

## Retrieving data

**SELECT \* FROM t;**

A simple query to retrieve all rows and columns from *t*

**SELECT c1, c2 FROM t;**

Query data in columns *c1*, *c2* from a table

**SELECT c1, c2 FROM t ORDER BY c1;**

Query data ordering them by *c1*

**SELECT \* FROM t ORDER BY c1 ASC;**

**SELECT \* FROM t ORDER BY c1 DESC;**

Sort the result set in ascending or descending order

**SELECT c1, c2 FROM t LIMIT number OFFSET offset;**

Query *the number* of rows skipping *the offset* of rows

**SELECT c1, c2 FROM t**

**WHERE c1 BETWEEN low AND high;**

Query rows where value in *c1* is between two values

**SELECT c1, c2 FROM t1 WHERE c1 [!] LIKE pattern;**

Query rows using simple pattern matching % and \_ that is processed quickly

**SELECT c1, c2 FROM t WHERE c1 [!] IN v1, v2;**

Query rows where the value of *c1* is [not] in the list of *v1* and *v2*

**SELECT c1, c2 FROM t WHERE c1 IS [!] NULL;**

Check if values in *c1* is NULL or not

## Retrieving data from multiple tables

**SELECT c1, c2 FROM t1 UNION [ALL]**

**SELECT c1, c2 FROM t2;**

Combine rows from two queries

**SELECT c1, c2 FROM t1 INTERSECT**

**SELECT c1, c2 FROM t2;**

Return the intersection of two queries

**SELECT c1, c2 FROM t1 EXCEPT**

**SELECT c1, c2 FROM t2;**

Subtract a result set from another result set

**SELECT c1, c2 FROM t1 INNER JOIN t2**

**ON t1.c1=t2.c3;**

Inner join *t1* and *t2*

If *t1.c1!=t2.c3* the row will not be in the result

**SELECT c1, c2 FROM t1 LEFT JOIN t2**

**ON t1.c1=t2.c3;**

Left join *t1* and *t1*

**SELECT c1, c2 FROM t1 LEFT JOIN t2**

**ON t1.c1=t2.c3;**

Right join *t1* and *t2*

## Deleting data

**DELETE FROM t WHERE c1=v1;**

Delete subset of rows in the table *t*

**TRUNCATE TABLE t CASCADE;**

**DELETE FROM t;**

Remove all data in the table *t*

## Modifying data

**INSERT INTO t(c1, c2) VALUES(v1, v2);**

Insert one row into a table

**INSERT INTO t(c1, c2) VALUES**

**(v1, v2), (v1, v2), (v1, v2), (v1, v2), (v1, v2);**

Insert multiple rows into a table (5 in the example above)

**UPDATE t SET c1=v1, c2=v2 WHERE c3=v3;**

Update values in the columns *c1*, *c2* that match the condition

**INSERT INTO t(c1, c2) SELECT c3, c4 FROM t2;**

Insert rows from columns *c3* and *c4* from *t2*

into columns *c1* and *c2* in *t1* respectively

## Notes

**t, t1, t2 ... tn** – table names

**c, c1, c2 ... cn** – column names

**v, v1, v2 ... vn** – values of different type

**value** – another values

**[!]** – optional negative condition

**[ALL]** – optional all condition

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