**JOINS IN SQL**

**TYPES OF JOINS:-**

1. INNER JOIN.
2. LEFT OUTER JOIN.
3. RIGHT OUTER JOIN.
4. FULL OUTER JOIN.

**1.INNER JOIN:**

* The inner join fetches records that have matching values in both tables.

SYNTAX:

SELECT <COLUMN\_LIST>

FROM <TABLE\_NAME 1> AS T1, <TABLE\_NAME 1> AS T2

WHERE T1.COLUMN\_NAME = T2.COLUMN\_NAME

1. **LEFT OUTER JOIN:**

* Common column in both table + Remaining column in left table
* The result is null for rows on right table,when there is no match.

SYNTAX:

SELECT <COLUMN\_LIST>

FROM <TABLE\_NAME 1> AS T1, <TABLE\_NAME 1> AS T2

WHERE T1.COLUMN\_NAME = T2.COLUMN\_NAME(+)

1. **RIGHT OUTER JOIN**:

* Common column in both table + Remaining column in right table.
* The result is null for rows on left table,when there is no match.

SYNTAX:

SELECT <COLUMN\_LIST>

FROM <TABLE\_NAME 1> AS T1, <TABLE\_NAME 1> AS T2

WHERE T1.COLUMN\_NAME(+) = T2.COLUMN\_NAME

1. **FULL OUTER JOIN**:

Fetches all columns from both table.(Left join + right join).

SYNTAX:

SELECT <COLUMN\_LIST>

FROM <TABLE\_NAME 1> AS T1

FULL JOIN <TABLE\_NAME 1> AS T2

ON T1.COLUMN\_NAME = T2.COLUMN\_NAME

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**SET OPERATORS**

**TYPES:**

1. UNION
2. UNION ALL
3. INTERSECT
4. EXCEPT

**RULES:**

* No of columns should same within both selected statements.
* Order of the columns should be same.
* Data types of the column must be match.

1. **UNION:**

To combained the result of two or more than two select statements as a single unit of values without duplicate values.

SYNTAX:

SELECT <COLUMN\_LIST> FROM <TABLE\_NAME 1>

UNION

SELECT <COLUMN\_LIST> FROM <TABLE\_NAME 2>

1. **UNION ALL:**

To combained the result of two or more than two select statements as a single unit of values with duplicate values.

SYNTAX:

SELECT <COLUMN\_LIST> FROM <TABLE\_NAME 1>

UNION ALL

SELECT <COLUMN\_LIST> FROM <TABLE\_NAME 2>

1. **INTERSECT:**

To return common values from the tables.

SYNTAX:

SELECT <COLUMN\_LIST> FROM <TABLE\_NAME 1>

INTERSECT

SELECT <COLUMN\_LIST> FROM <TABLE\_NAME 2>

1. **EXCEPT:**

To return all values from the left hand side which are not found in the right hand side table.

SYNTAX:

SELECT <COLUMN\_LIST> FROM <TABLE\_NAME 1>

EXCEPT

SELECT <COLUMN\_LIST> FROM <TABLE\_NAME 2>

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