**MYSQL**

Name: Diksha Mahajan

Batch No: 2022-7669

Enrollment no: EBEON0722627366

Guided By: Ms. A. Mohana priya

**Select:**

mysql> select \* from employee\_data;

+---------+-------+---------+---------+--------+------------+

| empname | empid | city | dept\_id | salary | hire\_date |

+---------+-------+---------+---------+--------+------------+

| John | 101 | Pune | 10 | 6000 | 1997-09-12 |

| Amit | 102 | Mumbai | 50 | 4000 | 1999-10-25 |

| Reena | 103 | Chennai | 30 | 8000 | 2000-10-19 |

| Albert | 104 | Mumbai | 30 | 10000 | 2015-06-05 |

| Seeta | 105 | Pune | 40 | 15000 | 2015-06-05 |

+---------+-------+---------+---------+--------+------------+

5 rows in set (0.03 sec)

**Rename**:

mysql> rename table employee\_data to employee;

Query OK, 0 rows affected (0.99 sec)

mysql> select \* from employee;

+---------+-------+---------+---------+--------+------------+

| empname | empid | city | dept\_id | salary | hire\_date |

+---------+-------+---------+---------+--------+------------+

| John | 101 | Pune | 10 | 6000 | 1997-09-12 |

| Amit | 102 | Mumbai | 50 | 4000 | 1999-10-25 |

| Reena | 103 | Chennai | 30 | 8000 | 2000-10-19 |

| Albert | 104 | Mumbai | 30 | 10000 | 2015-06-05 |

| Seeta | 105 | Pune | 40 | 15000 | 2015-06-05 |

+---------+-------+---------+---------+--------+------------+

5 rows in set (0.01 sec)

**Distinct:**

mysql> select distinct dept\_id from employee;

+---------+

| dept\_id |

+---------+

| 10 |

| 50 |

| 30 |

| 40 |

+---------+

4 rows in set (0.01 sec)

mysql> select distinct city from employee;

+---------+

| city |

+---------+

| Pune |

| Mumbai |

| Chennai |

+----------+

3 rows in set (0.00 sec)

**And , Or Operators**

mysql> select \* from employee where empname = "seeta" and dept\_id = 40;

+---------+-------+------+---------+--------+------------+

| empname | empid | city | dept\_id | salary | hire\_date |

+---------+-------+------+---------+--------+------------+

| Seeta | 105 | Pune | 40 | 15000 | 2015-06-05 |

+---------+-------+------+---------+--------+------------+

1 row in set (0.07 sec)

mysql> select \* from employee where empname = "seeta" and dept\_id = 10;

Empty set (0.00 sec)

mysql> select \* from employee where empname = "seeta" or dept\_id = 40;

+---------+-------+------+---------+--------+------------+

| empname | empid | city | dept\_id | salary | hire\_date |

+---------+-------+------+---------+--------+------------+

| Seeta | 105 | Pune | 40 | 15000 | 2015-06-05 |

+---------+-------+------+---------+--------+------------+

1 row in set (0.00 sec)

mysql> select \* from employee where empname = "seeta" or dept\_id = 50;

+---------+-------+--------+---------+--------+------------+

| empname | empid | city | dept\_id | salary | hire\_date |

+---------+-------+--------+---------+--------+------------+

| Amit | 102 | Mumbai | 50 | 4000 | 1999-10-25 |

| Seeta | 105 | Pune | 40 | 15000 | 2015-06-05 |

+---------+-------+--------+---------+--------+------------+

2 rows in set (0.00 sec)

mysql> select \* from employee where (empname = "albert" and dept\_id = 30) or salary <4000;

+---------+-------+--------+---------+--------+------------+

| empname | empid | city | dept\_id | salary | hire\_date |

+---------+-------+--------+---------+--------+------------+

| Albert | 104 | Mumbai | 30 | 10000 | 2015-06-05 |

+---------+-------+--------+---------+--------+------------+

1 row in set (0.07 sec)

mysql> select \* from employee where (empname = "albert" and dept\_id = 30) or salary < 10000;

+---------+-------+---------+---------+--------+------------+

| empname | empid | city | dept\_id | salary | hire\_date |

+---------+-------+---------+---------+--------+------------+

| John | 101 | Pune | 10 | 6000 | 1997-09-12 |

| Amit | 102 | Mumbai | 50 | 4000 | 1999-10-25 |

| Reena | 103 | Chennai | 30 | 8000 | 2000-10-19 |

| Albert | 104 | Mumbai | 30 | 10000 | 2015-06-05 |

+---------+-------+---------+---------+--------+------------+

4 rows in set (0.00 sec)

**Like**

mysql> select empname from employee where city like 'pu%';

