | |_TRUSTED
CONTEXT_context-name_____|| | |_TYPE___distinct-type-
name_____|| | |_MASK___mask-
name_____|| | |_PERMISSION_permission-
name_____|| | |_multiple-
column_list_____| alias-designator: _FOR
TABLE_____ >>_____ALIAS_alias-name_
|_____|_____>
|_PUBLIC_| |_____|_FOR SEQUENCE_|

```

multiple-column-list

```

<_ , _____ >>_table-
name_____(_column-name__IS__string-constant_|__)>
|_view-name_|

```

function-designator

```

>>_ FUNCTION_function-name_____>
|_____| </_><_ , _____ | | |
|_( _____ |_) | | | | _____ | | | |_parameter-
type_| | |___SPECIFIC FUNCTION_specific-name_____|
parameter-type >>___data-
type_____>< |_AS
LOCATOR___| data-type: >>___built-in-data-
type_____>< |_distinct-type-name_|
|_array-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__| |__(length)__| | | |__FOR__SBCS__DATA_|
| |
| | | |__CHARACTER__VARYING__(length__)| | | |__MIXED__|
| |
| | | |__CHAR__| | | |__BIT__|
| |
| | | |__VARCHAR__|
| |
| | | |__(1M)|
| |
| | | |__CHARACTER__LARGE OBJECT_| | | | | | | | |
| | | |
| | | |__CHAR__| | | |__(integer)__| | | |__FOR__SBCS__DATA_|
| |
| | | |__CLOB__| | | |__MIXED__|
| |
| | | |__(1)|
| |
|__GRAPHIC__|_____|
|
| | | |__(integer)__| | | |
| |
| | | |__VARGRAPHIC__(integer__)|
| |
| | | |__(1M)|
| |
| | | |__DBCLOB__| | | |
|

```

```

|          |_(integer)_____|
|          |_(1)_____
|
|_
|_BINARY__|_____|
|_____|
| |          |_(integer)__|          |
|
| |__BINARY VARYING ___(integer)_____|
|
| | |_VARBINARY_____|          |
|
| |          |_(1M)_____          |
|
| |_BINARY LARGE OBJECT_____|_____|_____|
|
| |_BLOB_____| |_(__integer_____)|_____|
|
|          |_K_|
|          |_M_|
|          |_G_|
|
|
|_DATE_____
|_____|
|
|_TIME_____
|_____|
| |          |__(6)_____ |_WITHOUT TIME ZONE_|
|
|
|_TIMESTAMP_|_____|_____|_____|_____
|_____|
|          |_(integer_)_| |_WITH TIME ZONE_____|
|
|_ROWID_____
|_____|

```

## COMMIT

```

>> _COMMIT_|_WORK_|_____>>

```

## CONNECT

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

## CREATE ALIAS

```
>> __CREATE_____ALIAS_| table-alias | _____><
|_PUBLIC_| |_sequence-alias | >> __alias-name__FOR____TABLE_____table-
name_____>< |_view-name__| |_alias-name2_| >> __alias-
name__FOR____SEQUENCE_____sequence-name_____><
```

## CREATE AUXILIARY TABLE

```
>> __CREATE_____AUXILIARY_____TABLE__aux-table-name__IN_____>
|_AUX_____|
> _____table-space-name__STORES__table-name_____>
|_database-name_|
> __APPEND NO_____COLUMN__column-name_____><
|_APPEND YES_| |_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 (compiled SQL scalar)

```
>> __CREATE FUNCTION__function-name__(_____)__>
| < , _____ |
|_parameter-declaration_| |_VERSION V1_____> __RETURNS_data-
```

```

type2_ | _____ | _option-list____ >< | _VERSION routine-
version-id_ | 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 _____ >< | _disctinct-type-name_ |
| _array-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_ _____ | | _ ( _length_ ) _____ | | | | _CCSID_ ASCII_ |
| _FOR_ SBCS _____ DATA_ | | | | | | _____ CHARACTER_ VARYING_ ( _length_ ) _____ |
| _EBCDIC_ | | _MIXED_ | | | | | | | _CHAR_ _____ | | | | _UNICODE_ | | _BIT_ | | | | |
| _VARCHAR _____ | | | | | | _ (1M) _____ | | | | | _____ CHARACTER_ LARGE
OBJECT_ | _____ | _____ | | | |
| _CHAR _____ | | _ ( _integer_ ) _____ | | _CCSID_ ASCII_ _____ | | _FOR_ SBCS _____ DATA_ | | |
| _CLOB _____ | | _EBCDIC_ | | _MIXED_ | | | | _____ (1) _____
| _UNICODE_ | |
| _GRAPHIC_ | _____ | _____
_____ | | | | | _ ( _integer_ ) _____ | | | | | _CCSID_ ASCII_ _____ | | |
| _VARGRAPHIC_ ( _integer_ ) _____ | | _EBCDIC_ | | | | |
_____ (1M) _____ | | _UNICDOE_ | | | | | _DBCLOB_ | _____ | | |
| _ (integer) _____ | | | | | _ (1) _____ | |
| _BINARY_ | _____ | _____
_____ | | | | | _ (integer) _____ | | | | | | _BINARY VARYING
_____ (integer) _____ | | | | | | _VARBINARY _____ | | | | |
_____ (1M) _____ | | | | | _BINARY LARGE
OBJECT _____ | _____ | _____ | | | | | _BLOB _____ |
| _ ( _integer _____ ) _____ | | | | | _K_ | | | | | _M_ | | | | | _G_ | |
| _DATE _____
_____ | | | | | _TIME _____ | | | | | _____ ( _6_ ) _____ _WITHOUT TIME ZONE_ | |
| _TIMESTAMP_ | _____ | | |
| _____ | _____ | _____ |
| _ (integer_ ) _____ | | _WITH TIME ZONE _____ | |
| _ROWID _____
_____ |
| _XML _____

```

\_\_\_\_\_ | SQL-control-body: >>\_\_SQL-control-  
statement\_\_\_\_\_>

option-list:

> \_\_LANGUAGE SQL\_\_\_\_\_>  
          |\_SPECIFIC specific-name\_\_\_\_\_|  
> \_\_\_\_\_NOT DETERMINISTIC\_\_\_\_\_EXTERNAL ACTION\_\_\_\_\_>  
      |\_DETERMINISTIC\_\_\_\_\_|      |\_NO EXTERNAL ACTION\_|  
> \_\_\_\_\_READS SQL DATA\_\_\_\_\_CALLED ON NULL INPUT\_\_\_\_\_>  
      |\_CONTAINS SQL\_\_\_\_\_|      |\_RETURNS NULL ON NULL INPUT\_|  
      |\_MODIFIES SQL DATA\_|  
> \_\_\_\_\_STATIC DISPATCH\_\_\_\_\_ALLOW PARALLEL\_\_\_\_\_>  
                                  |\_DISALLOW PARALLEL\_|  
  
> \_\_DISALLOW DEBUG MODE\_\_\_\_\_PARAMETER CCSID ASCII\_\_\_\_\_QUALIFIER schema-name\_>  
      |\_ALLOW DEBUG MODE\_\_\_\_\_|\_PARAMETER CCSID EBCDIC\_|  
      |\_DISABLE DEBUG MODE\_\_|\_PARAMETER CCSIS UNICODE\_|  
> \_\_PACKAGE OWNER\_\_authorization-name\_\_\_ASUTIME\_NO LIMIT\_\_\_\_\_>  
                                  |\_ASUTIME\_LIMIT\_\_integer\_|  
> \_\_INHERIT SPECIAL REGISTERS\_\_\_\_\_WLM ENVIRONMENT FOR DEBUG MODE name\_\_\_\_\_>  
      |\_DEFAULT SPECIAL REGISTERS\_|  
> \_\_CURRENT DATA NO\_\_\_\_\_CONCURRENT ACCESS RESOLUTION USE CURRENTLY COMMITTED\_>  
      |\_CURRENT DATA YES\_|\_CONCURRENT ACCESS RESOLUTION WAIT FOR OUTCOME\_\_\_\_\_|  
> \_\_\_\_\_DYNAMICRULES RUN\_\_\_\_\_>  
      |\_DYNAMICRULES BIND\_\_\_\_\_|  |\_APPLICATION ENCODING SCHEME ASCII\_\_\_\_\_|  
      |\_DYNAMICRULES DEFINEBIND\_|  |\_APPLICATION ENCODING SCHEME EBCDIC\_\_\_\_\_|  
      |\_DYNAMICRULES DEFINERUN\_\_|  |\_APPLICATION ENCODING SCHEME UNICODE\_\_\_\_\_|  
      |\_DYNAMICRULES INVOKEBIND\_|  
      |\_DYNAMICRULES INVOKERUN\_\_|  
> \_\_WITHOUT EXPLAIN\_\_\_\_\_ISOLATION LEVEL CS\_\_\_OPHINT\_\_\_' '\_\_\_\_\_>  
      |\_WITH EXPLAIN\_\_\_\_\_|\_ISOLATION LEVEL RS\_|      |\_OPHINT\_string-constant\_|  
                          |\_ISOLATION LEVEL RR\_|  
                          |\_ISOLATION LEVEL UR\_|  
                          </\_><\_ , \_\_\_\_\_>\_SQL PATH\_\_schema-name|\_\_\_\_\_REOPT  
NONE\_\_\_\_\_VALIDATE RUN\_\_\_\_\_DEGREE 1\_\_\_\_\_>  
          |\_SCHEMA PATH\_|  |\_REOPT ALWAYS\_|\_VALIDATE BIND\_|\_DEGREE ANY\_|  
          |\_SESSION USER\_|  |\_REOPT ONCE\_\_\_\_\_|  
          |\_USER\_|  
> \_\_\_\_\_>  
      |\_QUERY ACCELERATION NONE\_\_\_\_\_|      |\_GET\_ACCEL\_ARCHIVE\_NO\_\_\_\_\_|  
      |\_QUERY ACCELERATION ENABLE\_\_\_\_\_|      |\_GET\_ACCEL\_ARCHIVE\_YES\_\_\_\_\_|  
      |\_QUERY ACCELARATION ENABLE WITH FAILBACK\_|  
      |\_QUERY ACCELERATION ELIGIBLE\_\_\_\_\_|  
      |\_QUERY ACCELERATION ALL\_\_\_\_\_|



```

> _____>
I_ROUNDING DEC_ROUND_CEILING___I   I_DATE FORMAT ISO___I
I_ROUNDING DEC_ROUND_DOWN____I     I_DATE FORMAT EUR___I
I_ROUNDING DEC_ROUND_FLOOR____I     I_DATE FORMAT USA___I
I_ROUNDING DEC_ROUND_HALF_DOWN___I  I_DATE FORMAT JIS___I
I_ROUNDING DEC_ROUND_HALF_EVEN___I  I_DATE FORMAT LOCAL___I
I_ROUNDING DEC_ROUND_HALF_UP___I
I_ROUNDING DEC_ROUND_UP_____I

```

```

> _____FOR UPDATE CLAUSE REQUIRED_____>
I_DECIMAL(15)___I   I_FOR UPDATE CLAUSE OPTIONAL_I
I_DECIMAL(31)___I
I_DECIMAL(15,s)_I
I_DECIMAL(31,s)_I

```

```

> _____SECURED_____>
I_TIME FORMAT ISO___I I_NOT SECURED_I
I_TIME FORMAT EUR___I
I_TIME FORMAT USA___I
I_TIME FORMAT JIS___I
I_TIME FORMAT LOCAL_I

```

```

> _____BUSINESS TIMESENSITIVE YES_ _____SYSTEM TIMESENSITIVE YES_
> _____I_____I_____I_____I_____

```

```

>
I_BUSINESS TIMESENSITIVE NO ___I   I_SYSTEM TIMESENSITIVE YES_

```

```

> _____ARCHIVE SENSITIVE YES_____
> _____I_____I_____

```

```

>< I_ARCHIVE SENSITIVE NO ___I   I_APPLCOMPAT_compatibility-level_I

```

external-java-routine-name

```

I_____method-name_____I
I_jar-name:_I   I_method-signature_I

