**21-01-23**

mysql> create table employee(emp\_id int primary key, emp\_name varchar(50), emp\_gender char, emp\_department varchar(50), emp\_salary double(10,4), emp\_company varchar(50), emp\_phone int, emp\_email varchar(100));

Query OK, 0 rows affected, 1 warning (2.48 sec)

mysql> insert into employee values(1, 'Naresh Kambala', 'M', 'IT', 50000.00, 'IBM', 99512887, 'java4naresh@gmail.com');

Query OK, 1 row affected (0.21 sec)

mysql> insert into employee values(1, 'Naresh Kambala', 'M', 'IT', 50000.00, 'IBM', 99512887, 'java4naresh@gmail.com');

ERROR 1062 (23000): Duplicate entry '1' for key 'employee.PRIMARY'

//primary key not allow the duplicates.

mysql> insert into employee values(2, 'Naresh Kambala', 'M', 'IT', 50000.00, 'IBM', 99512887, 'java4naresh@gmail.com');

Query OK, 1 row affected (0.09 sec)

mysql> select \* from employee;

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

| emp\_id | emp\_name | emp\_gender | emp\_department | emp\_salary | emp\_company | emp\_phone | emp\_email |

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

| 1 | Naresh Kambala | M | IT | 50000.0000 | IBM | 99512887 | java4naresh@gmail.com |

| 2 | Naresh Kambala | M | IT | 50000.0000 | IBM | 99512887 | java4naresh@gmail.com |

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

2 rows in set (0.00 sec)

mysql> drop table employee;

Query OK, 0 rows affected (0.24 sec)

mysql> create table employee(emp\_id int primary key, emp\_name varchar(50), emp\_gender char, emp\_department varchar(50), emp\_salary double(10,4), emp\_company varchar(50), emp\_phone int unique, emp\_email varchar(100)unique);

Query OK, 0 rows affected, 1 warning (0.40 sec)

mysql> insert into employee values(1, 'Naresh Kambala', 'M', 'IT', 50000.00, 'IBM', 99512887, 'java4naresh@gmail.com');

Query OK, 1 row affected (0.11 sec)

mysql> insert into employee values(2, 'Naresh Kambala', 'M', 'IT', 50000.00, 'IBM', 99512887, 'java4naresh@gmail.com');

ERROR 1062 (23000): Duplicate entry '99512887' for key 'employee.emp\_phone'

mysql> insert into employee values(2, 'Naresh Kambala', 'M', 'IT', 50000.00, 'IBM', 99512567, 'java4naresh@gmail.com');

ERROR 1062 (23000): Duplicate entry 'java4naresh@gmail.com' for key 'employee.emp\_email'

mysql> insert into employee values(2, 'Naresh Kambala', 'M', 'IT', 50000.00, 'IBM', 99512567, 'kambalajava4naresh@gmail.com');

Query OK, 1 row affected (0.08 sec)

mysql> select \* from employee;

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

| emp\_id | emp\_name | emp\_gender | emp\_department | emp\_salary | emp\_company | emp\_phone | emp\_email |

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

| 1 | Naresh Kambala | M | IT | 50000.0000 | IBM | 99512887 | java4naresh@gmail.com |

| 2 | Naresh Kambala | M | IT | 50000.0000 | IBM | 99512567 | kambalajava4naresh@gmail.com |

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

2 rows in set (0.00 sec)

**//primary key --emp\_id = null// not allow the null values**

mysql> insert into employee values(null, 'Naresh Kambala', 'M', 'IT', 50000.00, 'IBM', 995128898, 'java5naresh@gmail.com');

**ERROR 1048 (23000): Column 'emp\_id' cannot be null**

**//unique--emp\_pho= allows the null values**

mysql> insert into employee values(3, 'Naresh Kambala', 'M', 'IT', 50000.00, 'IBM', null, 'java6naresh@gmail.com');