+---------+

| empname |

+---------+

| John |

| Seeta |

+---------+

2 rows in set (0.05 sec)

mysql> select empname from employee where city like 'm%';

+---------+

| empname |

+---------+

| Amit |

| Albert |

+---------+

2 rows in set (0.00 sec)

mysql> select empname from employee where city like '%m';

Empty set (0.00 sec)

mysql> select empname from employee where city like '%i';

+---------+

| empname |

+---------+

| Amit |

| Reena |

| Albert |

+---------+

3 rows in set (0.00 sec)

mysql> select empname,city from employee where city like '%i';

+---------+---------+

| empname | city |

+---------+---------+

| Amit | Mumbai |

| Reena | Chennai |

| Albert | Mumbai |

+---------+---------+

3 rows in set (0.00 sec)

mysql> select empname,city from employee where city not like '%i';

+---------+------+

| empname | city |

+---------+------+

| John | Pune |

| Seeta | Pune |

+---------+------+

2 rows in set (0.00 sec)

**IN**

mysql> select \* from employee where empname in('john','reena','albert');

+---------+-------+---------+---------+--------+------------+

| empname | empid | city | dept\_id | salary | hire\_date |

+---------+-------+---------+---------+--------+------------+

| John | 101 | Pune | 10 | 6000 | 1997-09-12 |

| Reena | 103 | Chennai | 30 | 8000 | 2000-10-19 |

| Albert | 104 | Mumbai | 30 | 10000 | 2015-06-05 |

+---------+-------+---------+---------+--------+------------+

3 rows in set (0.00 sec)

mysql> select \* from employee where empname in('john','reena','seeta');

+---------+-------+---------+---------+--------+------------+

| empname | empid | city | dept\_id | salary | hire\_date |

+---------+-------+---------+---------+--------+------------+

| John | 101 | Pune | 10 | 6000 | 1997-09-12 |

| Reena | 103 | Chennai | 30 | 8000 | 2000-10-19 |

| Seeta | 105 | Pune | 40 | 15000 | 2015-06-05 |

+---------+-------+---------+---------+--------+------------+

3 rows in set (0.00 sec)

mysql> select \* from employee where empname = "amit" or empname = "john" or empname = "reena";

+---------+-------+---------+---------+--------+------------+

| empname | empid | city | dept\_id | salary | hire\_date |

+---------+-------+---------+---------+--------+------------+

| John | 101 | Pune | 10 | 6000 | 1997-09-12 |

| Amit | 102 | Mumbai | 50 | 4000 | 1999-10-25 |

| Reena | 103 | Chennai | 30 | 8000 | 2000-10-19 |

+---------+-------+---------+---------+--------+------------+

3 rows in set (0.00 sec)

**Any**

mysql> select \* from customers;

+------+--------+------+----------+

| id | name | age | address |

+------+--------+------+----------+

| 1 | nikita | 25 | pune |

| 3 | Amit | 28 | chennai |

| 4 | John | 30 | chennai |

| 5 | Albert | 22 | banglore |

| 2 | diksha | 24 | mumbai |

+------+--------+------+----------+

5 rows in set (0.11 sec)

mysql> select dept\_id from employee where dept\_id > any (select id from customers);

|  |
| --- |
|  |

| dept\_id |

+---------+

| 10 |

| 50 |

| 30 |

| 30 |

| 40 |

+---------+

5 rows in set (0.06 sec)

mysql> select dept\_id from employee where dept\_id > any (select age from customers);

+---------+

| dept\_id |

+---------+

| 50 |

| 30 |

| 30 |

| 40 |

+---------+

4 rows in set (0.00 sec)

mysql> select \* from customers;

+------+--------+------+----------+

| id | name | age | address |

+------+--------+------+----------+

| 1 | nikita | 25 | pune |

| 3 | Amit | 28 | chennai |

| 4 | John | 30 | chennai |

| 5 | Albert | 22 | banglore |

| 2 | diksha | 24 | mumbai |

+------+--------+------+----------+

5 rows in set (0.00 sec)

mysql> select \* from orders;

+---------+------+------------+

| orderid | id | orderdate |

+---------+------+------------+

| 101 | 1 | 2022-06-12 |

| 103 | 6 | 2022-07-25 |

| 104 | 7 | 2022-08-05 |

| 105 | 8 | 2022-08-21 |

| 106 | 4 | 2022-09-19 |

| 102 | 2 | 2022-07-25 |

+---------+------+------------+

6 rows in set (0.14 sec)

**Exists**

mysql> select name , address from customers where exists (select \* from orders where customers.id = orders.id);

+--------+---------+

| name | address |

+--------+---------+

| nikita | pune |

| John | chennai |

| diksha | mumbai |

+--------+---------+

3 rows in set (0.04 sec)

