

# 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: _____
```



# 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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