Query OK, 1 row affected (0.08 sec)

mysql> insert into employee values(4, 'Naresh Kambala', 'M', 'IT', 50000.00, 'IBM', null, 'java7naresh@gmail.com');

Query OK, 1 row affected (0.04 sec)

mysql> drop table employee;

Query OK, 0 rows affected (0.33 sec)

**by using notnull we cannot give the null value.**

mysql> create table employee (emp\_id int primary key,emp\_name varchar(50) not null, emp\_gender char not null,emp\_salary double(10,5) not null, emp\_company varchar(50) not null,emp\_department varchar(50) not null, emp\_phone int unique not null, emp\_email varchar(50) unique not null);

Query OK, 0 rows affected, 1 warning (0.28 sec)

mysql> insert into employee values(1, 'Naresh Kambala', 'M', 50000.00, 'IBM', 'IT', 9951288, 'kambalanaresh4java@gmail.com');

Query OK, 1 row affected (0.09 sec)

mysql> insert into employee values(2, 'Naresh Kambala', 'M', 50000.00, 'IBM', 'IT', null, 'kambalanaresh5java@gmail.com');

**ERROR 1048 (23000): Column 'emp\_phone' cannot be null**

mysql> insert into employee values(3, 'Naresh Kambala', 'M', 50000.00, 'IBM', null, 9662234, 'kambalanaresh6java@gmail.com');

**ERROR 1048 (23000): Column 'emp\_department' cannot be null**

**22-01-23**

mysql> alter table employee add column (emp\_dob varchar(10), emp\_city varchar(50));

Query OK, 0 rows affected (0.34 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> alter table employee modify column emp\_dob varchar(10) not null;

ERROR 1138 (22004): Invalid use of NULL value

mysql> alter table employee modify column emp\_dob varchar(10) not null;

ERROR 1138 (22004): Invalid use of NULL value

mysql> delete from employee;

Query OK, 1 row affected (0.12 sec)

mysql> alter table employee modify column emp\_dob varchar(10) not null;

Query OK, 0 rows affected (0.44 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> alter table employee modify column emp\_city varchar(50) not null;

Query OK, 0 rows affected (0.36 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> alter table employee drop column emp\_city;

Query OK, 0 rows affected (0.17 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> alter table employee change column emp\_dob emp\_date\_of\_birth varchar(10);

Query OK, 0 rows affected (0.46 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> alter table employee rename employee\_details;

Query OK, 0 rows affected (0.14 sec)

mysql> select \* from employee\_details;

Empty set (0.00 sec)

mysql> insert into employee\_details values(1,'nareshkambala','M',50000.00,'IBM','IT',9988562,'javabatch4@gmail.com','16-07-1992');

Query OK, 1 row affected (0.04 sec)

mysql> insert into employee\_details values(2,'pavan','M',30000.00,'IBM','IT',9786523,'pavan@gmail.com','18-12-'1994');

Query OK, 1 row affected (0.04 sec)

mysql> insert into employee\_details values (3, 'Veerababu', 'M', 25000.00, 'Microsoft', 'IT', 4555668, 'veeru@gmail.com', '15-11-1992');

Query OK, 1 row affected (0.06 sec)

mysql> select \* from employee\_details where emp\_id != 1;

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 2 | pavan | M | 30000.00000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 |

| 3 | Veerababu | M | 25000.00000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 |

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

2 rows in set (0.06 sec)

mysql> alter table employee\_details modify emp\_salary bigint;

Query OK, 3 rows affected (0.82 sec)

Records: 3 Duplicates: 0 Warnings: 0

mysql> insert into employee\_details values (4, 'Vasavi', 'F', 15000.00, 'Amazon', 'IT', 98765432, 'vasavi@gmail.com', '16-12-1999');

Query OK, 1 row affected (0.09 sec)

mysql> insert into employee\_details values (5, 'Dhanalakshmi', 'F', 10000.00, 'Infosys', 'IT', 23456789, 'dhanalakshmi@gmail.com', '16-10-1996');