**Not Exists**

mysql> select name , address from customers where not exists (select \* from orders where customers.id = orders.id);

+--------+----------+

| name | address |

+--------+----------+

| Amit | chennai |

| Albert | banglore |

+--------+----------+

2 rows in set (0.00 sec)

mysql> select exists(select \* from customers where id = 5 ) AS RESULT;

+--------+

| RESULT |

+--------+

| 1 |

+--------+

1 row in set (0.00 sec)

mysql> select exists(select \* from customers where id = 5 or id = 4 ) AS RESULT;

+--------+

| RESULT |

+--------+

| 1 |

+--------+

1 row in set (0.00 sec)

mysql> select exists(select \* from customers where id = 5 AND id = 4 ) AS RESULT;

+--------+

| RESULT |

+--------+

| 0 |

+--------+

1 row in set (0.00 sec)

mysql> select exists(select \* from customers where id = 5 or id = 1 ) AS RESULT;

+--------+

| RESULT |

+--------+

| 1 |

+--------+

1 row in set (0.00 sec)

mysql> select exists(select \* from customers where id = 2) AS RESULT;

+--------+

| RESULT |

+--------+

| 1 |

+--------+

1 row in set (0.00 sec)

**Not Null**

mysql> select \* from customers where name is not null;

+------+--------+------+----------+

| id | name | age | address |

+------+--------+------+----------+

| 1 | nikita | 25 | pune |

| 3 | Amit | 28 | chennai |

| 4 | John | 30 | chennai |

| 5 | Albert | 22 | banglore |

| 2 | diksha | 24 | mumbai |

+------+--------+------+----------+

5 rows in set (0.00 sec)

**IS NULL**

mysql> select \* from customers where name is null;

Empty set (0.00 sec)

mysql> insert into customers values (6,NULL,45,NULL);

Query OK, 1 row affected (0.09 sec)

mysql> select \* from customers where name is null;

+------+------+------+---------+

| id | name | age | address |

+------+------+------+---------+

| 6 | NULL | 45 | NULL |

+------+------+------+---------+

1 row in set (0.02 sec)

mysql> select \* from customers;

+------+--------+------+----------+

| id | name | age | address |

+------+--------+------+----------+

| 1 | nikita | 25 | pune |

| 3 | Amit | 28 | chennai |

| 4 | John | 30 | chennai |

| 5 | Albert | 22 | banglore |

| 2 | diksha | 24 | mumbai |

| 6 | NULL | 45 | NULL |

+------+--------+------+----------+

6 rows in set (0.00 sec)

**Not Like**

mysql> select \* from customers where name not like 'A%';

+------+--------+------+---------+

| id | name | age | address |

+------+--------+------+---------+

| 1 | nikita | 25 | pune |

| 4 | John | 30 | chennai |

| 2 | diksha | 24 | mumbai |

+------+--------+------+---------+

3 rows in set (0.00 sec)

**Not Between**

mysql> select \* from customers where id not between 3 and 5;

+------+--------+------+---------+

| id | name | age | address |

+------+--------+------+---------+

| 1 | nikita | 25 | pune |

| 2 | diksha | 24 | mumbai |

| 6 | NULL | 45 | NULL |

+------+--------+------+---------+

3 rows in set (0.02 sec)

mysql> select \* from customers where id not between 1 and 6;

Empty set (0.00 sec)

mysql> select \* from customers where id not between 1 and 4;

+------+--------+------+----------+

| id | name | age | address |

+------+--------+------+----------+

| 5 | Albert | 22 | banglore |

| 6 | NULL | 45 | NULL |

+------+--------+------+----------+

2 rows in set (0.00 sec)

**Between**

mysql> select \* from customers where id between 1 and 4;

+------+--------+------+---------+

| id | name | age | address |

+------+--------+------+---------+

| 1 | nikita | 25 | pune |

| 3 | Amit | 28 | chennai |

| 4 | John | 30 | chennai |

| 2 | diksha | 24 | mumbai |

+------+--------+------+---------+

4 rows in set (0.00 sec)

**Case Condition**

mysql> select empname ,empid ,case dept\_id

-> when 10 then "IT"

-> when 50 then "Sales"

-> else "development"

-> end AS Departments from employee;

+---------+-------+-------------+

| empname | empid | Departments |

+---------+-------+-------------+

| John | 101 | IT |

| Amit | 102 | Sales |

| Reena | 103 | development |

| Albert | 104 | development |

| Seeta | 105 | development |

+---------+-------+-------------+

5 rows in set (0.04 sec)

mysql> select empname ,empid ,case dept\_id

-> when 10 then "IT"

-> when 50 then "Sales"

-> when 40 then "Testing"

-> else "Developer"

-> end as DEPARTMENTS from employee;