```

jar-name

```

I_____jar-id_____I
I_schema-name._I

```

method-name

```

<
I_____I_class-id_ . _____method-id_____I
I_package-id_ . _____I   I!_____I
I_/_____I

```

method-signature

```

I_____I

```





```

|_CONTINUE AFTER FAILURE_____|
> _____>
|_RUN OPTIONS_run-time-options_|
|_INHERIT SPECIAL REGISTERS_|_STATIC DISPATCH
> |_____|_____|_____|_____>
|_DEFAULT SPECIAL REGISTERS_|
|_NOT SECURED_____
|_|_____|_____>>
|_SECURED_____|

```

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 FUNCTION(external table)

```

>>_CREATE FUNCTION_function-name_____>
>_(_____)_____>
|<_,_____|
|_parameter-declaration_|_
|<_,_____
>_RETURNS_TABLE_(column-name data-type_____|_)_option-list_>< |
|_AS LOCATOR_| | |_GENERIC TABLE_____| 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)_____ |

```





```

> _____>
  |_SPECIFIC_specific-name_| |_PARAMETER CCSID__ _ASCII_____|
                                     |_EBCDIC_____|
                                     |_UNICODE_____|
> _SOURCE_ _function-name_____><
|_SPECIFIC_specific-name_____|
  |_function-name__(_____)_|
                                     |<_,_____| |____parameter-type_|_|
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_|
|

```

```

|_I__DOUBLE_|_____I_|
|
|_____ (1)_____
|
|_____ CHARACTER _____|_____
|_____
| | | | _CHAR _____ | |_(length_)_____ | | | _CCSID__ASCII__ |
|_FOR__SBCS__DATA_| | |
| | | _CHARACTER__VARYING__(_length_)_| | _EBCDIC_| | _MIXED_|
| |
| | | | _CHAR _____ | | | _UNICODE_|
| |
| | | _VARCHAR _____|
| |
| | _____ (1M)_____
| |
| | _____ CHARACTER__LARGE OBJECT__
| _____|_____ | | | | | | |
| | | | _CHAR _____ | |_(integer_)_| | _CCSID__ASCII__ |
|_FOR__SBCS__DATA_| | |
| | | _CLOB _____ | | _EBCDIC_|
|_MIXED_| |
| | _____ (1)_____ | _UNICODE_|
|
|_GRAPHIC_| _____|_____
|_____
| | _____|_(integer)_|_____ | | _CCSID__ASCII__ |
|
| | _VARGRAPHIC__(_integer_)_____ | | _EBCDIC_|
|
| | _____ (1M)_____ | _UNICODE_|
|
| | _DBCLOB_| _____|
|
| | _____ (integer)_____ |
|
| | _____ (1)_____
|
|_BINARY_| _____|_____
|_____
| | _____|_(integer)_|_____ |
|
| | _BINARY VARYING __ (integer) _____|
|
| | | _VARBINARY _____ |
|

```







</\_>

## CREATE FUNCTION (SQL Table)

```
> __CREATE FUNCTION__ function-name_ ( _____ )_>
      |       <_ , _____ |
      | _____ |__|
      |_____ |_____ |
      |_parameter-declaration_|
      <_, _____ >_RETURNS TABLE__ (_____
name__data-type2_|_____ options-list_____>
```

```
>_SQL-routine-body_____>
```

parameter-declaration:

```
>>__parameter-name parameter-type_____>>
```

```
parameter-type: >>__data-
```

```
type1_____>< |_TABLE
```

```
LIKE__table-name__AS LOCATOR_| |_view name_| data-type1, data-type2:
```

```
>>__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_| _____ | _____ | _____ |
```

```
| _____ | _____ | _____ | _____ | _____ |
```

```
_____ | | | | |_CHAR_| | |(length_)_____ | | | |_CCSID_ASCII_| |
```

```
|_FOR_SBCS__DATA_| | | | | | |_CHARACTER_VARYING_(length_)_|
```

```
|_EBCDIC_| | |_MIXED_| | | | | | |_CHAR_| | | | |_UNICODE_| | | | |
```

```
|_VARCHAR_| _____ | | | | | |(1M)_____ | | | | | _____ | _____ | _____ | _____ |
```

```
OBJECT_| _____ | _____ | _____ | _____ | _____ |
```

```
|_CHAR_| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
```

```
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
```

```
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
```

```
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
```

```
_____ | | | | |_(integer_)_____ | | | | | |_CCSID_ASCII_| | | |
```

```
|_VARGRAPHIC_(integer_)_____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
```

```
_____(1M)_____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
```

```
| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
```

```
|_BINARY_| _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ |
```

```
_____ | | | | |_(integer_)_____ | | | | | | _____ | _____ | _____ | _____ | _____ |
```

```

__(integer)_____ | | | | | _VARBINARY_____ | | | | |
_(1M)_____ | | | | | _BINARY LARGE
OBJECT_____ | _____ | _____ | | | | | _BLOB_____ |
|_(integer)_____ )_____ | | | | | _K_| | | | | _M_| | | | | _G_| | |
|_DATE_____
_____ | | | | | _TIME_____ | | | | | ___(6_)_____ _WITHOUT TIME ZONE_ | | |
|_TIMESTAMP_| _____ | _____ | _____ | _____ |
_____ | | | | | (integer)_ | | | | | _WITH TIME ZONE_____ | | |
|_ROWID_____
_____ | option-list: > _____ LANGUAGE
SQL_____ >
_____ | _SPECIFIC_specific-name_|
> _____ NOT DETERMINISTIC_____ EXTERNAL ACTION_____ >
|_DETERMINISTIC_____ | | _NO EXTERNAL ACTION_|
> _____ READS SQL DATA_____ CALLED ON NULL INPUT_____ >
|_CONTAINS SQL_____ |
> _____ INHERIT SPECIAL REGISTERS_____ STATIC DISPATCH_____ >
_____ | _CARDINALITY int_|
> _____ SECURED_____ PARAMETER CCSID_____ >
|_NOT SECURED_| | _ASCII_|
|_EBCDIC_|
|_UNICODE_|

```

SQL-routine-body:

```

>> _RETURN statement_____ >>
|_BEGIN ATOMIC RETURN statement_END_|

```

## 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\_ |

|

| | | (34) |

|

| | \_DECFLOAT\_ |

| | |

| | |

| | | (16) |

|

| | | (53) |

|

| | | \_FLOAT\_ | |

| | |

| | | ( \_integer\_ ) |

|

| | | \_REAL\_ | |

|

| | | \_PRECISION\_ | |

|

| | | \_DOUBLE\_ | | |

|

| | | (1) |

|

| | | \_CHARACTER\_ | |

| | |

| | | | \_CHAR\_ | | (length\_) | | | | \_CCSID\_ \_ASCII\_ |

| | | | \_FOR\_ \_SBCS\_ \_DATA\_ | | |

| | | | | \_CHARACTER\_ \_VARYING\_ (length\_) | | | | \_EBCDIC\_ | | | | \_MIXED\_ |

| | |

| | | | | \_CHAR\_ | | | | | | | \_UNICODE\_ |

| | |

| | | | \_VARCHAR\_ | |

| | |

```

| |          |(1M)|
| |
| |____CHARACTER____LARGE OBJECT_
|_____|_____| | | | | | | | | | | |
| | | | _CHAR_| | | | |_(integer)| | | | _CCSID_ _ASCII_|
| _FOR_ _SBCS_ _DATA_| | |
| | | | _CLOB_| | | | | _EBCDIC_|
| _MIXED_| | |
| | | | |(1)| | | | | _UNICODE_|
|
| | | | _GRAPHIC_| | | | | | |
|_____|_____|
| | | | |_(integer)| | | | | _CCSID_ _ASCII_|
|
| | | | _VARGRAPHIC_|_(integer)| | | | | _EBCDIC_|
|
| | | | |(1M)| | | | | _UNICODE_|
|
| | | | _DBCLOB_| | | | |
|
| | | | |_(integer)| | | | |
|
| | | | |(1)|
|
| | | | _BINARY_| | | | | |
|_____|_____|
| | | | |_(integer)| | | | |
|
| | | | _BINARY VARYING_|_(integer)| | | | |
|
| | | | | _VARBINARY_| | | | |
|
| | | | |(1M)| | | | |
|
| | | | _BINARY LARGE OBJECT_| | | | |
|
| | | | | _BLOB_| | | | |_(integer)| | | | |
|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
|
| | | | | _DATE_|
|_____|_____|

```

```

|
| | TIME |
|
| | (6) | WITHOUT TIME ZONE |
|
|
| | TIMESTAMP | | |
|
| | (integer) | | WITH TIME ZONE |
|
| ROWID |
|

```

## CREATE INDEX

```

>> CREATE INDEX index-name ON
| UNIQUE |
| WHERE NOT NULL |
| < , | ASC | > table-
name ( column-name | | |
| | key-expression | | DESC | |
| | | RANDOM | |
| aux-table-name |
> ) >
| , BUSINESS TIME WITHOUT OVERLAPS |
| WITH OVERLAPS |
< >>
| XML index-specs | INCLUDE (column-name) | | NOT CLUSTER | |
| | CLUSTER | |
| PARTITIONED |
| NOT PADDED |
| | PADDED | |
| free-block |
| using-block |
| gbpcache-block |
| YES |
| DEFINE | NO | |
| YES |
| COMPRESS | NO | |
| INCLUDE NULL KEYS |
| | |
| | EXCLUDE NULL KEYS | |
> >

```

```

|
| <_ , _____ |
| | _RANGE_ < _____ | | | | |
| | PARTITION BY | _____ | partition-element _____ | | _____) |
| | | | | | |
| | | using-block _____ |
| | free-block _____ |
| | gbpcache-block _____ |
| | DSSIZE_int_G _____ |
|
| _____
|
| _____
|
| < | BUFFERPOOL_bpname _____ | | _YES_ | | _CLOSE_ | _NO_ | _____ | |
| | _NO_ | | _DEFER_ | _YES_ | _____ | | _NO_ | | _COPY_ | _YES_ | _____ |
| | DSSIZE_integer _____ G _____ | | 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) _____ ><
| | (34) | | DECFLOAT | _____ | _____ | | DATE _____ | | (12) | |
| | TIMESTAMP | _____ | _____ | using-block:
>> _USING _____ >
| > _____ VCAT_ catalog-name _____ >< |
|
| _____ |

```



```

I_STOGR0UP__stogroup-name_____|_____|
|          _12_____ |
|_PRIQTY__|_integer_|_ |
|_SECQTY__integer_____ |
|          _NO_____ |
|_ERASE__|_YES_|_____ |

```

free-block:

```

<_____ _0_____ |
>>_____FREPAGE__|_integer_|_____>> |
_10_____ | |_PCTFREE__|_integer_|_____ | gbpcache-block: _CHANGED_
>>_GBPCACHE__|_ALL_____ |_____>>
|_NONE_____ |

```

partition-element:

```

>>_PARTITION__integer_ENDING__|_AT_<_,_____ _INCLUSIVE_
|_MAXVALUE_|
|_MINVALUE_|

```

## CREATE MASK

```

>>_CREATE MASK_mask-name_ON_table-name_____>
|_AS_|
|_|_|_correlation-name_|
>_FOR COLUMN_column-name___RETURN case-expression___DISABLE_____>>
|_ENABLE_|

```

## CREATE PERMISSION

```

>>_CREATE PERMISSION_permission-name_ON_table-name_____>
|_AS_|
|_|_|_correlation-name_|
>_FOR ROWS WHERE_search-condition___ENFORCED FOR ALL ACCESS___DISABLE_____>>
|_ENABLE_|

```

## CREATE PROCEDURE (external)

```

>>_CREATE PROCEDURE_procedure-name_____>
<_,_____
>_(_____|_____)_option-list_____>>
|_parameter-declaration_| parameter-declaration: _IN_____