Query OK, 1 row affected (0.09 sec)

mysql> select \* from employee\_details where emp\_id != 1;

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 |

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 |

| 5 | Dhanalakshmi | F | 10000 | Infosys | IT | 23456789 | dhanalakshmi@gmail.com | 16-10-1996 |

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

4 rows in set (0.00 sec)

mysql> select \* from employee\_details where emp\_salary <50000;

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 |

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 |

| 5 | Dhanalakshmi | F | 10000 | Infosys | IT | 23456789 | dhanalakshmi@gmail.com | 16-10-1996 |

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

4 rows in set (0.00 sec)

mysql> select \* from employee\_details where emp\_salary >50000;

Empty set (0.05 sec)

mysql> select \* from employee\_details where emp\_salary between 50000 and 100000;

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 |

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

1 row in set (0.05 sec)

mysql> select \* from employee\_details;

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 |

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 |

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 |

| 5 | Dhanalakshmi | F | 10000 | Infosys | IT | 23456789 | dhanalakshmi@gmail.com | 16-10-1996 |

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

5 rows in set (0.00 sec)

mysql> select \* from employee\_details where emp\_name like 'n%h';

Empty set (0.00 sec)

mysql> select \* from employee\_details where emp\_name like 'n%a';

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 |

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

1 row in set (0.00 sec)

mysql> select \* from employee\_details where emp\_name like '%na';

Empty set (0.00 sec)

mysql> select \* from employee\_details where emp\_name like 'na%';

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 |

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

1 row in set (0.00 sec)

mysql> select \* from employee\_details where emp\_name like '%i';

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 |

| 5 | Dhanalakshmi | F | 10000 | Infosys | IT | 23456789 | dhanalakshmi@gmail.com | 16-10-1996 |

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

2 rows in set (0.00 sec)

mysql> select \* from employee\_details where emp\_name like '%an';

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 |

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

1 row in set (0.00 sec)

mysql> select \* from employee\_details where emp\_name like '%a%';

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 |

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 |

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 |

| 5 | Dhanalakshmi | F | 10000 | Infosys | IT | 23456789 | dhanalakshmi@gmail.com | 16-10-1996 |

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

5 rows in set (0.00 sec)

mysql> select \* from employee\_details where emp\_name like '%v%';

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 |

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 |

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

3 rows in set (0.00 sec)

mysql> select \* from employee\_details where emp\_id in (1,3,5);

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 |

| 5 | Dhanalakshmi | F | 10000 | Infosys | IT | 23456789 | dhanalakshmi@gmail.com | 16-10-1996 |

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

3 rows in set (0.00 sec)

mysql> select \* from employee\_details where emp\_id in (2,4);

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 |

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 |

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

2 rows in set (0.00 sec)

**24-01-22**

mysql> select \* from employee\_details;

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 |

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 |

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 |

| 5 | Dhanalakshmi | F | 10000 | Infosys | IT | 23456789 | dhanalakshmi@gmail.com | 16-10-1996 |

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

5 rows in set (0.58 sec)

mysql> select \* from employee\_details where emp\_salary >=70000 and emp\_department='IT';

Empty set (0.13 sec)

mysql> select \* from employee\_details where emp\_salary >=50000 and emp\_department='IT';

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 |

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

1 row in set (0.00 sec)

mysql> select \* from employee\_details where emp\_salary >=10000 and emp\_department='IT';

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 |

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 |

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 |

| 5 | Dhanalakshmi | F | 10000 | Infosys | IT | 23456789 | dhanalakshmi@gmail.com | 16-10-1996 |

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

5 rows in set (0.00 sec)

mysql> select \* from employee\_details where emp\_salary >=10000 and emp\_department='IT' and emp\_gender='M';

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 |

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 |

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

3 rows in set (0.00 sec)

mysql> insert into employee\_details values (6, 'vamsi', 'F', 65000.00, 'LTI', 'HR', 2377689, 'vamsi@gmail.com', '16-8-1997');

