Types of SQL operators

Arithmetic

Arithmetic

Performs math operation on numerical data, we can find addition, subtraction, multiplication, division and modulus.

Comparison

Comparison

Compares two different data returning a boolean value (TRUE or FALSE), checking if equal, greater or lesser.

Logical

Logical

Creates conditional expressions that returns a boolean value (TRUE or FALSE). We can find ALL, AND, ANY, BETWEEN, EXISTS, IN, LIKE, NOT, OR, IS NULL.

Set

Set

Combines similar type of data from tables mixing the result of queries and returning a single result.

Its operators are UNION, UNION ALL, MINUS, INTERSECT.



UNION

The UNION operator combines the result of two or more tables in a single result.

The number of columns and their data types must be the same and in the same order for each SELECT statement. It doesn't show duplicated rows.

SELECT COLUMN1, ..., COLUMNN FROM TABLE1
UNION
SELECT COLUMN1, ..., COLUMNN FROM TABLE2;



UNION EXAMPLE

SELECT birth_country FROM employee

UNION

SELECT description FROM countries;

It will uniquely extract the country descriptions



UNION ALL

The UNION ALL operator acts like the UNION operator with the only difference that shows duplicated rows.

SELECT COLUMN1, ..., COLUMNN FROM TABLE1
UNION ALL
SELECT COLUMN1, ..., COLUMNN FROM TABLE2;



UNION ALL EXAMPLE

SELECT birth_country FROM employee UNION ALL SELECT description FROM countries;

It will extract the country descriptions providing duplicates



MINUS



The MINUS (or EXCEPT) operator combines the result of two SELECT statements, simply subtracting the second statement from the first one showing unique records.

SELECT COLUMN1, ..., COLUMNN FROM TABLE1

MINUS

SELECT COLUMN1, ..., COLUMNN FROM TABLE2;



MINUS EXAMPLE

SELECT birth_country FROM employee MINUS

SELECT description FROM countries;

It will extract the employees' country descriptions that aren't present in the countries table



INTERSECT

The INTERSECT operator combines the result of two SELECT statements in a single result matching the common records. The number of columns and their data types must be the same and in the same order for each SELECT statement. It doesn't show duplicated rows.

SELECT COLUMN1, ..., COLUMNN FROM TABLE1
INTERSECT
SELECT COLUMN1, ..., COLUMNN FROM TABLE2;



INTERSECT EXAMPLE

SELECT birth_country FROM employee INTERSECT
SELECT description FROM countries;

It will extract the employees' country descriptions that are present in the countries table



Let's connect

If you want to learn more about the topic, connect or send me a DM.