```

```

> __I_OUT__ | _____ parameter-type _____ >
  |_INOUT__ | |_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_____ | _____ |
_____ | | | | |_CHAR_____ | |_(length__)_____ | | | |_CCSID_ ASCII__ |
|_FOR_SBCS__ DATA_| | | | | |_CHARACTER__ VARYING__(length__)_|
|_EBCDIC__ | |_MIXED_| | | | | |_CHAR_____ | | | |_UNICODE_| | | | |
|_VARCHAR_____ | | | | |_(1M)_____ | | | | |_CHARACTER__ LARGE
OBJECT_| _____ | | | | |
|_CHAR_____ | |_( __integer__ )_| | |_CCSID_ ASCII__ | |_FOR_SBCS__ DATA_| | |
|_CLOB_____ | |_EBCDIC__ | |_MIXED_| | | |(1)_____
|_UNICODE_| |
|_GRAPHIC_| _____ |
_____ | | | |_( __integer__ )_____ | | | |_CCSID_ ASCII__ | | |
|_VARGRAPHIC__( __integer__ )_____ | |_EBCDIC__ | | | |
_____(1M)_____ | |_UNICODE__ | | | | |_DBCLOB_| _____ | | |
|_(integer)_____ | | | |(1)_____ | |
|_BINARY__ | _____ |
_____ | | | |_(integer)_____ | | | | |_BINARY VARYING
_____(integer)_____ | | | | |_VARBINARY_____ | | | | |
_____(1M)_____ | | | | |_BINARY LARGE
OBJECT_____ | _____ | | | | |_BLOB_____ |
|_( __integer_____ )_____ | | | | |_K_| | | | |_M_| | | | |_G_| |
|_DATE_____
_____ | | | |_TIME_____ | | | | |(6)_____ |_WITHOUT TIME ZONE_| | |
|_TIMESTAMP_| _____ | _____ |
_____ | | |_(integer)_____ | | |_WITH TIME ZONE_____ | |
|_ROWID_____
_____ | option-list: _DYNAMIC RESULT SET 0 _____ |
>> __| _____ | _____ >

```

```

I_DYNAMIC_RESULT SET integer_1
>
I_PARAMETER CCSID ASII |
| I_EBCDIC | |
| I_UNICODE | |
| VARCHAR NULTERM |
| STRUCTURE |
> EXTERNAL LANGUAGE ASSEMBLE >
| NAME 'string' | | C |
| identifier | | 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 PACKAGE PATH |
> | |
| PACKAGE PATH package-path |
| NO DBINFO | NO COLLID |
> | | |
| DBINFO | | 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_|
> |_____|_____>>
|_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__SQL-routine-body_____>> |_parameter-declaration_| parameter-
declaration: _IN_____>_|_OUT_____|_____parameter-
type_____>
    |_INOUT_____| |_parameter-name_|

```

parameter-type:



```

> _PARAMETER__VARCHAR_____NULTERM_____>
      |_____|
      |_STRUCTURE_____|
      |
      |_NOT DETERMINISTIC_|
> |_____|>
      |_DETERMINISTIC_____|
      |_CALLED ON NULL INPUT_____||_MODIFIES SQL DATA_|
> |_____|_|_|>
      |_NO SQL_____||
      |_CONTAINS SQL_____||
      |_READS SQL DATA_____||
      |
      |_NODBINFO_|_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 decaration_|
      |
      |_VERSION V1_____
> |_____|_|_|SQL-routine-body_____>
      |_VERSION routine ver-id_|_|_option-list_|

```

parameter-declaration:

```
  _IN_
> |_____| |__parameter-name__parameter-type_____>
  |_OUT_|
  |_INOUT_|
```

parameter-type:

```
>> __built-in-data-type_____><
|_TABLE LIKE__table-name__AS LOCATOR_| |_view-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_____ | |_(length__)_____ | | | | _CCSID_ ASCII_|
|_FOR_SBCS__DATA_| | | | | | | _CHARACTER_ VARYING__(length__)_|
|_EBCDIC_| | _MIXED_| | | | | | | | _CHAR_____ | | | | _UNICODE_| | | | |
|_VARCHAR_____ | | | | | |_(1M)_____ | | | | | | _CHARACTER_ LARGE
OBJECT_| |_____ |_____ | | | | |
|_CHAR_____ | |_( __integer__ )_| | | _CCSID_ ASCII_| | _FOR_SBCS__DATA_| | | |
|_CLOB_____ | | _EBCDIC_| | _MIXED_| | | | |(1)_____
|_UNICODE_| | |
|_GRAPHIC_| |_____ |_____
_____ | | | | |_( __integer__ )_____ | | | | | _CCSID_ ASCII_| | | | |
|_VARGRAPHIC__( __integer__ )_____ | | _EBCDIC_| | | | | |
_____(1M)_____ | | _UNICODE_| | | | | | _DBCLOB_| |_____ | | | |
|_(integer)_____ | | | | |(1)_____ | | |
|_BINARY_| |_____ |_____
_____ | | | | |_(integer)_____ | | | | | | _BINARY VARYING
_____(integer)_____ | | | | | | _VARBINARY_____ | | | | | |
_____(1M)_____ | | | | | | _BINARY LARGE
OBJECT_____ | |_____ | |_____ | | | | | _BLOB_____ |
|_( __integer_____ )_____ | | | | | _K_| | | | | _M_| | | | | _G_| | |
|_DATE_____
_____ | | | | _TIME_____ | | | | | |(6)_____ _WITHOUT TIME ZONE_| | |
|_TIMESTAMP_| |_____ | |_____ | |_____
_____ | | | | |_(integer)_____ | | | | | _WITH TIME ZONE_____ | | |
|_XML_____
_____ | option-list: _NOT DETERMINISTIC_ _MODIFIES SQL DATA_ >>_
|_____ | |_____ | |_____ | |_____ >
```





```

I_WITH_EXPLAIN___ I_WITH_IMMEDIATE_WRITE___

  _ISOLATION_LEVEL_CS_  _WITHOUT_KEEP_DYNAMIC_
> |_____ |_____ |_____ >
  I_ISOLATION_LEVEL_RS_ I_WITH_KEEP_DYNAMIC___
  I_ISOLATION_LEVEL_RR_
  I_ISOLATION_LEVEL_UR_
  _OPHINT_____
> |_____ |_____ >
  I_OPHINT_string-constant___
>
  I_SQL_PATH_schema_name_____
  I_SQL_PATH_schema_name_list_____
  I_SQL_PATH_SESSION_USER or USER_
  I_SQL_PATH_DEFAULT_____

>
I_QUERY_ACCELERATION_NONE_____ I_GET_ACCEL_ARCHIVE_NO___ I
I_QUERY_ACCELERATION_ENABLE_____ I_GET_ACCEL_ARCHIVE_YES___ I
I_QUERY_ACCELERATION_ENABLE_WITH_FAILBACK_
I_QUERY_ACCELERATION_ELIGIBLE_____
I_QUERY_ACCELERATION_ALL_____

  _RELEASE_AT_COMMIT_____  _REOPT_NONE_____
> |_____ |_____ |_____ >
  I_RELEASE_AT_DEALLOCATE___ I_REOPT_ALWAYS___
  I_REOPT_ONCE___

  _VALIDATE_RUN_____
> |_____ |_____ >
  I_VALIDATE_BIND_ | I_ROUNDING_DEC_ROUND_CEILING___ |
  I_ROUNDING_DEC_ROUND_DOWN_____ |
  I_ROUNDING_DEC_ROUND_FLOOR_____ |
  I_ROUNDING_DEC_ROUND_HALF_DOWN_ |
  I_ROUNDING_DEC_ROUND_HALF_EVEN_ |
  I_ROUNDING_DEC_ROUND_HALF_UP___ |
  I_ROUNDING_DEC_ROUND_UP_____ |

>
I_DATE_FORMAT_ISO___ | I_DECIMAL(15)___ |
I_DATE_FORMAT_EUR___ | I_DECIMAL(31)___ |
I_DATE_FORMAT_USA___ | I_DECIMAL(15,s)_ |
I_DATE_FORMAT_JIS___ | I_DECIMAL(31,s)_ |
I_DATE_FORMAT_LOCAL_ |

  _FOR_UPDATE_CLAUSE_REQUIRED_

```

```

> _____|_____>
  |_FOR UPDATE CLAUSE OPTIONAL_| |_TIME FORMAT ISO___|
  |_TIME FORMAT EUR___|
  |_TIME FORMAT USA___|
  |_TIME FORMAT JIS___|
  |_TIME FORMAT LOCAL_|
>
  |_____YES_____|
  |_SYSTIMESENSITIVE( |_NO_| )_| |_BUSTIMESENSITIVE( |_NO_| )_|
>
  |_____YES_____|
  |_ARCHIVESENSITIVE( |_NO_| )_| |_APPLCOMPAT( __compatibility-level )_|

```

## CREATE ROLE

```

>> __CREATE ROLE__ role-name_____>

```

## CREATE SEQUENCE

```

>> __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___| data-type: >> __built-in-
type_____>
  |_distinct-type-name_|

```

built-in-type:

```

> __SMALLINT_____>>
  | |_INTEGER___| | | |
  | | |INT_| | |
  | |_BIGINT___| |
  | _____(5,0)_____ |
  |_DECIMAL___| _____ | |
  |_DEC___| |_( __integer_____ )_|
  |_numeric_| |_,integer_|

```

# CREATE STOGROUP

```
<_ , _____ >>_ CREATE
STOGROUP__stogroup-name__VOLUMES(_____volume-id|_____)____>
| _____ </_><_ , ___ |
| _____ '*' _| _____ | > _VCAT_ catalog-
name_____>
> _____><
| _DATACLASdc-name_| | _MGMTCLASmc-name_| | _STORCLASsc-name_|
```

# CREATE TABLE

```
>>_ CREATE TABLE__table-name_____>
<_ , _____ >_(_____column-
definition_____)>
| | _____ | | |
| | _____ | |
| | _____ | |
| | _____ | |
| _LIKE__table-name__copy-options_____ | |
| | _____ | |
| | _as-result-table__|_copy-options_____ | |
| | _materialized-query-definition_____ | |
<_____>
| _____><
| _IN_____table-space-name__|
| | _____ | |
| | _IN DATABASE__database-name_____ | |
| _____ |
| _____ |
| _____WITH ROW ATTRIBUTES_____ |
| _EDITPROC_prg-name_|_____ | |
| _____|_WITHOUT ROW ATTRIBUTES_| |
| _VALIDPROC__program-name_____ |
| _____NONE_____ |
| _AUDIT__|_CHANGES_|_____ |
| _____|_ALL_____ |
| _OBID__integer_____ |
| _____NONE_____ |
| _DATA CAPTURE__|_CHANGES_|_____ |
| _____WITH RESTRICT ON DROP_____ |
| _CCSID__ASCII_____ |
| _____|_EBCDIC_|_____ | |
| _____|_UNICODE_|_____ |
| _____NOT VOLATILE_____|_CARDINALITY_____|
| | _____ | | _____ |
```

```

| |           _CARDINALITY_ | | | | |
| | _VOLATILE_____|_____|_| | |
| | _LOGGED_____| | | |
| |_____|_____|_____ | |
| | _NOT LOGGED_| | | |
|
| | _COMPRESS NO_____| | | | |
| |_____|_____|_____ | |
| | | _COMPRESS YES_| | | |
| |           _NO_____| | | |
| | _APPEND_____| _YES_| | | |
| | _DSSIZE_integer_G_____| | | |
| | _BUFFERPOOL_bpname_____| | | |
| | _MEMBER CLUSTER_____| | | |
| |   _TRACKMOD YES_____| | | |
| |_____|_____|_____ | |
| | | _TRACKMOD NO_____| | | |
| |_____|_____|_____ | |
|_____ |
| | _PAGENUM RELATIVE_| | |
| | _PAGENUM ABSOLUTE_| | |

```

column-definition:

```

<_____ | | |
>> _column-name_data-type_____ | >
>_____ | >>
| | _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_| | | |
| | | _GENERATED_____ ALWAYS_____ | | |
| |           | | _as-row-transaction-timestamp-clause_| | |

