SELECT column, another\_column, …

FROM mytable

**WHERE *condition***

**AND/OR *another\_condition***

**AND/OR …**;

|  |  |  |
| --- | --- | --- |
| **Operator** | **Condition** | **SQL Example** |
| =, !=, < <=, >, >= | Standard numerical operators | col\_name **!=** 4 |
| BETWEEN … AND … | Number is within range of two values (inclusive) | col\_name **BETWEEN** 1.5 **AND** 10.5 |
| NOT BETWEEN … AND … | Number is not within range of two values (inclusive) | col\_name **NOT BETWEEN** 1 **AND** 10 |
| IN (…) | Number exists in a list | col\_name **IN** (2, 4, 6) |
| NOT IN (…) | Number does not exist in a list | col\_name **NOT IN** (1, 3, 5) |

|  |  |  |
| --- | --- | --- |
| **Operator** | **Condition** | **Example** |
| = | Case sensitive exact string comparison (**notice the single equals**) | col\_name **=** "abc" |
| != or <> | Case sensitive exact string inequality comparison | col\_name **!=** "abcd" |
| LIKE | Case insensitive exact string comparison | col\_name **LIKE** "ABC" |
| NOT LIKE | Case insensitive exact string inequality comparison | col\_name **NOT LIKE** "ABCD" |
| % | Used anywhere in a string to match a sequence of zero or more characters (only with LIKE or NOT LIKE) | col\_name **LIKE** "%AT%" (matches "AT", "ATTIC", "CAT" or even "BATS") |
| \_ | Used anywhere in a string to match a single character (only with LIKE or NOT LIKE) | col\_name **LIKE** "AN\_" (matches "AND", but not "AN") |
| IN (…) | String exists in a list | col\_name **IN** ("A", "B", "C") |
| NOT IN (…) | String does not exist in a list | col\_name **NOT IN** ("D", "E", "F") |

SELECT column, another\_column, …

FROM mytable

WHERE *condition(s)*

**ORDER BY column ASC/DESC**;

SELECT column, another\_column, …

FROM mytable

WHERE *condition(s)*

ORDER BY column ASC/DESC

**LIMIT num\_limit OFFSET num\_offset**;

SELECT column, another\_table\_column, …

FROM mytable

**INNER JOIN another\_table**

**ON mytable.id = another\_table.id**

WHERE *condition(s)*

ORDER BY column, … ASC/DESC

LIMIT num\_limit OFFSET num\_offset;

SELECT column, another\_column, …

FROM mytable

**INNER/LEFT/RIGHT/FULL JOIN another\_table**

**ON mytable.id = another\_table.matching\_id**

WHERE *condition(s)*

ORDER BY column, … ASC/DESC

LIMIT num\_limit OFFSET num\_offset;

SELECT **particle\_speed / 2.0** AS half\_particle\_speed

FROM physics\_data

WHERE **ABS(particle\_position) \* 10.0 > 500**;

SELECT column **AS better\_column\_name**, …

FROM a\_long\_widgets\_table\_name **AS mywidgets**

INNER JOIN widget\_sales

ON mywidgets.id = widget\_sales.widget\_id;

**SELECT AGG\_FUNC(*column\_or\_expression*) AS aggregate\_description**, …

FROM mytable

WHERE *constraint\_expression*;

|  |  |
| --- | --- |
| **Function** | Description |
| **COUNT(**\***)**, **COUNT(***column***)** | A common function used to counts the number of rows in the group if no column name is specified. Otherwise, count the number of rows in the group with non-NULL values in the specified column. |
| **MIN(***column***)** | Finds the smallest numerical value in the specified column for all rows in the group. |
| **MAX(***column***)** | Finds the largest numerical value in the specified column for all rows in the group. |
| **AVG(***column*) | Finds the average numerical value in the specified column for all rows in the group. |
| **SUM(***column***)** | Finds the sum of all numerical values in the specified column for the rows in the group. |

SELECT DISTINCT column, AGG\_FUNC(*column\_or\_expression*), …

FROM mytable

JOIN another\_table

ON mytable.column = another\_table.column

WHERE *constraint\_expression*

GROUP BY column

HAVING *constraint\_expression*

ORDER BY *column* ASC/DESC

LIMIT *count* OFFSET *COUNT*;

SELECT Director, SUM(Boxoffice.Domestic\_sales+Boxoffice.International\_sales)

AS Total\_Sales

INNER JOIN Boxoffice

ON Movies.Id=Boxoffice.Movie\_id

GROUP BY Director;