

SQL CONTROL STATEMENTS IN DB2 12



SQL CONTROL STATEMENT

```
>> __ assignment-statement _____ ><
|_CALL statement_____|
|_CASE statement_____|
|_compound-statement__|
|_FOR statement_____|
|_GET DIAGNOSTICS stmt_|
|_GOTO statement_____|
|_IF statement_____  |
|_ITERATE statement____|
|_LEAVE statement_____|
|_LOOP statement_____|
|_REPEAT statement_____|
|_RESIGNAL statement___|
|_RETURN statement_____|
|_SIGNAL statement_____|
|_WHILE statement_____|
```

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

Assignment

```
>> _____ SET _____ assignment-clause _____ >>
|_label:| assignment-clause: > _____ SQL-parameter-name__ =_ CURRENT
SERVER _____ >< | | SQL-variable-name__ | | CURRENT
PACKAGESET _____ |
| | _____ | CURRENT PACKAGE PATH__ | | |
| | <_, _____ | |
| _____ SQL-parameter-name__ =_ expression__ | _____ |
| | SQL-variable-name__ | | NULL _____ | |
| | <_, _____ | <_, _____ | |
| | ( _____ SQL-parameter-name__ | ) =_ ( _____ expression__ | _____ |
| | SQL-variable-name__ | | NULL _____ | |
| | VALUES _____ expression _____ |
| | NULL _____ | |
| | <_, _____ | |
| | ( _____ expression__ | ) |
| | NULL _____ |
```

CALL

```
>> __CALL__ procedure-name _____ >
> _____ >>
|_ ( _____ )_|
| | <_, _____ | |
| | _____ SQL-variable-name _____ | |
| | SQL-parameter-name _____ |
| | expression _____ |
| | NULL _____ |
```

CASE

```
> __CASE__ _____ searched-case-statement-when-clause _____ >
| | _____ simple-case-statement-when-clause__ |
> _____ END CASE _____ >
| | < _____ | |
| | ELSE _____ SQL-procedure-statement__ ;_ | |
```

searched-case-statement-when-clause:

```
< _____
| | _____ |
> __WHEN__ search-condition__ THEN _____ SQL-procedure-statement__ ;_ | | _____ >
```

simple-case-statement-when-clause:

```
> _expression _____ >
< _____
< _____ | > ___ WHEN ___ expression ___ THEN ___ SQL-procedure-
statement ___; | | _____ >

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

Compound

```
>> _____ NOT ATOMIC_
_____ BEGIN ___ | _____ | _____ >
|_label:_|
> _____ >
| < _____ | | _____ SQL-variable-
declaration _____; | | |_condition-declaration _____| |_return-codes-
declaration_|
> _____ >
| < _____ |
| _____ DECLARE-CURSOR-statement ___; | | |
| _____
> _____ SQL-procedure-statement ___; | _____ >
| < _____ | | _____ handler-declaration ___; | | |
> END _____ ><
|_label_| SQL-variable-declaration:
>> DECLARE _____ >
<_, _____ DEFAULT NULL _____ >_SQL-variable-name_|_data-
type_| _____ >< | | DEFAULT ___ constant_| |
|_RESULT_SET_LOCATOR VARYING _____|_condition-declaration:
>> DECLARE ___ condition-name ___ CONDITION ___ FOR ___ string-constant _____ ><
|_SQLSTATE _____| |_VALUE_|_return-codes-declaration: _DEFAULT
'00000' _____ >> DECLARE ___
SQLSTATE ___ CHAR(5) | _____ | _____ >< |
|_DEFAULT ___ constant _____| | |_DEFAULT 0 _____ |
|_SQLCODE ___ INTEGER_| _____ | | |_DEFAULT ___ constant
statement-declaration: >> DECLARE ___ statement-
name ___ STATEMENT _____ >< handler-declaration:
>> DECLARE ___ CONTINUE ___ HANDLER ___ FOR _____ >
|_EXIT _____|
> ___ specific-condition-value _____ SQL-procedure-statement _____ ><
|_general-condition-value_|
```

specific-condition-value:

```
<_, _____ VALUE_|
>> ___ SQLSTATE_| _____ |_string_| _____ ><
|_condition-name _____|_general-condition-value:
```

```
>> __SQLEXCEPTION_____><
|_SQLWARNING_|
  |_NOT FOUND_|
```

FOR

```
>> _____FOR_____>
|_label:_| |_for-loop-name_AS_| |_____|
|_____| |_____| |_____|
|_csr-name_CURSOR_| |_____| |_FOR_|
|_____| |_WITH HOLD_|
|_____| <_____> |_select-statement_| |_DO_| |_SQL-
procedure-statement_| ; |_END FOR_____>< |_label:_|
```

GET DIAGNOSTICS