```

```

|          |_as-row-transaction-start-id-clause_| |
|          |_as-generated-expression-clause_____| |
|_references-clause_____|
|_column-constraint_____|
|_FIELDPROC_program-name_____|
|          | | | | | <_, _____ | | |
|_(__constant_|_)_| | | |_AS SECURITY
LABEL_____ | | | | |_IMPLICITY
HIDDEN_____ | | | | |_INLINE
LENGTH_____ | 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_| _____ | | | | |_(length_)_____ | | | | |_CCSID_ASCII_| |
|_FOR_SBCS_DATA_| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|_EBCDIC_| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|_VARCHAR_____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
OBJECT_| _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|_CHAR_| _____ | | | | |_( __integer__)| | | | |_CCSID_ASCII_| | | | |_FOR_SBCS_DATA_| | | | |
|_CLOB_____ | | | | |_EBCDIC_| | | | |_MIXED_| | | | |_(1)_____ |
|_UNICODE_| | |
|_GRAPHIC_| _____ |
_____ | | | | |_( __integer__)| _____ | | | | |_CCSID_ASCII_| | | |
|_VARGRAPHIC__( __integer__)| _____ | | | | |_EBCDIC_| | | | | | | | | |
|_(1M)_____ | | | | |_UNICODE_| | | | | |_DBCLOB_| _____ | | | |
|_(integer)_____ | | | | |_(1)_____ | | |
|_BINARY_| _____ |
_____ | | | | |_(integer)_____| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|_(integer)_____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|_(1M)_____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
OBJECT_____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|_( __integer_____)_____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|_DATE_____ |
_____ | | | | |_TIME_| _____ | | | | |_(6_)_____ | | | | |_WITHOUT TIME ZONE_| | |
|_TIMESTAMP_| _____ | _____ | _____ |
_____ | | | | |_(integer_)_____| | | | | |_WITH TIME ZONE_| | |
|_ROWID_____ |
_____ | | | | |_XML___( XML-type-

```

modifier\_) \_\_\_\_\_ |  
XML-type-modifier: >> \_\_XMLSCHEMA XML-schema-  
specification \_\_\_\_\_ >  
|\_ELEMENT\_element-name\_|

XML-schema-specification:

>> \_\_ID registered-XML-schema-name \_\_\_\_\_ >  
|\_URL target-namespace \_\_\_\_\_ |  
|\_NO NAMESPACE \_\_\_\_\_ | |\_LOCATION\_schema-location\_|

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 \_\_\_\_\_ >< as-row-transaction-timestamp-clause:

>> \_\_AS ROW \_\_BEGIN \_\_\_\_\_ ><

|\_END\_| as-row-transaction-id-clause: >> \_\_AS TRANSACTION START  
ID \_\_\_\_\_ >< as-generated-expression-

clause: >> \_\_AS (\_non-deterministic-  
expression\_) \_\_\_\_\_ >< non-deterministic-

expression: >> \_\_DATA CHANGE

OPERATION \_\_\_\_\_ >< |\_special-  
register \_\_\_\_\_ | |\_session-variable \_\_\_\_\_ | special register: >> \_\_CURRENT

CLIENT\_ACCTNG \_\_\_\_\_ >< |\_CURRENT

CLIENT\_APPLNAME \_\_\_\_\_ | |\_CURRENT CLIENT\_CORR\_TOKEN \_\_\_\_\_ | |\_CURRENT

CLIENT\_USERID \_\_\_\_\_ | |\_CURRENT CLIENT\_WRKSTNNAME \_\_\_\_\_ | |\_CURRENT

SERVER \_\_\_\_\_ | |\_CURRENT SQLID \_\_\_\_\_ |

|\_SESSION\_USER \_\_\_\_\_ | session-variable:

>> \_\_SYSTEM.PACKAGE\_NAME \_\_\_\_\_ ><

|\_SYSTEM.PACKAGE\_SCHEMA \_\_\_\_\_ | |\_SYSTEM.PACKAGE\_VERSION \_\_\_\_\_ |

column-constraint: >> \_\_\_\_\_ PRIMARY

KEY \_\_\_\_\_ >< |\_CONSTRAINT\_constraint-name\_| | |\_UNIQUE \_\_\_\_\_ |

| |\_references clause \_\_\_\_\_ | |\_CHECK(\_check-condition\_) \_\_\_\_\_ |

period-definition: \_\_FOR\_\_

>> \_\_PERIOD\_| \_\_\_\_\_ | \_\_\_\_\_ ><>

SYSTEM\_TIME \_\_\_\_\_ (\_begin-column-name, end-column-name) \_\_\_\_\_ ><

|\_BUSINESS\_TIME \_\_\_\_\_ (\_begin-column-name, end-column-name) \_EXCLUSIVE \_\_\_\_\_ |

|\_INCLUSIVE \_\_\_\_\_ |

unique-constraint:

```

>> _____ PRIMARY KEY ( _____ <_, _____ >>
|_CONSTRAINT_ constraint-name |_UNIQUE_ |
> _____ ) _____ >>
|_,_BUSINESS_TIME WITHOUT OVERLAPS_____ |

```

referential-constraint:

```

>> _____ FOREIGN KEY ( _____ <_, _____ >>
|_CONSTRAINT_ constraint-name | |_PERIOD_BUSINESS_TIME_ | >_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_ | _____ |_ |
>> _____ | _____ | _____ | _____ >
| | _____ _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_ _____ | |
| |_EXCLUDING XML TYPE MODIFIERS_ _____ | |

```

partitioning-clause:

```

        _RANGE_ </_><_ , _____ >> __PARTITION
BY _I _____ I __ ( _partition-expression_ I_ ) _____ >
        I_SIZE _____ I
        I __EVERY_ integer-constant_G_I
</_><_ , _____ > __ ( _partition-
element _____ I_ ) _____ << partition-
expression: _NULLS LAST_ _ASC_ >> __column-
name_ I _____ I_ I _____ I _____ << I_DESC_ I
partition-element: _AT_
>> __PARTITION_ integer_ ENDING_ I _____ I_ ( _____ constant_ I_ ) _____ >
        I_MAXVALUE_ I
        I_MINVALUE_ I
        _____ _INCLUSIVE_
> __HASH SPACE_ integer_ K _____ I _____ I _____ <<
I_M_ I
        I_G_ I

```

organization-clause:

```

        < _____ _HASH SPACE_ 64M _____ >> __UNIQUE__ ( _column-
name_ )_ I _____ I _____ >
        I_HASH SPACE_ integer_ K _____ I
        I_M_ I
        I_G_ I

```

materialized-query-definition:

```

>> __ _____ AS_ (fullselect) _____ >
I </_><_ , _____ I I_ ( _____ column-name_ I_ )_ I >__
_____ << I_

```

```

refreshable-table-options _____ I refreshable-table-options: >> __DATA INITIALLY
DEFERRED_ REFRESH DEFERRED _____ >

```

```

        < _____ > _____
_____ I _____ << I
__MAINTAINED BY SYSTEM_ _____ I
I_ I _____ I _____ I
I I __MAINTAINED BY USER__ I _____ I
I __ENABLE QUERY OPTIMIZATION__ I I
I_ I _____ I_ I
I __DISABLE QUERY OPTIMIZATION_

```

## CREATE TABLESPACE

```

>> __CREATE _____ TABLESPACE_ table-space-name _____ >
        I_LOB_ I _____ DSNDB04 _____ I
        I_IN_ I_ database-name_ I_ I
< _____ > _____ I _____

```





partition-by-range-specification:

```
< _____
> _____ |>
| _____ |
|_NUMPARTS_ integer _____ |
| _____ | | _MEMBER CLUSTER_ |
| _____ | |
| (_PARTITION_ integer _using-block_ |_) |
| _____ |
| _____ |
| _____ |
| _____ |
| _____ |
| _____ |
| _____ |
| _____ |
| _____ |
|_MEMBER CLUSTER_ _____ |
```

## CREATE TRIGGER (advanced)

```
_____ _VERSION V1_____
>> _CREATE_____ TRIGGER_trigger-name_ | _____ |>
|_OR REPLACE_ | | _VERSION trigger-version-id_ |
> _NO CASCADE BEFORE_____ >
|_AFTER_____ |
|_INSTEAD OF_____ |
> _INSERT_____ ON_____ table-name_____ >
|_DELETE_____ | | _view-name_ |
|_UPDATE_____ |
| _____ | | _OF_____ column-name_ | _____ |
> _____ >
| _____ | | _AS_ | |
|_REFERENCING_____ OLD_ | _____ | _____ | | _AS_ |
|_NEW_ | _____ | _____ | | _AS_ | | _OLD_
TABLE_____ | _____ | _identifier_ | | _AS_ | | _NEW TABLE_____ | _____ | _identifier_ |
> _____ FOR EACH ROW_____ MODE DB2SQL_ NOT SECURED_ triggered-action_____ ><
|_FOR EACH STATEMENT_ | | _SECURED_____ | triggered-action:
>> _____ SQL trigger body_____ >
|_WHEN_ ( _____ )_ |
```

SQL-trigger-body:

```
> _____ SQL-control-statement_____ ><
|_trigger-SQL-statement_ | option-list: > _DISALLOW DEBUG
MODE_____ APPLICATION ENCODING SCHEME ASCII_____ >
```

```

I_ALLOW DEBUG MODE___I I_APPLICATION ENCODING SCHEME EBCDIC___I
I_DISABLE DEBUG MODE_I I_APPLICATION ENCODING SCHEME UNICODE_I
>_QUALIFIER schema-name___ ASUTIME_NO LIMIT_____>
      I_ASUTIME LIMIT_int_I
>_____>
      I_WLM ENVIRONMENT FOR DEBUG MODE name___I

>_CURRENT DATA NO_____ CONCURRENT ACCESS RESOLUTION USE CURRENTLY COMMITTED_>
      I_CURRENT DATA YES_II_CONCURRENT ACCESS RESOLUTION WAIT FOR OUTCOME_____I

>_DYNAMICRULES RUN_____ WITHOUT IMMEDIATE WRITE_____>
      I_DYNAMICRULES BIND_____I I_WITH IMMEDIATE WRITE___I

>_WITHOUT EXPLAIN___ ISOLATION LEVEL CS_____ OPHINT_ ' ' _____>
      I_WITH EXPLAIN___II_ISOLATION LEVEL RS_I I_OPHINT_string-constant_I
      I_ISOLATION LEVEL RR_I
      I_ISOLATION LEVEL UR_I
      <_ , _____>_SQL PATH_schema-nameI_____ RELEASE AT
COMMIT_____>
      I_SCHEMA PATH_I I_RELEASE AT DEALLOCATE_I
      I_SESSION USER_I
      I_USER_I

>_____>
I_ROUNDING DEC_ROUND_CEILING___I I_DATE FORMAT ISO___I
I_ROUNDING DEC_ROUND_DOWN_____I I_DATE FORMAT EUR___I
I_ROUNDING DEC_ROUND_FLOOR_____I I_DATE FORMAT USA___I
I_ROUNDING DEC_ROUND_HALF_DOWN_I I_DATE FORMAT JIS___I
I_ROUNDING DEC_ROUND_HALF_EVEN_I I_DATE FORMAT LOCAL_I
I_ROUNDING DEC_ROUND_HALF_UP___I
I_ROUNDING DEC_ROUND_UP_____I

>_____ FOR UPDATE CLAUSE REQUIRED_____>
      I_DECIMAL(15)___I I_FOR UPDATE CLAUSE OPTIONAL_I
      I_DECIMAL(31)___I
      I_DECIMAL(15,s)_I
      I_DECIMAL(31,s)_I

>_____>
      I_TIME FORMAT ISO___I I_NOT SECURED_I
      I_TIME FORMAT EUR___I I_SECURED_____I
      I_TIME FORMAT USA___I
      I_TIME FORMAT JIS___I
      I_TIME FORMAT LOCAL_I

>_____>
      I_____ YES_ I I_____ YES_ I
      I_SYSTIMESENSITIVE(_I_NO_I_)I I_BUSTIMESENSITIVE(_I_NO_I_)I
>_____>

```

```
| | _YES_ | | |
|_ARCHIVESENSITIVE( |_NO_ |_) | | |_APPLCOMPAT( __V12R1__ ) |
```

```
> _____ >>
|_CONCENTRATE STATEMENTS OFF _____ |
|_CONCENTRATE STATEMENTS WITH LITERALS_ |
```

