## UNION CLAUSE

The SQL UNION clause/operator is used to combine the results of two or more SELECT statements without returning any duplicate rows.

To use UNION, each SELECT must have the same number of columns selected, the same number of column expressions, the same data type, and have them in the same order but they do not have to be the same length.

```
SELECT column1 [, column2 ]
FROM table1 [, table2 ]
[WHERE condition]
```

UNION

```
SELECT column1 [, column2 ]
FROM table1 [, table2 ]
[WHERE condition]
```

## UNION ALL CLAUSE

The SQL UNION ALL clause/operator is used to combine the results of two SELECT statements *including* duplicate rows.

The same rules that apply to UNION apply to the UNION ALL operator.

```
SELECT column1 [, column2 ]
FROM table1 [, table2 ]
[WHERE condition]
```

**UNION ALL** 

SELECT column1 [, column2 ]
FROM table1 [, table2 ]
[WHERE condition]

## INTERSECT CLAUSE

The SQL INTERSECT clause/operator is used to combine two SELECT statements, but returns rows only from the first SELECT statement that are identical to a row in the second SELECT statement. This means INTERSECT returns only common rows returned by the two SELECT statements.

The same rules that apply to UNION apply to the INTERSECT operator.

```
SELECT column1 [, column2 ]
FROM table1 [, table2 ]
[WHERE condition]
```

**INTERSECT** 

SELECT column1 [, column2 ]
FROM table1 [, table2 ]
[WHERE condition]

# EXCEPT CLAUSE

The SQL EXCEPT clause/operator is used to combine two SELECT statements and returns rows from the first SELECT statement that are not returned by the second SELECT statement. This means EXCEPT returns only rows which are not available in second SELECT statement.

The same rules that apply to UNION apply to the EXCEPT operator.

```
SELECT column1 [, column2 ]
FROM table1 [, table2 ]
[WHERE condition]
```

**EXCEPT** 

SELECT column1 [, column2 ]
FROM table1 [, table2 ]
[WHERE condition]





#### **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

# INDEXES

## Indexes

Indexes are special lookup tables that the database search engine can use to speed up data retrieval.

An index helps speed up SELECT queries and WHERE clauses, but it slows down data input, with UPDATE and INSERT statements. Indexes can be created or dropped with no effect on the data.

#### The CREATE INDEX Command:

CREATE INDEX index\_EID ON table\_EID (column\_EID);

#### **Composite Indexes:**

CREATE INDEX index EID on table EID (column1, column2);

**Implicit Indexes:** Implicit indexes are indexes that are automatically created by the database server when an object is created. Indexes are automatically created for primary key constraints and unique constraints.

#### **DROP INDEX Command:**

DROP INDEX index\_EID ON table\_EID;

# SQL VIEWS

### **VIEWS**

A view is nothing more than a SQL statement that is stored in the database with an associated ID.

A view can contain all rows of a table or select rows from a table. A view can be created from one or many tables which depends on the written SQL query to create a view.

Views which are kind of virtual tables, allow users to do the following:

- Structure data in a way that users or classes of users find natural or intuitive.
- ■Restrict access to the data such that a user can see and (sometimes) modify exactly what they need and no more.
- ■Summarize data from various tables which can be used to generate reports.

### **VIEWS**

```
CREATE VIEW view_EID AS
(SELECT column1, column2.....
FROM table_EID
WHERE [condition]
);
```

#### The WITH CHECK OPTION:

The WITH CHECK OPTION is a CREATE VIEW statement option. The purpose of the WITH CHECK OPTION is to ensure that all UPDATE and INSERTs satisfy the condition(s) in the view definition.

```
CREATE VIEW view_EID AS

SELECT column1, column2.....

FROM table_EID

WHERE [condition]

WITH CHECK OPTION
;
```