+---------+-------+-------------+

| empname | empid | DEPARTMENTS |

+---------+-------+-------------+

| John | 101 | IT |

| Amit | 102 | Sales |

| Reena | 103 | Developer |

| Albert | 104 | Developer |

| Seeta | 105 | Testing |

+---------+-------+-------------+

5 rows in set (0.00 sec)

mysql> select \* from employee;

+---------+-------+---------+---------+--------+------------+

| empname | empid | city | dept\_id | salary | hire\_date |

+---------+-------+---------+---------+--------+------------+

| John | 101 | Pune | 10 | 6000 | 1997-09-12 |

| Amit | 102 | Mumbai | 50 | 4000 | 1999-10-25 |

| Reena | 103 | Chennai | 30 | 8000 | 2000-10-19 |

| Albert | 104 | Mumbai | 30 | 10000 | 2015-06-05 |

| Seeta | 105 | Pune | 40 | 15000 | 2015-06-05 |

+---------+-------+---------+---------+--------+------------+

5 rows in set (0.00 sec)

**Count()**

mysql> select count(empname) from employee;

+----------------+

| count(empname) |

+----------------+

| 5 |

+----------------+

1 row in set (0.05 sec)

**Concat()**

mysql> select empname ,empid,dept\_id, group\_concat(city) as Location from employee group by dept\_id;

+---------+-------+---------+----------------+

| empname | empid | dept\_id | Location |

+---------+-------+---------+----------------+

| John | 101 | 10 | Pune |

| Reena | 103 | 30 | Chennai,Mumbai |

| Seeta | 105 | 40 | Pune |

| Amit | 102 | 50 | Mumbai |

+---------+-------+---------+----------------+

4 rows in set (0.00 sec)

**Limit**

mysql> select empname from employee limit 2;

+---------+

| empname |

+---------+

| John |

| Amit |

+---------+

2 rows in set (0.00 sec)

mysql> select empname from employee limit 1;

+---------+

| empname |

+---------+

| John |

+---------+

1 row in set (0.00 sec)

mysql> select empname from employee limit 5;

+---------+

| empname |

+---------+

| John |

| Amit |

| Reena |

| Albert |

| Seeta |

+---------+

5 rows in set (0.02 sec)

**Cast()**

mysql> select cast(3-6 as Signed);

+---------------------+

| cast(3-6 as Signed) |

+---------------------+

| -3 |

+---------------------+

1 row in set (0.05 sec)

mysql> select cast(3-6 as unsigned);

+-----------------------+

| cast(3-6 as unsigned) |

+-----------------------+

| 18446744073709551613 |

+-----------------------+

1 row in set (0.00 sec)

**Convert()**

mysql> select convert("2018-11-30" , Datetime);

+----------------------------------+

| convert("2018-11-30" , Datetime) |

+----------------------------------+

| 2018-11-30 00:00:00 |

+----------------------------------+

1 row in set (0.00 sec)

mysql> select \* from employee;

+---------+-------+---------+---------+--------+------------+

| empname | empid | city | dept\_id | salary | hire\_date |

+---------+-------+---------+---------+--------+------------+

| John | 101 | Pune | 10 | 6000 | 1997-09-12 |

| Amit | 102 | Mumbai | 50 | 4000 | 1999-10-25 |

| Reena | 103 | Chennai | 30 | 8000 | 2000-10-19 |

| Albert | 104 | Mumbai | 30 | 10000 | 2015-06-05 |

| Seeta | 105 | Pune | 40 | 15000 | 2015-06-05 |

+---------+-------+---------+---------+--------+------------+

5 rows in set (0.00 sec)

**AS Alias**

mysql> select hire\_date as JOINING\_DATE from employee;

+--------------+

| JOINING\_DATE |

+--------------+

| 1997-09-12 |

| 1999-10-25 |

| 2000-10-19 |

| 2015-06-05 |

| 2015-06-05 |

+--------------+

5 rows in set (0.00 sec)

mysql> select empname as NAME , city as LOCATION , hire\_date as JOINING\_DATE from employee;

+--------+----------+--------------+

| NAME | LOCATION | JOINING\_DATE |

+--------+----------+--------------+

| John | Pune | 1997-09-12 |

| Amit | Mumbai | 1999-10-25 |

| Reena | Chennai | 2000-10-19 |

| Albert | Mumbai | 2015-06-05 |

| Seeta | Pune | 2015-06-05 |

+--------+----------+--------------+

5 rows in set (0.00 sec)

mysql> select empname as NAME , city as LOCATION , hire\_date as JOINING\_DATE from employee as EMPLOYEE\_DETAILS;