## CREATE TRIGGER(basic)

```
>> _CREATE TRIGGER_ trigger-name _____ NO CASCADE BEFORE _____ >
|_AFTER_____ |
|_INSTEAD OF_____ |
> _INSERT_____ ON_ table-name _____ >
|_DELETE_____ |
|_UPDATE_____ |
| <_ , _____ | |_OF_ column-name_ |__ |
> _____ >
| < _____ | |_AS_ | |
|_REFERENCING_____ OLD_ |__ |_correlation-name_____ | _____ | |_AS_ |
|_NEW_ |__ |_correlation-name_____ | |_AS_ | |_OLD
TABLE_____ |__ |_identifier_ | |_AS_ | |_NEW TABLE_____ |__ |_identifier_ |
> _FOR EACH ROW_____ MODE DB2SQL_ NOT SECURED_ triggered-action_ ><
|_FOR EACH STATEMENT_ | |_SECURED_____ | triggered-action:
>> _____ SQL trigger body _____ >
|_WHEN_( _search-condition_ )_ |
| < _____ > _BEGIN ATOMIC_____ triggered-
SQL-statement_ ;_ |_END_____ ><
```

## CREATE TRUSTED CONTEXT

```
>> _CREATED TRUSTED CONTEXT_ context-name _____ >
> _BASED UPON CONNECTION USING SYSTEM AUTHID_ authorization-name _____ >
|_NO DEFAULT ROLE_____ | _____ _DISABLE_
> | _____ | _____ | _____ >
| _____ _WITHOUT ROLE AS OBJECT OWNER_ | |_ENABLE_ |
|_DEFAULT ROLE_ role-name_ | _____ |_
| _____ _WITH ROLE AS OBJECT OWNER_ |
|_NO DEFAULT SECURITY LABEL_____
> | _____ | _____ >
|_DEFAULT SECURITY LABEL_ seclabel-name _____ |
| <_ , _____ |
> _ATTRIBUTES_( _____ ADDRESS_ address-value _____ | _____ >
| |_ENCRYPTION_ encryption-value_ | _____ |
| |_SERVAUTH_ servauth-value _____ | _____ |
| </_><_ , _____ | | _____ _JOBNAME_ jobname-
value_ | _____ |
```



```

__(1M)_____ |_UNICODE_| | | |_DBCLOB_|_____ | | |
|_(integer)_____ | | | |(1)_____ | | |
|_BINARY_|_____ |
| | | |_(integer)_| | | | |__BINARY VARYING
_(integer)_____ | | | | |__VARBINARY_____ | | | | |
_(1M)_____ | | | | |__BINARY LARGE
OBJECT_____ | _____ | _____ | | | | |__BLOB_____ |
|_(integer)_____ )_____ | | | | |__K_| | | | | |__M_| | | | | |__G_| | |
|_DATE_____
| | | | |__TIME_____ | | | | |__(6)_____ |__WITHOUT TIME ZONE_| |
|_TIMESTAMP_| _____ | _____ | _____ |
| | | | |_(integer)_| | | | |__WITH TIME ZONE_____ | data-type2:
> _____INTEGER_____ >
| | |__INT_| _____ | _____ |
|_VARCHAR_____ (integer) _____ |
|_CHARACTER_VARYING_| _____ |__CCSID_ASCII_____ | | |__FOR_SBCS_____ |__DATA_| | | |
| | | | |__EBCDIC_| | | | |__MIXED_|
| | | | |__UNICODE_| | | | |__BIT_|

```

## CREATE TYPE(distinct)

```

>> __CREATE TYPE_distinct-type-name_AS_source-data-type_____ >
> _____ >
|_INLINE LENGTH_integer_|

```

source-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_____| |_(length)_____| | |_CCSID__ASCII__|
|_|_FOR__SBCS__DATA_| | |
| | | |__CHARACTER__VARYING__(length)_____| |_EBCDIC_| |_MIXED_|
| | |
| | | |_CHAR_____| | | |_UNICODE_|
| | |
| | | |_VARCHAR_____|
| | |
| | |         |(1M)_____
| | |
| | | |_____CHARACTER__LARGE OBJECT_
| | | |_____
| | | | |_____
| | | | |_CHAR_____| | | |_(integer)_| | |_CCSID__ASCII__|
| | | | |_FOR__SBCS__DATA_| | | |
| | | | |_CLOB_____| | | |_EBCDIC_|
| | | | |_MIXED_| | | |
| | | | |         |(1)_____ | | | |_UNICODE_|
| | | | |
| | | | |_GRAPHIC_| | | | |_____
| | | | |_____
| | | | | |_(integer)_____| | | | |_CCSID__ASCII__|
| | | | |
| | | | |_VARGRAPHIC__(integer)_____| | | | |_EBCDIC_|
| | | | |
| | | | |         |(1M)_____ | | | |_UNICODE_|
| | | | |
| | | | |_DBCLOB_| | | | |_____
| | | | |
| | | | | |_(integer)_____|

```

```

|
|      _(1)_____
|
|_
|_BINARY_|_____ |_____
|_____ |
| |      |(integer)___ |          |
|
| |_BINARY VARYING |(integer)_____ |
|
| | |_VARBINARY_____ |          |
|
| |      |(1M)_____ |          |
|
| |_BINARY LARGE OBJECT_____ |_____ |_____ |
|
| |_BLOB_____ | |_(integer_____)___ |
|
|          |_K_|
|
|          |_M_|
|
|          |_G_|
|
|_DATE_____
|_____ |
| |_TIME_____ |
|
| |      |_(6)_____ |_WITHOUT TIME ZONE_|
|
|_TIMESTAMP_|_____ |___ |_____ |_____
|_____ |
|      |(integer)___ | |_WITH TIME ZONE_____ |
|
|_ROWID_____
|_____ |

```

## CREATE VARIABLE

```

>>__CREATE VARIABLE_variable-name_| data-type |_____ >
|_DEFAULT NULL_____
> |_____ |_____ | built-in type |_____ >
|_DEFAULT_constant_____ |_____ |_array-type-name_|
|_special register_|

```



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\_ | | (length\_) | | | \_CCSID\_ \_ASCII\_ |

| | | | \_FOR\_ \_SBCS\_ \_DATA\_ | | |

| | | | \_CHARACTER\_ \_VARYING\_ (length\_) | | | \_EBCDIC\_ | | | \_MIXED\_ |

| | |

| | | | \_CHAR\_ | | | | \_UNICODE\_ |

| | |

| | | | \_VARCHAR\_ | |

| | |

```

| |          __ (1M) _____
| |
| | ____ CHARACTER ____ LARGE OBJECT ____
| | _____ | _____ | | | | | | | |
| | | | _CHAR ____ | | | | ____ (_integer_) ____ | | _CCSID ____ ASCII ____ |
| | _FOR ____ SBCS ____ DATA ____ | |
| | | | _CLOB ____ | | | | | | _EBCDIC ____ |
| | _MIXED ____ | |
| |          __ (1) _____ | | _UNICODE ____ |
| |
| | _GRAPHIC ____ | _____ | _____
| | _____ |
| | | | ____ (_integer_) ____ | | | | _CCSID ____ ASCII ____ |
| |
| | | | _VARGRAPHIC ____ (_integer_) ____ | | | | _EBCDIC ____ |
| |
| | | |          __ (1M) _____ | | | | _UNICODE ____ |
| |
| | | | _DBCLOB ____ | _____ |
| |
| | | |          | | (_integer) ____ |
| |
| | | |          __ (1) _____
| |
| | _BINARY ____ | _____ | _____
| | _____ |
| | | |          | | (_integer) ____ | |
| |
| | | | _BINARY VARYING ____ (_integer) ____ |
| |
| | | | | | _VARBINARY ____ | |
| |
| | | |          __ (1M) _____ |
| |
| | | | _BINARY LARGE OBJECT ____ | _____ | _____ |
| |
| | | | _BLOB ____ | | | | ____ (_integer) ____ |
| |
| | | |          | | _K ____ |
| |
| | | |          | | _M ____ |
| |
| | | |          | | _G ____ |
| |
| | _DATE ____ | _____ |
| | _____ |

```

```

|_TIME_____|
|
|      __(_6_)_____  _WITHOUT TIME ZONE_
|
|_TIMESTAMP_|_____|_____|_____
|_____
|      |(integer_)_|  |_WITH TIME ZONE____|

```

## CREATE VIEW

```

>> __CREATE VIEW__ view-name_____>
|      |_____ | |_(column-name_|_)_|
> _____ AS fullselect_____>
|      |_____ | |_WITH common-table-
expression_|_|
> _____>> |
|_CASCADED_|_____ |
|_WITH_|_____ |_CHECK OPTION_|
|_LOCAL_____|

```

## DECLARE CURSOR

```

_____ NO SCROLL_____
>> __DECLARE__ cursor-name_____>
|      |_ASENSITIVE_____ | |
|_|_____ |_SCROLL_|
|      |_INSENSITIVE_____ |
|      |_____ DYNAMIC_____ |
|_SENSITIVE_|_____ |
|      |_STATIC_____|
|_____> CURSOR_____
|_____>
|      |_holdability_____ |
|      |_returnability_____ |
|      |_rowset-positioning_|
> __FOR__ select-statement_____>>
|_statement-name_| holdability: _WITHOUT HOLD_
>> |_____>>
|_WITH HOLD_____| returnability: _WITHOUT RETURN_____
>> |_____>>
|_TO CALLER_| |_WITH RETURN_|_____ | |_TO CLIENT_| rowset-
positioning: _WITHOUT ROWSET POSITIONING_
>> |_____>>

```

I\_WITH ROWSET POSITIONING \_\_\_\_ I

## DECLARE GLOBAL TEMPORARY TABLE

```
>> __DECLARE GLOBAL TEMPORARY TABLE __table-name____>
    < __ , _____ > (____ column-
spec __ I __) _____>
    I __LIKE__ table-name__ I _____ I
    I _____ I_view-name__ I _____ I_copy-options__ I
    I_as-result-table_____ I
< _____>
_____ I _____><
I __CCSID__ ASCII_____ I I I __EBCDIC__ I I I I __UNICODE__ I
I I __DELETE ROWS__ I I __ON COMMIT__ I __PRESERVE ROWS__ I _____ I I
I __DROP TABLE__ I I I I I __LOGGED_____ I
I I _____ I I I I __ON ROLLBACK DELETE ROWS__ I
I __NOT LOGGED__ I _____ I __ I I __ON ROLLBACK PRESERVE ROWS__ I
column-spec: >> __column-name__ data-
type _____>
< _____>
_____ I _____>< I __NOT
NULL_____ I I __WITH__ I
I I _____ I __DEFAULT_____ I I I __CONSTANT_____ I I I
I __SESSION_USER__ I I I I I __USER_____ I I I I I __CURRENT SQLID__ I I I
I __NULL_____ I I I I __GENERATED__ ALWAYS_____ I I
I __BY DEFAULT__ I I_as-identity-clause__ I I I __NOT
NULL_____ I data-type: >> __built-in
type _____>< I __distinct-
type-name__ I
> __SMALLINT_____
_____>< I I __INTEGER__ I I I I I __INT__ I I I I I __BIGINT__ I I I
_____ (5,0) _____ I
I __DECIMAL__ I _____ I
_____ I I I __DEC__ I I (__integer_____) _____ I I
I I __NUMERIC__ I I __integer__ I I I __ (34) __ I I __DECFLOAT__
I _____ I
_____ I I I __ (16) __ I I I I __ (53) _____ I
I __FLOAT__ I _____ I
_____ I I I I I (__integer__) I I I I I __REAL_____ I I I I
I __PRECISION__ I I I I I __DOUBLE__ I _____ I I I I I __ (1) _____ I
I _____ CHARACTER_____ I
_____ I I I I I __CHAR_____ I I (length__) _____ I I
I __FOR_SBCS__ DATA I I I I I I __CHARACTER_VARYING__ (length__) I I
I __MIXED__ I I I I I I I __CHAR_____ I I I I I __BIT__ I I I I I
I __VARCHAR_____ I I __CCSID 1208_____ I I I I I __ (1) _____ I
```



# 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_|
```