Query OK, 1 row affected (0.77 sec)

mysql> delete from employee\_details where emp\_id=6;

Query OK, 1 row affected (0.37 sec)

mysql> insert into employee\_details values (6, 'vamsi', 'M', 65000.00, 'LTI', 'HR', 2377689, 'vamsi@gmail.com', '16-8-1997');

Query OK, 1 row affected (0.04 sec)

mysql> insert into employee\_details values (7, 'Mahesh', 'M', 75000.00, 'TCS', 'Marketing', 2354321, 'Mahesh@gmail.com', '17-8-1997');

Query OK, 1 row affected (0.12 sec)

mysql> select \* from employee\_details where emp\_salary >=10000 and emp\_department='IT' or emp\_department='HR' and emp\_gender='M';

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 |

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 |

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 |

| 5 | Dhanalakshmi | F | 10000 | Infosys | IT | 23456789 | dhanalakshmi@gmail.com | 16-10-1996 |

| 6 | vamsi | M | 65000 | LTI | HR | 2377689 | vamsi@gmail.com | 16-8-1997 |

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

6 rows in set (0.03 sec)

mysql> select \* from employee\_details where emp\_salary >=10000 and emp\_department='Marketing' or emp\_department='HR' and emp\_gender='M';

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 6 | vamsi | M | 65000 | LTI | HR | 2377689 | vamsi@gmail.com | 16-8-1997 |

| 7 | Mahesh | M | 75000 | TCS | Marketing | 2354321 | Mahesh@gmail.com | 17-8-1997 |

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

2 rows in set (0.00 sec)

mysql> select \* from employee\_details where emp\_salary >50000 and emp\_salary<100000;

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 6 | vamsi | M | 65000 | LTI | HR | 2377689 | vamsi@gmail.com | 16-8-1997 |

| 7 | Mahesh | M | 75000 | TCS | Marketing | 2354321 | Mahesh@gmail.com | 17-8-1997 |

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

2 rows in set (0.03 sec)

mysql> select \* from employee\_details where emp\_salary >50000 or emp\_salary<100000;

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 |

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 |

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 |

| 5 | Dhanalakshmi | F | 10000 | Infosys | IT | 23456789 | dhanalakshmi@gmail.com | 16-10-1996 |

| 6 | vamsi | M | 65000 | LTI | HR | 2377689 | vamsi@gmail.com | 16-8-1997 |

| 7 | Mahesh | M | 75000 | TCS | Marketing | 2354321 | Mahesh@gmail.com | 17-8-1997 |

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

7 rows in set (0.00 sec)

mysql> select \* from employee\_details where emp\_salary >70000 or emp\_salary<100000;

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 |

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 |

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 |

| 5 | Dhanalakshmi | F | 10000 | Infosys | IT | 23456789 | dhanalakshmi@gmail.com | 16-10-1996 |

| 6 | vamsi | M | 65000 | LTI | HR | 2377689 | vamsi@gmail.com | 16-8-1997 |

| 7 | Mahesh | M | 75000 | TCS | Marketing | 2354321 | Mahesh@gmail.com | 17-8-1997 |

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

7 rows in set (0.00 sec)

mysql> select \* from employee\_details where emp\_salary >70000 or emp\_salary<50000;

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 |

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 |

| 5 | Dhanalakshmi | F | 10000 | Infosys | IT | 23456789 | dhanalakshmi@gmail.com | 16-10-1996 |

| 7 | Mahesh | M | 75000 | TCS | Marketing | 2354321 | Mahesh@gmail.com | 17-8-1997 |

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

5 rows in set (0.00 sec)

mysql> select \* from employee\_details where emp\_salary >70000 or emp\_salary<50000 and not emp\_gender='M';

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 |

| 5 | Dhanalakshmi | F | 10000 | Infosys | IT | 23456789 | dhanalakshmi@gmail.com | 16-10-1996 |

| 7 | Mahesh | M | 75000 | TCS | Marketing | 2354321 | Mahesh@gmail.com | 17-8-1997 |