+--------+----------+--------------+

| NAME | LOCATION | JOINING\_DATE |

+--------+----------+--------------+

| John | Pune | 1997-09-12 |

| Amit | Mumbai | 1999-10-25 |

| Reena | Chennai | 2000-10-19 |

| Albert | Mumbai | 2015-06-05 |

| Seeta | Pune | 2015-06-05 |

+--------+----------+--------------+

5 rows in set (0.00 sec)

**Count(\*)**

mysql> select count(\*) as ROW\_COUNT from employee;

+-----------+

| ROW\_COUNT |

+-----------+

| 5 |

+-----------+

1 row in set (0.90 sec)

mysql> select \* from employee;

+---------+-------+---------+---------+--------+------------+

| empname | empid | city | dept\_id | salary | hire\_date |

+---------+-------+---------+---------+--------+------------+

| John | 101 | Pune | 10 | 6000 | 1997-09-12 |

| Amit | 102 | Mumbai | 50 | 4000 | 1999-10-25 |

| Reena | 103 | Chennai | 30 | 8000 | 2000-10-19 |

| Albert | 104 | Mumbai | 30 | 10000 | 2015-06-05 |

| Seeta | 105 | Pune | 40 | 15000 | 2015-06-05 |

+---------+-------+---------+---------+--------+------------+

5 rows in set (0.00 sec)

**Round()**

mysql> select salary , round(salary\*1.10) as "NEW SALARY" from employee;

+--------+------------+

| salary | NEW SALARY |

+--------+------------+

| 6000 | 6600 |

| 4000 | 4400 |

| 8000 | 8800 |

| 10000 | 11000 |

| 15000 | 16500 |

+--------+------------+

5 rows in set (0.00 sec)

**Concat()**

mysql> select concat(empname , empid) "EMPLOYEE ID" from employee;

+-------------+

| EMPLOYEE ID |

+-------------+

| John101 |

| Amit102 |

| Reena103 |

| Albert104 |

| Seeta105 |

+-------------+

5 rows in set (0.06 sec)

mysql> select concat(empname,' , ', empid) "EMPLOYEE ID" from employee;

+--------------+

| EMPLOYEE ID |

+--------------+

| John , 101 |

| Amit , 102 |

| Reena , 103 |

| Albert , 104 |

| Seeta , 105 |

+--------------+

5 rows in set (0.00 sec)

mysql> select concat(empid,'/',empname,'/',salary,'/',address,'/',city,'/',hire\_date) from employee;

ERROR 1054 (42S22): Unknown column 'address' in 'field list'

mysql> select concat(empid,'/',empname,'/',salary,'/',dept\_id,'/',city,'/',hire\_date) from employee;

+-------------------------------------------------------------------------+

| concat(empid,'/',empname,'/',salary,'/',dept\_id,'/',city,'/',hire\_date) |

+-------------------------------------------------------------------------+

| 101/John/6000/10/Pune/1997-09-12 |

| 102/Amit/4000/50/Mumbai/1999-10-25 |

| 103/Reena/8000/30/Chennai/2000-10-19 |

| 104/Albert/10000/30/Mumbai/2015-06-05 |

| 105/Seeta/15000/40/Pune/2015-06-05 |

+-------------------------------------------------------------------------+

5 rows in set (0.00 sec)

mysql> select concat(empid,'/',empname,'/',salary,'/',dept\_id,'/',city,'/',hire\_date) as "EMPLOYEE DETAILS" from employee;

+---------------------------------------+

| EMPLOYEE DETAILS |

+---------------------------------------+

| 101/John/6000/10/Pune/1997-09-12 |

| 102/Amit/4000/50/Mumbai/1999-10-25 |

| 103/Reena/8000/30/Chennai/2000-10-19 |

| 104/Albert/10000/30/Mumbai/2015-06-05 |

| 105/Seeta/15000/40/Pune/2015-06-05 |

+---------------------------------------+

5 rows in set (0.00 sec)

mysql> select empname , empid , salary , salary+(salary\*15.5/100) "NEW Salary" from employee

-> ;

+---------+-------+--------+------------+

| empname | empid | salary | NEW Salary |

+---------+-------+--------+------------+

| John | 101 | 6000 | 6930 |

| Amit | 102 | 4000 | 4620 |

| Reena | 103 | 8000 | 9240 |

| Albert | 104 | 10000 | 11550 |

| Seeta | 105 | 15000 | 17325 |

+---------+-------+--------+------------+

5 rows in set (0.00 sec)

**Upper()**

mysql> select upper(empname) from employee;

+----------------+

| upper(empname) |

+----------------+

| JOHN |

| AMIT |

| REENA |

| ALBERT |

| SEETA |

+----------------+

5 rows in set (0.09 sec)

**Lower()**

mysql> select lower(empname) from employee;