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 _____ | |_(length_) _____ | | | _CCSID_ ASCII ____ | | | | |
| _FOR_ SBCS _____ DATA_ | | |
| | | | _____ CHARACTER _____ VARYING _____ (length_) _____ | | | _EBCDIC_ | | | _MIXED_ |
| | |
| | | | | _CHAR _____ | | | | | _____ | | | _UNICODE_ |
| | |
| | | | | _VARCHAR _____ |
| | |
| | | _____ (1M) _____
| | |
| | | _____ CHARACTER _____ LARGE OBJECT _____
| | | _____ | | | | | | | | | | | |
| | | | | _CHAR _____ | | | | | _____ |_(integer_)_ | | | _CCSID_ ASCII ____ |
| | | _FOR_ SBCS _____ DATA_ | | |
| | | | | _CLOB _____ | | | | | _____ | | | _EBCDIC_ |
| | | _MIXED_ | | |
| | | _____ (1) _____ | | | _UNICODE_ |
| | |
| | | _____ GRAPHIC _____ | _____ |
| | | _____ |
| | | | | _____ |_(integer_)_ _____ | | | | | _CCSID_ ASCII ____ |
| | |
| | | | | _VARGRAPHIC _____ (integer) _____ | | | | | _EBCDIC_ |
| | |
| | | _____ (1M) _____ | | | _UNICODE_ |
| | |
| | | | | _DBCLOB _____ |
| | |
| | | | | _____ |(integer) _____ |
| | |
| | | _____ (1) _____
| | | | | | |
| | | _____ BINARY _____ | _____ |
| | | _____ |
| | | | | _____ |(integer) _____ |
| | |
| | | | | _____ BINARY VARYING _____ (integer) _____ |
| | |
| | | | | _____ VARBINARY _____ |
| | |
| | | _____ (1M) _____ |
| | |

```

```

| I_BINARY LARGE OBJECT_____|_____|_____|
|
| I_BLOB_____| I_(integer_____)_____|
|
|                                     I_K_I
|
|                                     I_M_I
|
|                                     I_G_I
|
|__DATE_____|_____|_____|_____|_____|_____|_____|_____|_____|_____|
|_____|_____|_____|_____|_____|_____|_____|_____|_____|_____|
| I_TIME_____|_____|_____|_____|_____|_____|_____|_____|_____|_____|
|
| I_____I_____I_____I_____I_____I_____I_____I_____I_____I_____I_____
|      ___(6)___          _WITHOUT TIME ZONE_
|
| I_TIMESTAMP_I_____I_____I_____I_____I_____I_____I_____I_____I_____I_____I_____
|_____I_____I_____I_____I_____I_____I_____I_____I_____I_____I_____I_____
|      I_(integer)_I    I_WITH TIME ZONE_____|
|
| I_ROWID_____I_____I_____I_____I_____I_____I_____I_____I_____I_____I_____
|_____I_____I_____I_____I_____I_____I_____I_____I_____I_____I_____I_____

```

## DECLARE VARIABLE

```

                                __CCSID EBCDIC__
>> DECLARE __host-variable| VARIABLE_I_____I_____I_____I_____I_____I_____I_____I_____I_____I_____I_____><
||__CCSID ASCII__| I_FOR SCBS DATA__||
                                ||__CCSID UNICODE_I| I_FOR MIXED DATA__||
                                |_____I_____I_____I_____I_____I_____I_____I_____I_____I_____I_____I_____||
                                I__CCSID__integer_____I_____I_____I_____I_____I_____I_____I_____I_____I_____I_____I_____

```

## DELETE

sarched delete:

```

>> __DELETE FROM__table-name_____I_____I_____I_____I_____I_____I_____I_____I_____I_____I_____I_____>
      I_view-name__I I_period-clause_I I_correlation-clause_I
>_____I_____I_____I_____I_____I_____I_____I_____I_____I_____I_____I_____>
      I_include-column_I          I_SET assignment-clause_I
>_____I_____I_____I_____I_____I_____I_____I_____I_____I_____I_____I_____>
      I_WHERE__search-condition_I I_isolation-clause_I
                                I_SKIP LOCKED DATA_I
>_____I_____I_____I_____I_____I_____I_____I_____I_____I_____I_____I_____><
I_QUERYNO__integer_I positioned delete: >>__DELETE FROM__table-

```



```

name__WHERE CURRENT OF__cursor-name_____>< |_view-name_|
>
|_FOR ROW__host-variable_____OF ROWSET_| |_integer-constant_| period-
clause: >>_FOR PORTION OF BUSINESS_TIME_FROM_value1 TO
value2_____>< |_BETWEEN value1 AND value2_| 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)_____ | |
|_FOR__BIT__DATA_| |
| | | |__CHARACTER__VARYING__(integer)___|
|
| | | | _CHAR_____ | |
|
| | | |__VARCHAR_____ |
|
| | | |_____(1)_____ |
|
|__GRAPHIC_| _____ |
|_____ |
| | | | |_(integer)___| |
|
| | | |__VARGRAPHIC__(integer)_____ |
|
| | | |_____(1)_____ |
|
|__BINARY_| _____ |
|_____ |
| | | | |_(integer)___| |
|
| | | |__BINARY VARYING__(integer)_____ |
|
| | | |__VARBINARY_____ | |
|
|__DATE_____ |
|_____ |
|__TIME_____ |
| | | |_____(6)_____ |__WITHOUT TIME ZONE_| | | | |
|__TIMESTAMP_| _____ | _____ | _____ | _____ |
| | | | |_(integer)___| | |__WITH TIME ZONE___| |

```

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 OUTPUT

```
          _OUTPUT_  
>> __DESCRIBE_ |_____ |_statement-name__ INTO__ descriptor-name_____ >  
> _____ >  
< |          _NAMES__ |  
  |_USING__ |_LABELS_|_ |  
    |_ANY_____|  
    |_BOTH_____|
```

## DESCRIBE PROCEDURE

```
>> __DESCRIBE PROCEDURE__ procedure-name__ INTO__ descriptor-  
name_____ >< |_host-variable_|
```

## DESCRIBE TABLE

```
>> __DESCRIBE TABLE__ host-variable_____ INTO__ descriptor-name_____ >  
> _____ >  
< |          _NAMES__ |  
  |_USING__ |_LABELS_|_ |  
    |_ANY_____|  
    |_BOTH_____|
```

## DROP

```
>> __DROP_____ ALIAS__ alias-name_ |_____ |_____ ><  
| |_PUBLIC_|          |_FOR SEQUENCE_|          |  
  |_DATABASE__ database-name_____ |  
  |_TYPE_____ distinct-type-name__ RESTRICT_____ |
```



```

|          __(53)_____
|
|  ___FLOAT___|_____|_____
|_____|
| |          |__(integer__)|
|
|  |__REAL_____|
|
| |          |__PRECISION_|
|
|  |__DOUBLE___|_____||
|
|          |(1)_____
|
|  _____CHARACTER_____|_____|_____
|_____|
| | | |__CHAR_____| |__(integer__)_____| | |__CCSID__ASCII___|
|__FOR__SBCS____DATA_| |
| | |__CHARACTER__VARYING__(integer__)__| |__EBCDIC___|
|__MIXED_| | |
| | | |__CHAR_____| | | |__UNICODE_|
| |
| | |__VARCHAR_____|
| |
| |          |(1M)_____
| |
| |__CHARACTER__LARGE OBJECT_
|_____|| | | | | | | |
| | | |__CHAR_____| |__(integer__)_| | |__CCSID__ASCII___|
|__FOR__SBCS____DATA_| |
| | |__CLOB_____| |__EBCDIC___|
|__MIXED_| |
| |          |(1)_____ |__UNICODE_|
|
|  ___GRAPHIC___|_____|_____
|_____|
| |          |__(integer__)_____| | |__CCSID__ASCII___|
|
| |__VARGRAPHIC__(integer__)_____| |__EBCDIC___|
|
| |          |(1M)_____ |__UNICODE___|
|
|  |__DBCLOB___|_____|
|
|          |(integer)_____|
|
|          |(1)_____

```



# EXCHANGE

```
>> __EXECUTE DATA BETWEEN TABLE table-name1_AND_table-name2_____><
```

# EXECUTE

```
>> __EXECUTE__statement-name_____>
> _____><
|      <_,_____ |
|      |__USING__variable_____ | |
|      |_____ |
|      |__USING__DESCRIPTOR__descriptor-name__ | |
|      |__source-row-data_____ |
```

source-row-data:

```
      <_,_____ >>__ __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_____ | | | |__PACKAGE__package-
specification_____ | Package-specification: >> __COLLECTION-
collection-name_____>
> __PACKAGE__package-name_____><
|__VERSION__version-name| |__COPY__copy-id_|
```

# FETCH

FROM

>> FETCH \_\_\_\_\_ fetch-orientation \_\_\_\_\_>

| INSENSITIVE | | WITH CONTINUE |  
| 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 target-variable | \_\_\_\_\_ | | array-  
variable | | INTO DESCRIPTOR descriptor-name | \_\_\_\_\_ | target-variable:  
> global-variable-  
name \_\_\_\_\_>  
| host-variable-name \_\_\_\_\_ |  
| SQL-parameter-name \_\_\_\_\_ |  
| SQL-variable-name \_\_\_\_\_ |  
| transition-variable-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_|  
|_host-variable1_ = _DB2_SQL_NESTING_LEVEL_|
```

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_____>
      <_ , _____> __TO__ authorization-
name_____ | _____>>
|_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_____ |
|_WITH GRANT OPTION_|
      |_ROLE_role-name_____ |
```

# GRANT (function or procedure privileges)

```
>> __GRANT__ EXECUTE__ ON _____ >
      <_, _____
> __FUNCTION__ function-name _____ | _____ >
| |
| | _____ |_(_____)_| | |
| | _____ |_parameter-type_| | |
| | _____ |_* _____ | |
| | _____ <_, _____ |
| | __SPECIFIC FUNCTION__ specific-name_| _____ |
| | _____ <_, _____ |
| | __PROCEDURE__ procedure-name_| _____ |
| | _____ |_* _____ |
| | _____ >__TO__ authorization-
name_| _____ >< |_PUBLIC_____ |
| | __WITH GRANT OPTION_| |__ROLE__ role-name_____| parameter-type: >>__data-
type_____ >< |_AS
LOCATOR_____| data-type: >>__built-in-data-
type_____ >< |_distinct-type-
name_| |_array-type-name_____| built-in-data-type:
> __SMALLINT_____
_____ >< | |__INTEGER__|
|
| |__INT__| |
|
| |__BIGINT__|
|
| _____ (5,0) _____
|
| __DECIMAL__ | _____ |
| _____ |
| |__DEC__| |_(__integer_____)_|
|
| |__NUMERIC__| _____ |_, integer_|
|
| _____ (34) _____
|
| __DECFLOAT__
| _____ |
| _____ |
| _____ |_(16)_|
|
| _____ (53) _____
|
| __FLOAT__ | _____ |
```





```

id_____|_____>
          |_*_____|
          </_><_ , _____ >__TO_____authorization-
name_____|_____>> I_PUBLIC_____|
I_WITHGRANT OPTION_I
          I_ROLE_role-name_____|

```

## GRANT (plan privileges)

```

>>__GRANT_____<_ , _____ <_ , _____
name_____|_____>> BIND_____|__ON PLAN_____plan-
          |_____>
          I_EXECUTE_I
          </_><_ , _____ >__TO_____authorization-
name_____|_____>> I_PUBLIC_____|
I_WITH GRANT OPTION_I
          I_ROLE_role-name_____|

```

## GRANT (schema privileges)

```

>>__GRANT_____<_ , _____ <_ , _____
name_____|_____>> ALTERIN_____|__ON SCHEMA_____schema-name_|_____>
          |_____>
          I_CREATEIN_I
          I_DROPIN_____|
          </_><_ , _____ >__TO_____authorization-
name_____|_____>> I_PUBLIC_____|
I_WITH GRANT OPTION_I
          I_ROLE_role-name_____|

```

## GRANT (sequence privileges)

