# Sql Joins:

Join is used in sql when we want to retrieve data from multiple tables.

## Different Types of SQL joins:

### 1.Inner Join/Equi Join:

It will retrieve the matching records from both the tables.Here the operators used between two fields are ‘=’.

Example (SELECT field1,field2,field3

FROM table\_1

INNER JOIN table\_2

ON table\_1.keyField=table\_2.keyField)

### 2.Non Equi Join:

In non equi join the two fields of the different tables are being compared by logical operators(>,<,<=,>=,<>) etc.

Example (select field1,field2,field3

from table\_1, table\_2

where table\_1.col<>table\_2.col;)

### 3.Left outer Join:

Matching records from both the table and unmatched records from the left table will be retrieved in the left join.

Example (SELECT field1,field2,field3

FROM table\_1

Left JOIN table\_2

ON table\_1.keyField=table\_2.keyField;)

### 4.Right outer Join:

Matching records from both the table and unmatched records from the right table will be retrieved in the right join.

Example (SELECT field1,field2,field3

FROM table\_1

Right JOIN table\_2

ON table\_1.keyField=table\_2.keyField;)

### 5.Full outer Join:

Matching records from both the table and unmatched records from both the tables will be retrieved in the full outer join.

Example (SELECT field1,field2,field3

FROM table\_1

FULL OUTER JOIN table\_2

ON table\_1.keyField=table\_2.keyField;)

### 6.Cross Join:

It will return the cartesian products of records of the tables.It will return the product of the rows of the tables.

Self join is one type of inner join where join is applicable on the same table.

Student

| st\_id | st\_name | examid | marks |  |
| --- | --- | --- | --- | --- |
| 101 | sayanik | ug102 | 75 |  |
| 102 | soham | ug103 | 65 |  |
| 103 | avik | ug104 | 78 |  |
| 104 | shubham | ug102 | 85 |  |

Exam

| examid | Full marks |
| --- | --- |
| ug102 | 100 |
| ug103 | 100 |

No of o/p

INNER JOIN: 3

LEFT JOIN : 4

RIGHT JOIN: 3

FULL OUTER JOIN:4

CROSS JOIN:8