+----------------+

| lower(empname) |

+----------------+

| john |

| amit |

| reena |

| albert |

| seeta |

+----------------+

5 rows in set (0.00 sec)

mysql> select lower(empname),upper(city) from employee;

+----------------+-------------+

| lower(empname) | upper(city) |

+----------------+-------------+

| john | PUNE |

| amit | MUMBAI |

| reena | CHENNAI |

| albert | MUMBAI |

| seeta | PUNE |

+----------------+-------------+

5 rows in set (0.00 sec)

**Length()**

mysql> select upper(empname) , length(empname) from employee;

+----------------+-----------------+

| upper(empname) | length(empname) |

+----------------+-----------------+

| JOHN | 4 |

| AMIT | 4 |

| REENA | 5 |

| ALBERT | 6 |

| SEETA | 5 |

+----------------+-----------------+

5 rows in set (0.00 sec)

**Floor()**

mysql> select floor(salary/1000) from employee;

+--------------------+

| floor(salary/1000) |

+--------------------+

| 6 |

| 4 |

| 8 |

| 10 |

| 15 |

+--------------------+

5 rows in set (0.05 sec)

mysql> select floor(4.9);

+------------+

| floor(4.9) |

+------------+

| 4 |

+------------+

1 row in set (0.00 sec)

**Ceil()**

mysql> select ceil(4.9);

+-----------+

| ceil(4.9) |

+-----------+

| 5 |

+-----------+

1 row in set (0.00 sec)

**Current Time**

mysql> select current\_timestamp;

+---------------------+

| current\_timestamp |

+---------------------+

| 2022-10-12 12:19:21 |

+---------------------+

1 row in set (0.00 sec)

**Current date**

mysql> select current\_date;

+--------------+

| current\_date |

+--------------+

| 2022-10-12 |

+--------------+

1 row in set (0.00 sec)

mysql> select hire\_date , (current\_date - hire\_date) from employee;

+------------+----------------------------+

| hire\_date | (current\_date - hire\_date) |

+------------+----------------------------+

| 1997-09-12 | 250100 |

| 1999-10-25 | 229987 |

| 2000-10-19 | 219993 |

| 2015-06-05 | 70407 |

| 2015-06-05 | 70407 |

+------------+----------------------------+

5 rows in set (0.00 sec)

mysql> select \* from employee;

+---------+-------+---------+---------+--------+------------+

| empname | empid | city | dept\_id | salary | hire\_date |

+---------+-------+---------+---------+--------+------------+

| John | 101 | Pune | 10 | 6000 | 1997-09-12 |

| Amit | 102 | Mumbai | 50 | 4000 | 1999-10-25 |

| Reena | 103 | Chennai | 30 | 8000 | 2000-10-19 |

| Albert | 104 | Mumbai | 30 | 10000 | 2015-06-05 |

| Seeta | 105 | Pune | 40 | 15000 | 2015-06-05 |

+---------+-------+---------+---------+--------+------------+

5 rows in set (0.00 sec)

**Create View**

mysql> create view empvu30 as select empid , empname ,city , salary , dept\_id,hire\_date from employee where dept\_id =30;

Query OK, 0 rows affected (0.61 sec)

mysql> desc empvu30;

+-----------+-------------+------+-----+---------+-------+

| Field | Type | Null | Key | Default | Extra |

+-----------+-------------+------+-----+---------+-------+

| empid | int | YES | | NULL | |

| empname | varchar(20) | YES | | NULL | |

| city | varchar(20) | YES | | NULL | |

| salary | varchar(10) | YES | | NULL | |

| dept\_id | int | NO | | NULL | |

| hire\_date | date | YES | | NULL | |

+-----------+-------------+------+-----+---------+-------+

6 rows in set (0.04 sec)

mysql> select \* from empvu30;

+-------+---------+---------+--------+---------+------------+

| empid | empname | city | salary | dept\_id | hire\_date |

+-------+---------+---------+--------+---------+------------+

| 103 | Reena | Chennai | 8000 | 30 | 2000-10-19 |

| 104 | Albert | Mumbai | 10000 | 30 | 2015-06-05 |

+-------+---------+---------+--------+---------+------------+

2 rows in set (0.05 sec)

mysql> select \* from employee\_data;

+---------+-------+----------+--------+

| empname | empid | location | salary |

+---------+-------+----------+--------+

| John | 101 | Pune | 6000 |

| Amit | 102 | Mumbai | 4000 |

| Reena | 103 | Chennai | 8000 |

| Albert | 104 | Mumbai | 10000 |

| Seeta | 105 | Pune | 15000 |

+---------+-------+----------+--------+

5 rows in set (0.00 sec)

**Sum(), using group by , having clause**

mysql> select sum(salary),empname from employee\_data group by location;

