

**CLAUSES**

# SQL CLAUSES

## **SQL BETWEEN Clause**

```
SELECT column1, column2....columnN FROM table_EID WHERE column_EID BETWEEN  
val-1 AND val-2;
```

## **SQL IN Clause**

```
SELECT column1, column2....columnN  
FROM table_EID  
WHERE column_EID IN (Val1, Val2... Valn);
```

## **SQL Like Clause**

```
SELECT column1, column2....columnN FROM table_EID WHERE column_EID LIKE {  
PATTERN}
```

## **SQL COUNT Clause**

```
SELECT COUNT(column_EID) FROM table_EID WHERE CONDITION;
```

## **SQL DISTINCT Clause**

```
SELECT DISTINCT (column) FROM table_EID;
```

# SQL CLAUSES

## **SQL ORDER BY Clause**

```
SELECT column1, column2....columnN  
FROM table_EID  
WHERE CONDITION  
ORDER BY column_EID {ASC|DESC};
```

## **SQL GROUP BY Clause**

```
SELECT SUM(column_EID)  
FROM table_EID  
WHERE CONDITION  
GROUP BY column_EID;
```

## **SQL HAVING Clause**

```
SELECT SUM(column_EID)  
FROM table_EID  
WHERE CONDITION GROUP BY column_EID  
HAVING (arithmetic function condition);
```

**ASSIGNMENT**



## ASSIGNMENT – 4

In the EMP table display :

**CITY WISE COUNT OF EMPLOYEES ARRANGED IN DESCENDING ORDER**

**DETAILS OF THE EMPLOYEES WHO DOES NOT HAVE AN ACCOUNT ON YAHOO DOMAIN**

From the Emp\_Sal table display:

**DESIGNATION WISE TOTAL COST AND NUMBER OF MEMBERS ARRANGED IN DESCENDING ORDER OF THE TOTAL COST**

**JOINS**

# SQL Joins

The SQL Joins clause is used to combine records from two or more tables in a database. A JOIN is a means for combining fields from two tables by using values common to each.

## **SQL Join Types:**

- INNER JOIN: returns rows when there is a match in both tables.
- LEFT JOIN: returns all rows from the left table, even if there are no matches in the right table.
- RIGHT JOIN: returns all rows from the right table, even if there are no matches in the left table.
- FULL JOIN: returns rows when there is a match in one of the tables.
- CARTESIAN JOIN: returns the cartesian product of the sets of records from the two or more joined tables.
- SELF JOIN: is used to join a table to itself, as if the table were two tables, temporarily renaming at least one table in the SQL statement.

# INNER JOIN

The most frequently used and important of the joins is the INNER JOIN. They are also referred to as an EQUIJOIN..

```
SELECT table1.column1, table2.column2...  
FROM table1  
INNER JOIN table2  
ON table1.common_field = table2.common_field;
```

# LEFT JOIN

The SQL Left Join returns all the values from the left table, plus matched values from the right table or NULL in case of no matching.

```
SELECT table1.column1, table2.column2...  
FROM table1  
LEFT JOIN table2  
ON table1.common_field = table2.common_field;
```



# RIGHT JOIN

The SQL Right Join returns all the values from the right table, plus matched values from the left table or NULL in case of no matching.

```
SELECT table1.column1, table2.column2...  
FROM table1  
RIGHT JOIN table2  
ON table1.common_field = table2.common_field;
```

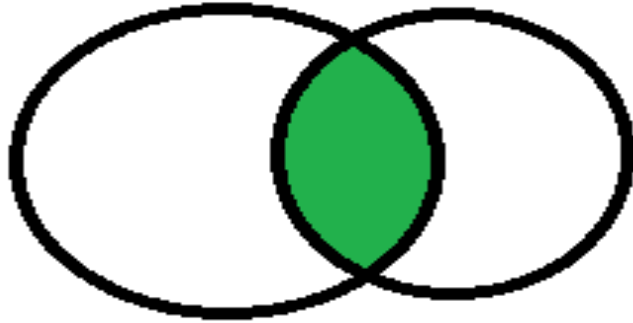
# FULL JOIN

The SQL FULL JOIN combines the results of both left and right outer joins.