```

>>__GRANT_____<_ , _____ <_ , _____
name_____|_____>> ALTER_____|__ON SEQUENCE_____sequence-name_|_____>
          |_____>
          I_USAGE_____|
          |_*_____|
          </_><_ , _____ >__TO_____authorization-
name_____|_____>> I_PUBLIC_____|
I_WITH GRANT OPTION_I
          I_ROLE_role-name_____|

```

## GRANT (system privileges)

```
>> __GRANT_____ACCESSCTRL_____I_____>
|_ARCHIVE_____|
|_BINDADD_____|
|_BINDAGENT_____|
|_BSDS_____|
|_CREATEALIAS_____|
|_CREATEDBA_____|
|_CREATEDBC_____|
|_CREATESG_____|
|_CREATETMTAB_____|
|_CREATE_SECURE_OBJECT_____|
|_DATAACCESS_____|
|_____WITH ACCESSCTRL_____WITH DATAACCESS_____|
|_DBADM_I_____||_____I_|
|_____I_WITHOUT ACCESSCTRL__I_WITHOUT DATAACCESS__I_|
|_DEBUGSESSION_____|
|_DISPLAY_____|
|_EXPLAIN_____|
|_MONITOR1_____|
|_MONITOR2_____|
|_RECOVER_____|
|_SQLADM_____|
|_STOPALL_____|
|_STOSPACE_____|
|_SYSADM_____|
|_SYSCTRL_____|
|_SYSOPR_____|
|_TRACE_____|
>_____>
|_ON SYSTEM_|
|_<_,_____>__TO_____authorization-
name_|_____>>|_PUBLIC_____|
|_WITH GRANT OPTION_|
|_ROLE_role-name_____|
```

## GRANT (table or view privileges)

```
>> __GRANT_____ALL___|_____|_____
>
|_<_,_____|
|_____ALTER_____I_|
|_DELETE_____I_|
```



```

|_INDEX_____|
|_INSERT_____|
|_SELECT_____|
|_REFERENCES_____|
|          | <_,_____ | |
|          | |_(___column-name_|_)_| |
|_TRIGGER_____|
|_UPDATE_____|
|          | <_,_____ |
|          | |_(___column-name_|_)_|

```

```

      _TABLE_   <_,_____ >_ON_|_____|_____table-
name_|_____>
          |_____|
          |_view-name_|
      </_><_ , _____ >_TO_____authorization-
name_|_____><
|_PUBLIC_____| |_WITH GRANT OPTION_|
|_ROLE_role-name_____|

```

## GRANT (type or JAR privileges)

```

          <_ , _____ >>_GRANT_USAGE ON_TYPE_type-
name_|_____>
          | </_><_ , _____ |
          |_JAR_jar-name_|_____|
      <_, _____ >_TO_____authorization-
name_|_____>< |_PUBLIC_____|
|_ROLE_role-name_____|

```

## GRANT (variable privileges)

```

          _PRIVILEGES_
>>_GRANT ALL_|_____|_ON_VARIABLE_variable-name_____>
          | <_ , _____ |
          |_READ_|_____|
          |_WRITE_|
      <_, _____ >_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

```
LOCATOR _____ <_ , _____ >> __HOLD
_____ >>> _____ >>>
```

## INCLUDE

```
>> __INCLUDE __SQLCA _____ >>>
  |_SQLDA _____ |
      |_member-name_|_ |
```

## INSERT

```
>> __INSERT INTO _____ table-name _____ >
      |_view-name_|_ | <_ , _____ | |_(____column-
name_|_)_|_ |
> _____ >
  |_include-column_|_ |_OVERRIDING USER VALUE_|_ |
> __VALUES _____ expression _____ >>>
  | _____ | |_DEFAULT _____ | _____ | | |
  | _____ | |_NULL _____ | _____ |
  | _____ | <_ , _____ | _____ |
  | _____ | |_(____expression_|_)_|_ | _____ |
  | _____ | |_DEFAULT _____ | _____ |
  | _____ | |_NULL _____ | _____ |
  | _____ | <_ , _____ | _____ |
  |_WITH common-table-expression_|_ _____ |
  |_fullselect _____ | _____ |
```

```

|          |_WITH__RR_| |_QUERYNO__integer_| |
|          |_RS_| |
|          |_CS_| |
|_multi-row-insert_____|

```

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__)_____ | |
|__FOR__ BIT _____ DATA_| | | | |__CHARACTER__ VARYING__(integer__)_| | | | | |
|__CHAR_____ | | | | | |__VARCHAR_____ | | | |__(1)_____ |
|__GRAPHIC_| _____|
_____ | | | |__(__integer__)_____ | | | |
|__VARGRAPHIC__(__integer__)_____ | | | |__(1)_____ | | |
|__BINARY_| _____|
_____ | | | |__(integer)_____ | | | | |__BINARY VARYING
__(integer)_____ | | | | |__VARBINARY_____ | | | |
|__DATE_____
_____ | |__TIME_____ | |
_____( 6 )_____ _WITHOUT TIME ZONE_|
|__TIMESTAMP_| _____| _____| | |__(integer__)| |__WITH
TIME ZONE_____ | 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

```
>> __ LABEL ON __ TABLE __ table-name _____ IS string-
constant _____ >< | | | _____ | _____ |
| | ALIAS __ alias-name _____ | |
| | COLUMN __ table-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__| | _____ |
|_correlation-clause_|
> _____ >
|_include-columns_|
> __ USING __ table-reference __ ON __ search-condition _____ >
|_source-values_|
< _____ ELSE IGNORE _____
> __ WHEN __ matching-condition __ THEN __ modification-operation __ | _____ | _____ >
> _____ ><
|_NOT ATOMIC CONTINUE ON SQL EXCEPTION_| |_QUERYNO__integer_|
```

include-column:

```
< _____ > __ INCLUDE __ ( __ column-name __ data-
type __ | ) _____ >< correlation-clause:
```







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 CONTINUE ON
SQLEXCEPTION_ | | | | __SKIP LOCKED DATA_____ | | | | __USE
CURRENTLY COMMITTED_ | | | | __WAIT FOR OUTCOME_____ | | | | __WITHOUT EXTENDED
INDICATORS_____ | | | | __WITH EXTENDED INDICATORS__ | | | | __CONCENTRATE
STATEMENTS OFF_____ | | | | __CONCENTRATE STATEMENTS WITH LITERALS__ | |
holdability:
>> _____ >
    | __WITHOUT HOLD_ |
    | __WITH HOLD____ |
```

returnability:

```
>> __ WITHOUT RETURN
_____ >< | __TO CALLER_ |
| __WITH RETURN_ | _____ | | | __TO CLIENT_ | rowset-positioning:
>> _____ >
< | | __WITHOUT ROWSET POSITIONING_ | | __WITH ROWSET POSITIONING__ | concurrent-
access-resolution: >> __SKIP LOCKED
DATA _____ >< | __USE CURRENTLY
COMMITTED__ |
    | __WAIT FOR OUTCOME_____ |
```

## REFRESH TABLE

```
>> __REFRESH_TABLE table-
name _____ >< | __QUERYNO integer_ |
```

## RELEASE

```
>> __RELEASE__ location-
name _____ >< | __host-variable_ |
    | __CURRENT_____ |
    | _____SQL_____ |
    | __ALL_ | _____ | _____ |
```



## RELEASE SAVEPOINT

```
>> __RELEASE__ |__TO__ |__SAVEPOINT__ svpt-  
name_____><
```

## RELEASE (connection)

```
>> __RELEASE__ |location-name_|  
_____>< |host-variable_|  
|_CURRENT_|  
|_SQL_|  
|_ALL_|_|_|
```

## RENAME

```
>> __RENAME__ |__TABLE__ |__source-table-name__ TO__ new-table-identifier____><  
|_INDEX__ source-table-name__ TO__ new-index-identifier__|
```

## REVOKE

```
>> __REVOKE__ authorization-specfication_____>  
|_PUBLIC_|  
|_ROLE-role-name_|  
>____><  
|_BY__ authorization-name_|_|  
|_ALL_|_|>__ INCLUDING DEPENDENT  
PRIVILEGES_____>< |_NOT INCLUDING  
DEPENDENT PRIVILEGES_| |_RESPECT_|
```

## REVOKE (collection privileges)

```
>> __REVOKE__ CREATE_____ IN_____ COLLECTION_____ collection-  
id_|_|>  
|_PACKADM_| |_ON_| |_*_|  
</_>< _____>__ FROM_____ authorization-  
name_|_|>  
|_PUBLIC_|  
|_ROLE-role-name_|
```





```

|
| | | | _DOUBLE_ | _____ | |
|
| | | | | _____ |
| | | | | (1) _____
|
| | | | | CHARACTER _____ | _____ | _____
| | | | | | | | | | | | |
| | | | | | _CHAR _____ | | (_integer_) _____ | | | | _CCSID_ ASCII _____ |
| | | | | | _FOR_ SBCS _____ DATA _____ | |
| | | | | | | CHARACTER _____ VARYING _____ (_integer_) _____ | | | | _EBCDIC_ _____ |
| | | | | | | MIXED _____ | |
| | | | | | | _CHAR _____ | | | | | _UNICODE_ _____ |
| | | | | |
| | | | | | | _VARCHAR _____ |
| | | | | |
| | | | | | | _____ (1M) _____
| | | | | |
| | | | | | | CHARACTER _____ LARGE OBJECT _____
| | | | | | | _____ | | | | | | | | | | | |
| | | | | | | | | _CHAR _____ | | | | | (_integer_) _____ | | | | _CCSID_ ASCII _____ |
| | | | | | | | | _FOR_ SBCS _____ DATA _____ | |
| | | | | | | | | CLOB _____ | | | | | _EBCDIC_ _____ |
| | | | | | | | | MIXED _____ |
| | | | | | | | | _____ (1) _____ | | | | | _UNICODE_ _____ |
| | | | | |
| | | | | | | | | _GRAPHIC_ _____ | _____ | _____
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | (_integer_) _____ | | | | | _CCSID_ ASCII _____ |
| | | | | | | | |
| | | | | | | | | | | _VARGRAPHIC_ _____ (_integer_) _____ | | | | | _EBCDIC_ _____ |
| | | | | | | | |
| | | | | | | | | | | _____ (1M) _____ | | | | | _UNICODE_ _____ |
| | | | | | | | |
| | | | | | | | | | | _DBCLOB_ _____ |
| | | | | | | | |
| | | | | | | | | | | (_integer) _____ |
| | | | | | | | |
| | | | | | | | | | | _____ (1) _____
| | | | | |
| | | | | | | | | | | _BINARY_ _____ | _____ | _____
| | | | | | | | | | | | |
| | | | | | | | | | | (_integer) _____ | |
| | | | | | | | |
| | | | | | | | | | | _BINARY VARYING _____ (_integer) _____ |
| | | | | | | | |
| | | | | | | | | | | _VARBINARY _____ | |

```



```

>
| </_><_ , _____ | | BY _____ authorization-name | ___ |
| ALL _____ | | ROLE-role-name _____ | > __ INCLUDING DEPENDENT
PRIVILEGES _____ >> | NOT INCLUDING DEPENDENT
PRIVILEGES ___ |

```

## REVOKE (plan privileges)

```

>> __ REVOKE _____ BIND _____ | ON PLAN _____ plan-name_ | _____ >
| EXECUTE_ |
| _____ > FROM _____ authorization-
name_ | _____ >
| PUBLIC _____ |
| ROLE-role-name _____ |
>
| </_><_ , _____ | | BY _____ authorization-name | ___ |
| ALL _____ | | ROLE-role-name _____ | > __ INCLUDING
DEPENDENT PRIVILEGES _____ >
| NOT INCLUDING DEPENDENT PRIVILEGES ___ |

```

</\_>

## REVOKE (schema privileges)