+-------------+---------+

| sum(salary) | empname |

+-------------+---------+

| 21000 | John |

| 14000 | Amit |

| 8000 | Reena |

+-------------+---------+

3 rows in set (0.09 sec)

mysql> select sum(salary),empname from employee\_data group by location having sum(salary)>5000;

+-------------+---------+

| sum(salary) | empname |

+-------------+---------+

| 21000 | John |

| 14000 | Amit |

| 8000 | Reena |

+-------------+---------+

3 rows in set (0.00 sec)

mysql> select sum(salary),empname from employee\_data group by location having sum(salary)>10000;

+-------------+---------+

| sum(salary) | empname |

+-------------+---------+

| 21000 | John |

| 14000 | Amit |

+-------------+---------+

2 rows in set (0.00 sec)

mysql> select count(salary),empname,location from employee\_data group by location having count(salary)<3;

+---------------+---------+----------+

| count(salary) | empname | location |

+---------------+---------+----------+

| 2 | John | Pune |

| 2 | Amit | Mumbai |

| 1 | Reena | Chennai |

+---------------+---------+----------+

3 rows in set (0.00 sec)

mysql> select avg(salary),empname,location from employee\_data group by location having avg(salary)>5000;

+-------------+---------+----------+

| avg(salary) | empname | location |

+-------------+---------+----------+

| 10500 | John | Pune |

| 7000 | Amit | Mumbai |

| 8000 | Reena | Chennai |

+-------------+---------+----------+

3 rows in set (0.00 sec)

**Commit , Savepoint , Rollback**

mysql> create table stud(stud\_name varchar

-> (10) , roll\_no int , percentage int);

Query OK, 0 rows affected (1.95 sec)

mysql> start transaction;

Query OK, 0 rows affected (0.00 sec)

mysql> insert into stud values("nikita" , 01 ,78);

Query OK, 1 row affected (0.10 sec)

mysql> savepoint insertion1;

Query OK, 0 rows affected (0.00 sec)

mysql> select \* from stud;

+-----------+---------+------------+

| stud\_name | roll\_no | percentage |

+-----------+---------+------------+

| nikita | 1 | 78 |

+-----------+---------+------------+

1 row in set (0.00 sec)

mysql> insert into stud values("Reena" , 02 ,89);

Query OK, 1 row affected (0.00 sec)

mysql> savepoint insertion2;

Query OK, 0 rows affected (0.00 sec)

mysql> select \* from stud;

+-----------+---------+------------+

| stud\_name | roll\_no | percentage |

+-----------+---------+------------+

| nikita | 1 | 78 |

| Reena | 2 | 89 |

+-----------+---------+------------+

2 rows in set (0.00 sec)

mysql> update stud set stud\_name = "Reshma" where roll\_no =2;

Query OK, 1 row affected (0.04 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> savepoint updation1;

Query OK, 0 rows affected (0.00 sec)

mysql> select \* from stud;

+-----------+---------+------------+

| stud\_name | roll\_no | percentage |

+-----------+---------+------------+

| nikita | 1 | 78 |

| Reshma | 2 | 89 |

+-----------+---------+------------+

2 rows in set (0.00 sec)

mysql> rollback to insertion1;

Query OK, 0 rows affected (0.05 sec)

mysql> select \* from stud;

+-----------+---------+------------+

| stud\_name | roll\_no | percentage |

+-----------+---------+------------+

| nikita | 1 | 78 |

+-----------+---------+------------+

1 row in set (0.08 sec)

**Sql Joins**

mysql> select \* from customers;

+------+--------+------+----------+

| id | name | age | address |

+------+--------+------+----------+

| 1 | nikita | 25 | pune |

| 3 | Amit | 28 | chennai |

| 4 | John | 30 | chennai |

| 5 | Albert | 22 | banglore |

| 2 | diksha | 24 | mumbai |

+------+--------+------+----------+

5 rows in set (0.19 sec)

mysql> select \* from orders;

+---------+------+------------+

| orderid | id | orderdate |

+---------+------+------------+

| 101 | 1 | 2022-06-12 |

| 103 | 6 | 2022-07-25 |

| 104 | 7 | 2022-08-05 |

| 105 | 8 | 2022-08-21 |

| 106 | 4 | 2022-09-19 |

| 102 | 2 | 2022-07-25 |

+---------+------+------------+

6 rows in set (0.15 sec)

**Inner join**

mysql> select \* from customers inner join orders on customers.id=orders.id;

+------+--------+------+---------+---------+------+------------+

| id | name | age | address | orderid | id | orderdate |

+------+--------+------+---------+---------+------+------------+

| 1 | nikita | 25 | pune | 101 | 1 | 2022-06-12 |

| 4 | John | 30 | chennai | 106 | 4 | 2022-09-19 |

| 2 | diksha | 24 | mumbai | 102 | 2 | 2022-07-25 |

+------+--------+------+---------+---------+------+------------+

3 rows in set (0.00 sec)

mysql> select customers.name , customers.address , orders.orderdate from customers inner join orders on customers.id=orders.id;