```
>> __GET DIAGNOSTICS __SQL-variable-name__ = __ROW_COUNT_____><
```

GOTO

```
>> _____GOTO__target-label_____><
|_label:_|
```

IF

```
|_____>> __IF__ search-
condition__ THEN _____SQL-procedure-statement__ ; |_____>
<_____>
|_____>
|_____<_____> |
|_ELSEIF__ search-condition__ THEN _____SQL-procedure-statement__ ; |_ |
> _____END IF_____><
| _____<_____> |
|_ELSE_____SQL-procedure-statement__ ; |_ |
```

ITERATE

```
>> _____ITERATE__target-label_____><
|_label:_|
```

LEAVE

```
>> _____ LEAVE _____ target-label _____ ><
|_label: _|
```

LOOP

```
< _____ >> _____ LOOP _____ SQL-procedure-
statement__ ; _|_ END LOOP _____ >< |_label: _|
|_label _|
```

REPEAT

```
< _____ >> _____ REPEAT _____ SQL-procedure-
statement__ ; _|_ _____ >
|_label: _|
> _|_ UNTIL_ search-condition _|_ END REPEAT _____ ><
|_label _|
```

RESIGNAL

```
>> _____ RESIGNAL _____ >
|_label: _|
> _____ >
| _____ VALUE _____ |
|_SQLSTATE_ _| _____ |_sqlstate-string-constant _____ | | |
| _____ |_SQL-variable-name _____ | | |_signal-information_ |
| _____ |_SQL-parameter-name _____ | |
|_SQL-condition-name _____ |
```

signal-information:

```
>> _|_ SET MESSAGE TEXT _|= _|_ diagnostic-string-expression _____ >
```

RETURN

```
>> _____ RETURN _____ >
|_label: _| |_expression _____ |
|_NULL _____ |
| _____ fullselect_ |
| < _____ |
|_WITH_ common-table-expression _|_ |
```

SIGNAL

```
>> _____ SIGNAL _____ >
|_label:_|
> _____ >
| _____ |
|_SQLSTATE_| _____ |__sqlstate-string-constant_____ | |
| _____ |__SQL-variable-name_____ ||__signal-information_|
| _____ |__SQL-parameter-name_____ ||
|_SQL-condition-name_____ |
```

signal-information:

```
>> __SET MESSAGE TEXT __=__diagnostic-string-expression_____ >
```

WHILE

```
>> _____ WHILE_search-condition_DO_SQL-procedure-statement_;_END WHILE_____ >
|_label:_| _____ |__label_|
```

SQL Procedure statement

```
>> __SQL-control-statement_____ >>
```

```
ALLOCATE CURSOR statement
ALTER DATABASE statement
ALTER FUNCTION statement (external scalar, external table,
sourced,
SQL scalar, or SQL table)
ALTER INDEX statement
ALTER PROEDURE statement (external, SQL-external,or SQL-
native)
ALTER SEQUENCE statement
ALTER STOGROUP statement
ALTER TABLE statement
ALTER TABLESPACE statement
ALTER TRUSTED CONTEXT statement
ALTER VIEW statement
ASSOCIATE LOCATORS statement
CALL statement
CLOSE statement
COMMENT statement
COMMIT statement
CONNECT statement
CREATE ALIAS statement
CREATE DATABASE statement
CREATE FUCNTION statement (external scalar, external table,
```

sourced)

CREATE GLOBAL TEMPORARY TABLE statement
CREATE INDEX statement
CREATE PROCEDURE statement (external)
CREATE ROLE statement
CREATE SEQUENCE statement
CREATE STOGROUP statement
CREATE TABLE statement
CREATE TABLESPACE statement
CREATE TRUSTED CONTEXT statement
CREATE TYPE statement
CREATE VIEW statement
DECLARE CURSOR statement
DECLARE GLOBAL TEMPORARY TABLE statement
DELETE statement
DROP statement
EXCHANGE statement
EXECUTE statement
EXECUTE IMMEDIATE statement
FETCH statement
GET DIAGNOSTICS statement
GRANT statement
INSERT statement
LABEL statement
LOCK TABLE statement
MERGE statement
OPEN statement
PREPARE statement
REFRESH TABLE statement
RELEASE statement
RELEASE SAVEPOINT statement
RENAME statement
REVOKE statement
ROLLBACK statement
SAVEPOINT statement
SELECT INTO statement
SET CONNECTION statement
SET special-register statement
TRUNCATE statement
UPDATE statement
VALUES INTO statement

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