```

>> __ REVOKE _____ ALTERIN _____ | ON SCHEMA _____ schema-name_ | _____ >
| CREATEIN_ | _____ |_* _____ |
| DROPIN _____ |
| _____ > FROM _____ authorization-
name_ | _____ >
| PUBLIC _____ |
| ROLE-role-name _____ |
>
| </_><_ , _____ | | BY _____ authorization-name | ___ |
| ALL _____ | | ROLE-role-name _____ | > __ INCLUDING DEPENDENT
PRIVILEGES _____ >> | NOT INCLUDING
DEPENDENT PRIVILEGES ___ |

```

## REVOKE (sequence privileges)

```
>> __REVOKE__ <_ , _____>
      ALTER _____ |__ ON__ SEQUENCE _____ schema-name_ | _____>
      | USAGE _____ |
      </_><_ , _____> > FROM _____ authorization-
name_ | _____>
      | PUBLIC _____ |
      | ROLE-role-name _____ | _____ RESTRICT_
> _____ | _____ | _____>
      | </_><_ , _____ | | BY _____ authorization-name_ | _____ |
| ALL _____ | | ROLE_role-name _____ | > INCLUDING DEPENDENT
PRIVILEGES _____>< | NOT INCLUDING
DEPENDENT PRIVILEGES_ |
```

## REVOKE (system privileges)

```
>> __REVOKE__ <_ , _____>
      ACCESSCTRL _____ | _____ FROM authorization-name_ | _____>
      | ARCHIVE _____ | _____ | PUBLIC _____ |
      | BINDADD _____ | _____ | ROLE_role-name _____ |
      | BINDAGENT _____ |
      | BSDS _____ |
      | CREATEALIAS _____ |
      | CREATEDBA _____ |
      | CREATEDBC _____ |
      | CREATSG _____ |
      | CREATETMTAB _____ |
      | CREATE_SECURE_OBJECT_ |
      | DATAACCESS _____ |
      | DBADAM _____ |
      | DEBUGSESSION _____ |
      | DISPLAY _____ |
      | EXPLAIN _____ |
      | MONITOR1 _____ |
      | MONITOR2 _____ |
      | RECOVER _____ |
      | SQLADM _____ |
      | STOPALL _____ |
      | STOSPACE _____ |
      | SYSADM _____ |
      | SYSCTRL _____ |
      | SYSOPR _____ |
      | TRACE _____ |
> _____>
```

```

| </_><_ , _____ | | _BY_____ authorization-name_ | _____ |
| _ALL_____ | | _ROLE_role-name_____ | > _____ INCLUDING
DEPENDENT PRIVILEGES_____ >
| _NOT INCLUDING DEPENDENT PRIVILEGES_ |

```

```
</_>
```

## 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_____ | > _____ INCLUDING
DEPENDENT PRIVILEGES_____ >< | _NOT INCLUDING
DEPENDENT PRIVILEGES_ |

```

## REVOKE (type or JAR privileges)

```

_____ <_ , _____
>> _REVOKE_ USAGE ON _____ TYPE_____ type-name_ | _____ >
| _____ </_><_ , _____ |
| _JAR_____ jar-name_ | _____ |
| _____ > _FROM_____ authorization-
name_ | _____ >
| _PUBLIC_____ |
| _ROLE_role-name_____ |
>
_____ RESTRICT_____ >
| _____ </_><_ , _____ | | _BY_____ authorization-name_ | _____ |
| _ALL_____ | > _____ INCLUDING DEPENDENT
PRIVILEGES_____ >< | _NOT INCLUDING DEPENDENT
PRIVILEGES_ |

```





## SAVEPOINT

```
>> __SAVEPOINT__ svpt-name _____ >
                                     |_UNIQUE_| _ON ROLLBACK RETAIN LOCKS_
> __ON ROLLBACK RETAIN
CURSORS _____ | _____ | _____ ><
```

## SELECT INTO

```
> _____ >
| _____ |
|_WITH__ common-table-expression__|_|
                                     <_, _____ > __select-clause__ INTO__ target-
variable_|_from-clause_____ >
                                     |_where-clause_|
> _____ >
|_group-by-clause_| |_having-clause_| |_order-by-clause_|
<_, _____
> _____ | _____ >
|_SKIP_LOCKED_DATA_| |_QUERYNO__integer_|
|_WITH__ RR _____|
|_RS_|
|_CS_|
|_UR_|
> _____ >< |
|_1_| |_FETCH FIRST_|_|_|_ROW__ __ONLY_| |_ROWS_| target-variable:
> __global-variable-name _____ ><
|_host-variable-name_____|
|_SQL-parameter-name_____|
|_SQL-variable-name_____|
|_transition-variable-name_|
```

## SET CONNECTION

```
>> __SET CONNECTION__ location-name _____ ><
|_host-variable_____|
```

## SET assignment statement

```
>> __SET__ assignment-clause _____ ><
assignment-clause:
|_array-variable-name__ (_array-index_) - _____ expression _____ |
| _____ |_NULL_____| |
| <_, _____ |
|_target-variable_____ expression _____ |__|
| _____ |_NULL_____| |
```

```

|                                     |_DEFAULT_|
| <_,_____ | <_,_____ |
|_( _target-variable_|)_( _____expression_____ )_|
| |__NULL_____ |
| |_DEFAULT_____ |
|_row subselect_____ |
|_VALUES_____expression_____ |
| |__NULL_____ |
| |_DEFAULT_____ |
| <_,_____ |
|_( _____expression_____ )_| |__NULL_____ | |_DEFAULT_____ | target-
variable: >__global-variable-
name_____ >< |_host-variable-
name_____ |
|_SQL-parameter-name_____ |
|_SQL-variable-name_____ |
|_transition-variable-name_|

```

## SET CURRENT APPLICATION COMPATIBILITY

```

>>__SET CURRENT_APPLICATION COMPATIBILITY_____ |_____|__string-constant_____ ><
|_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 ROUNDING 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 EXPLAIN MODE

```
>> __SET CURRENT EXPLAIN MODE =            NO            ><
|_YES            |
|_EXPLAIN            |
|_host-variable            |
```

## SET CURRENT GET\_ACCEL\_ARCHIVE

```
>> __SET CURRENT_GET_ACCEL_ARCHIVE =            |            |            NO            ><
|_YES            |
|_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

```

      _TABLE_          _FOR OPTIMIZATION_  _=_
>> __SET CURRENT MAINTAINED_ | _____ | _TYPES_ | _____ | _|_ | _____ >
> __ALL_____ >>>
| _NONE_____ |
| _SYSTEM_____ |
| _SESSION USER_ |
| | _USER_____ | |
| _host-variable_ |

```

## SET CURRENT OPTIMIZATION HINT

```

>> __SET CURRENT OPTIMIZATION HINT = _____ string-constant _____ >>>
| _host-variable_ |

```

## SET CURRENT PACKAGE PATH

```

      _=_ <_ , _____ >> __SET
CURRENT PACKAGE PATH_ | _____ | _____ collection-id _____ | _____ >>>
| _SESSION_USER_____ |
| | _USER_____ | |
| _CURRENT PACKAGE PATH_ |
| _CURRENT PATH_____ |
| _host-variable_____ |
| _string-constant_____ |

```

## SET CURRENT PACKAGESET

```

>> __SET CURRENT PACKAGESET = _____ SESSION USER _____ >>>
| | _USED_____ | |
| _string-constant_ |
| _host-variable_ |

```

## SET CURRENT PRECISION

```

>> __SET CURRENT PRECISION = _____ string-constant _____ >>>
| _host-variable_ |

```

## SET CURRENT QUERY ACCELERATION

```
>> __SET CURRENT QUERY ACCELERATION |__|_ NONE _____><
|_ENABLE_____|
|_ENABLE WITH FAILBACK_|
|_ELIGIBLE_____|
|_ALL_____|
|_host-variable_____|
```

## SET CURRENT REFRESH AGE

```
>> __SET CURRENT REFRESH AGE |__|_ numeric-constant_ _____><
|_ANY_____|
|_host-variable_____|
```

## SET CURRENT RULES

```
>> __SET CURRENT RULES = _____string-constant_____><
|_host-variable_____|
```

## SET CURRENT ROUTINE VERSION

```
>> __SET CURRENT ROUTINE VERSION |__|_ routine-version-id _____><
|_string-constant_____|
|_host-variable_____|
```

## SET CURRENT SQLID

```
>> __SET CURRENT SQLID = _____SESSION USER_____><
|_USER_____| |
|_string-constant_|
|_host-variable_____|
```

## SET CURRENT TEMPORAL BUSINESS TIME

```
>> __SET CURRENT TEMPORAL BUSINESS TIME |__|_ NULL _____><
|_expression_____|
```

## SET CURRENT TEMPORAL SYSTEM\_TIME

```
>> SET CURRENT TEMPORAL SYSTEM_TIME [=] NULL ><
|_expression_|
```

## SET ENCRYPTION PASSWORD

```
>> SET ENCRYPTION PASSWORD [=] password-host-variable >
|_password-string-const_|
> >< |
|
|_WITH HINT_| |_hint-host-variable_|
|_hint-string-const_|
```

## SET PATH

```
>> SET [=] CURRENT_PATH [=] schema-name >
|_ , _|
|_SYSTEM PATH_|
|_SESSION USER_|
|_USER_|
|_CURRENT_|
|_ |_PATH_|
|_CURRENT PACKAGE PATH_|
|_host-variable_|
|_string-constant_|
```

</\_>

## SET SCHEMA

```
>> SET [=] CURRENT_SCHEMA [=] schema-name >
|_CURRENT_SCHEMA_| |_SESSION USER_|
|_USER_|
|_host-variable_|
|_string-constant_|
|_DEFAULT_|
```

## SET SESSION TIME ZONE

```
>> __SET_SESSION TIME ZONE__ |__=__ |__string-constant__>
|__host-variable__|
```

## SIGNAL SQLSTATE

```
>> __SIGNAL__SQLSTATE_|__VALUE_|__sqlstate-string-constant__>
|__variable-name__| |
|__condition-name__|
> (__diagnostic-string-constant__)><
```

## TRANSFER OWNERSHIP

```
>> __TRANSFER OWNERSHIP OF object_TO_new_owner__REVOKE PRIVILEGES__>
```

object:

```
> __DATABASE__database-name__><
|__INDEX__index-name__| |__STOGROUP__stogroup-
name__| |__TABLE__table-name__|
|__TABLESPACE__tablespace-name_| |__database-name_| | |__VIEW
view-name__| new-owner: >__ROLE__role-
name__>< |__USER
authorization-name__|
|__SESSION_USER__|
```

## TRUNCATE

```
>> __TRUNCATE_|__TABLE__|__table-name__|__DROP STORAGE__|__>
|__REUSE 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| period-clause:
>> __FOR PORTION OF BUSINESS TIME__ FROM_value1_TO_value2_____><
  |_BETWEEN value1 AND value2__|

```

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)_____
|

```



assignment-clause:

```
<_, _____
>> _____column-name=___expression_____ | _____>< |
|_DEFAULT_____ | | |
| | _____ | |
| | _____ | |
|_(<_, _____<_, _____) |
|_(<_, _____) = ___(_____expression___ | _____) | |
| | _____ | |
| | _____ | |
|_row-fullselect_____ |
|_UNPACK function invoc. ___ |
```

## VALUES

```
>> ___VALUES___expression_____><
| <_, _____ |
| _____ |_(<_, _____) |
```

## VALUES INTO

```
>> ___VALUES___CURRENT PACKAGESET_____INTO___target-variable_____><
| |_CURRENT PACKAGE PATH_ | | |
| |_CURRENT SERVER_____ | |
| | _____ | _____ |
|_(<_, _____<_, _____) | _____ | |_NULL_____ |
|_array-variable_(array-index_) | target-variable: >___global-variable-
name_____>< |_host-variable-
name_____ |
|_SQL-parameter-name_____ |
|_SQL-variable-name_____ |
|_transition-variable-name_ |
```

## WHENEVER

```
>> ___WHENEVER___NOT FOUND_____CONTINUE_____><
|_SQLERROR___ | |_GOTO_____host-label_ |
|_SQLWARNING_ | |_GO TO_ |
```

</\_>

</\_></\_\_\_\_\_>

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