+--------+---------+------------+

| name | address | orderdate |

+--------+---------+------------+

| nikita | pune | 2022-06-12 |

| John | chennai | 2022-09-19 |

| diksha | mumbai | 2022-07-25 |

+--------+---------+------------+

3 rows in set (0.00 sec)

**Union all / Full join**

mysql> select \* from customers inner join orders on customers.id=orders.id union all select \* from customers right join orders on customers.id=orders.id;

+------+--------+------+---------+---------+------+------------+

| id | name | age | address | orderid | id | orderdate |

+------+--------+------+---------+---------+------+------------+

| 1 | nikita | 25 | pune | 101 | 1 | 2022-06-12 |

| 4 | John | 30 | chennai | 106 | 4 | 2022-09-19 |

| 2 | diksha | 24 | mumbai | 102 | 2 | 2022-07-25 |

| 1 | nikita | 25 | pune | 101 | 1 | 2022-06-12 |

| NULL | NULL | NULL | NULL | 103 | 6 | 2022-07-25 |

| NULL | NULL | NULL | NULL | 104 | 7 | 2022-08-05 |

| NULL | NULL | NULL | NULL | 105 | 8 | 2022-08-21 |

| 4 | John | 30 | chennai | 106 | 4 | 2022-09-19 |

| 2 | diksha | 24 | mumbai | 102 | 2 | 2022-07-25 |

+------+--------+------+---------+---------+------+------------+

9 rows in set (0.04 sec)

**Left join**

mysql> select \* from customers left join orders on customers.id=orders.id;

+------+--------+------+----------+---------+------+------------+

| id | name | age | address | orderid | id | orderdate |

+------+--------+------+----------+---------+------+------------+

| 1 | nikita | 25 | pune | 101 | 1 | 2022-06-12 |

| 3 | Amit | 28 | chennai | NULL | NULL | NULL |

| 4 | John | 30 | chennai | 106 | 4 | 2022-09-19 |

| 5 | Albert | 22 | banglore | NULL | NULL | NULL |

| 2 | diksha | 24 | mumbai | 102 | 2 | 2022-07-25 |

+------+--------+------+----------+---------+------+------------+

5 rows in set (0.00 sec)

mysql> select customers.name , customers.address , orders.orderdate from customers left join orders on customers.id=orders.id;

+--------+----------+------------+

| name | address | orderdate |

+--------+----------+------------+

| nikita | pune | 2022-06-12 |

| Amit | chennai | NULL |

| John | chennai | 2022-09-19 |

| Albert | banglore | NULL |

| diksha | mumbai | 2022-07-25 |

+--------+----------+------------+

5 rows in set (0.00 sec)

**Right join**

mysql> select \* from customers right join orders on customers.id=orders.id;

+------+--------+------+---------+---------+------+------------+

| id | name | age | address | orderid | id | orderdate |

+------+--------+------+---------+---------+------+------------+

| 1 | nikita | 25 | pune | 101 | 1 | 2022-06-12 |

| NULL | NULL | NULL | NULL | 103 | 6 | 2022-07-25 |

| NULL | NULL | NULL | NULL | 104 | 7 | 2022-08-05 |

| NULL | NULL | NULL | NULL | 105 | 8 | 2022-08-21 |

| 4 | John | 30 | chennai | 106 | 4 | 2022-09-19 |

| 2 | diksha | 24 | mumbai | 102 | 2 | 2022-07-25 |

+------+--------+------+---------+---------+------+------------+

6 rows in set (0.00 sec)

mysql> select customers.name , customers.address , orders.orderdate from customers right join orders on customers.id=orders.id;

+--------+---------+------------+

| name | address | orderdate |

+--------+---------+------------+

| nikita | pune | 2022-06-12 |

| NULL | NULL | 2022-07-25 |

| NULL | NULL | 2022-08-05 |

| NULL | NULL | 2022-08-21 |

| John | chennai | 2022-09-19 |

| diksha | mumbai | 2022-07-25 |

+--------+---------+------------+

6 rows in set (0.00 sec)

mysql> select customers.name , customers.address , orders.orderdate from customers left join orders on customers.id=orders.id;

+--------+----------+------------+

| name | address | orderdate |

+--------+----------+------------+

| nikita | pune | 2022-06-12 |

| Amit | chennai | NULL |

| John | chennai | 2022-09-19 |

| Albert | banglore | NULL |

| diksha | mumbai | 2022-07-25 |

+--------+----------+------------+

5 rows in set (0.00 sec)