

# 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

```
>> _____ 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: _____
```

```
>> __SQL EXCEPTION _____>>
|_SQLWARNING__|
|_NOT FOUND__|
```

## FOR

```
>> _____FOR_____>
|_label:_| |_for-loop-name_AS_| |_____| |_WITHOUT HOLD_| |
|_____| |_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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