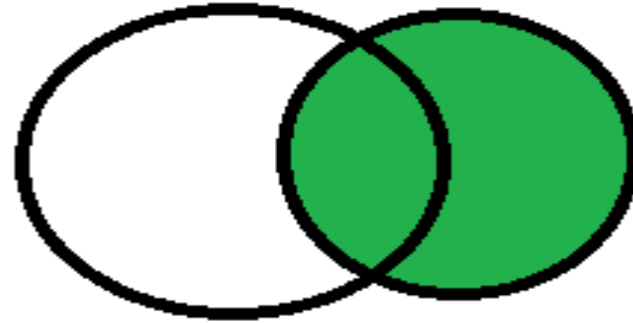
```
SELECT table1.column1, table2.column2...  
FROM table1  
FULL JOIN table2  
ON table1.common_field = table2.common_field;
```

# JOINS

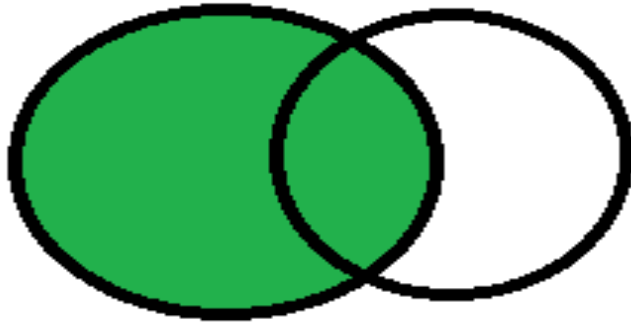
Inner Join



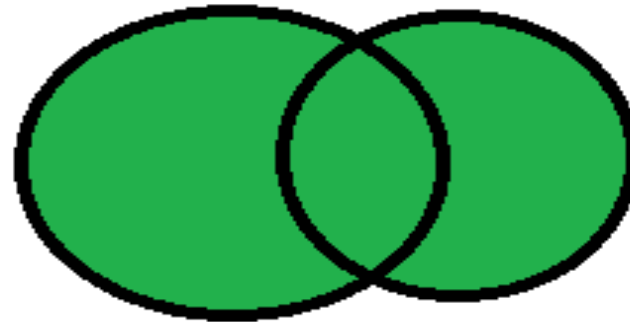
Right Join



Left Join



Full Join



# CARTESIAN JOIN

- The CARTESIAN JOIN or CROSS JOIN returns the cartesian product of the sets of records from the two or more joined tables.
- It produces a result set which is the number of rows in the first table multiplied by the number of rows in the second table if no WHERE clause is used along with CROSS JOIN.
- If WHERE clause is used with CROSS JOIN, it functions like an INNER JOIN.

```
SELECT table1.column1, table2.column2...  
FROM table1  
CROSS JOIN table2
```

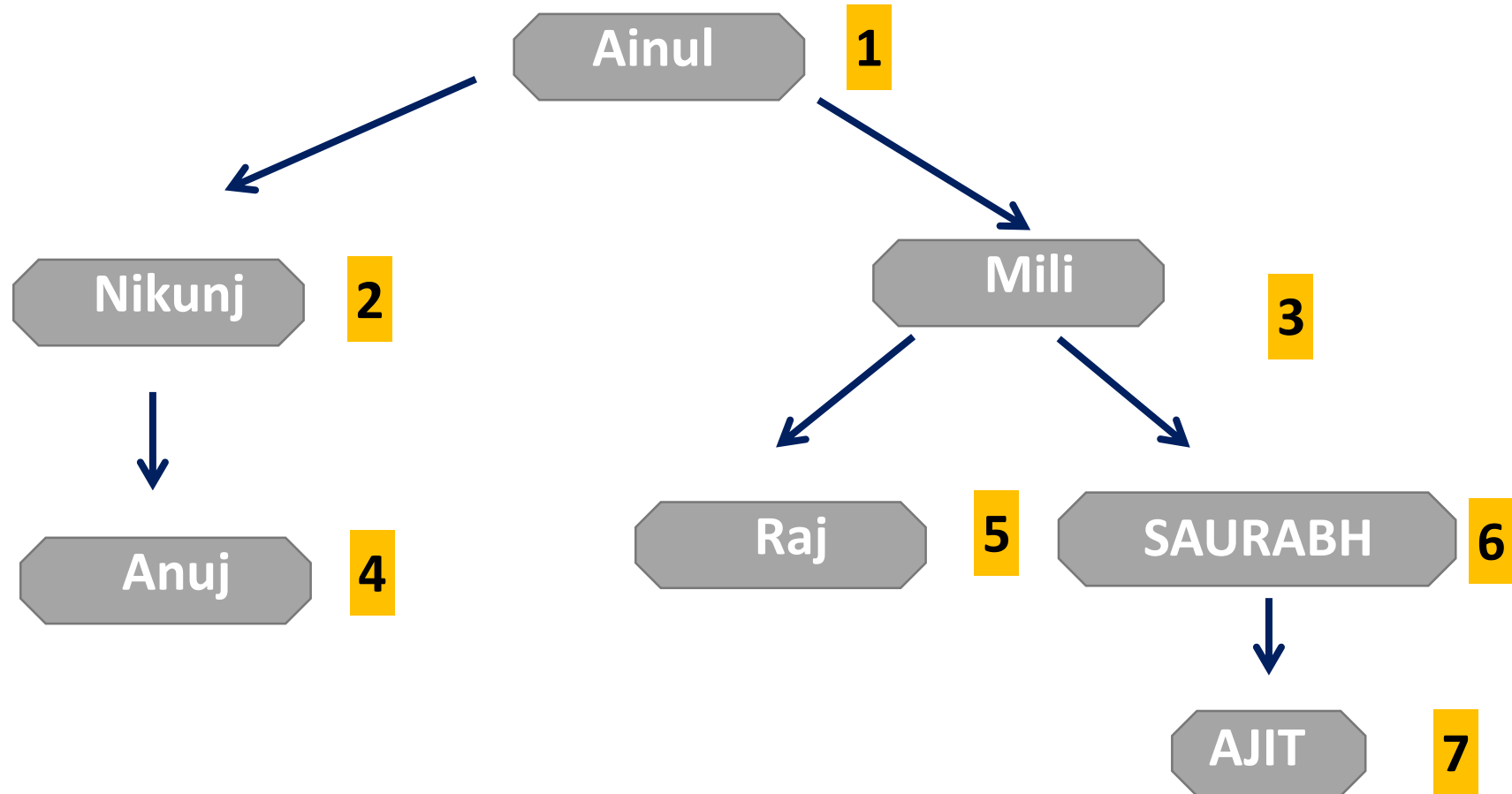
```
SELECT table1.column1, table2.column2...  
FROM table1  
CROSS JOIN table2  
WHERE table1.common_field = table2.common_field;
```

# SELF JOIN

The SQL SELF JOIN is used to join a table to itself, as if the table were two tables, temporarily renaming at least one table in the SQL statement.

```
SELECT a.column_EID, b.column_EID...  
FROM table1 a, table1 b  
WHERE a.common_field = b.common_field;
```

# SELF JOIN



# ASSIGNMENT



## ASSIGNMENT – 5

IN THE EMP TABLE DISPLAY :

- 1 ) EID NAME CITY DOJ DEPT DESI SALARY OF THE DELHI EMPLOYEES
- 2 ) DETAILS OF ALL THE EMPLOYEES WHOSE SALARY DETAILS ARE NOT AVAILABLE.

IN THE INVENTORY STRUCTURE DISPLAY :

- 1) PID, PDESC, CATEGORY, SNAME, SCITY
- 2 ) DISPLAY OID , ODATE , CNAME, CADDRESS, CPHONE, PDESC, PRICE,OQTY, AMT