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

3 rows in set (0.06 sec)

mysql> select \* from employee\_details order by emp\_name;

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 5 | Dhanalakshmi | F | 10000 | Infosys | IT | 23456789 | dhanalakshmi@gmail.com | 16-10-1996 |

| 7 | Mahesh | M | 75000 | TCS | Marketing | 2354321 | Mahesh@gmail.com | 17-8-1997 |

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 |

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 |

| 6 | vamsi | M | 65000 | LTI | HR | 2377689 | vamsi@gmail.com | 16-8-1997 |

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 |

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

7 rows in set (0.10 sec)

mysql> select \* from employee\_details order by emp\_salary;

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 5 | Dhanalakshmi | F | 10000 | Infosys | IT | 23456789 | dhanalakshmi@gmail.com | 16-10-1996 |

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 |

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 |

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 |

| 6 | vamsi | M | 65000 | LTI | HR | 2377689 | vamsi@gmail.com | 16-8-1997 |

| 7 | Mahesh | M | 75000 | TCS | Marketing | 2354321 | Mahesh@gmail.com | 17-8-1997 |

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

7 rows in set (0.00 sec)

mysql> select \* from employee\_details order by emp\_name desc;

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 |

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 |

| 6 | vamsi | M | 65000 | LTI | HR | 2377689 | vamsi@gmail.com | 16-8-1997 |

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 |

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 |

| 7 | Mahesh | M | 75000 | TCS | Marketing | 2354321 | Mahesh@gmail.com | 17-8-1997 |

| 5 | Dhanalakshmi | F | 10000 | Infosys | IT | 23456789 | dhanalakshmi@gmail.com | 16-10-1996 |

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

7 rows in set (0.00 sec)

mysql> select \* from employee\_details order by emp\_salary desc;

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 7 | Mahesh | M | 75000 | TCS | Marketing | 2354321 | Mahesh@gmail.com | 17-8-1997 |

| 6 | vamsi | M | 65000 | LTI | HR | 2377689 | vamsi@gmail.com | 16-8-1997 |

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 |

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 |

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 |

| 5 | Dhanalakshmi | F | 10000 | Infosys | IT | 23456789 | dhanalakshmi@gmail.com | 16-10-1996 |

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

7 rows in set (0.00 sec)

mysql> select \* from employee\_details where emp\_salary >50000 and emp\_department='IT';

Empty set (0.00 sec)

mysql> select \* from employee\_details where emp\_salary > 20000 and emp\_department='IT';

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth |

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

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 |

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 |

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

3 rows in set (0.00)sec

mysql> alter table employee\_details add column(city varchar(50));

Query OK, 0 rows affected (0.89 sec)

Records: 0 Duplicates: 0 Warnings: 0

UPDATE `java\_batch4`.`employee\_details` SET `city` = 'Hyderabad' WHERE (`emp\_id` = '1');

UPDATE `java\_batch4`.`employee\_details` SET `city` = 'Guntur' WHERE (`emp\_id` = '2');

UPDATE `java\_batch4`.`employee\_details` SET `city` = 'Vijayawada' WHERE (`emp\_id` = '3');

UPDATE `java\_batch4`.`employee\_details` SET `city` = 'Vishakapatnam' WHERE (`emp\_id` = '4');

UPDATE `java\_batch4`.`employee\_details` SET `city` = 'bangalore' WHERE (`emp\_id` = '5');

UPDATE `java\_batch4`.`employee\_details` SET `city` = 'bangalore' WHERE (`emp\_id` = '6');

UPDATE `java\_batch4`.`employee\_details` SET `city` = 'Hyderabad' WHERE (`emp\_id` = '7');

select \* from employee\_details;

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth | city |

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

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 | Hyderabad |

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 | Guntur |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 | Vijayawada |

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 | Vishakapatnam |

| 5 | Dhanalakshmi | F | 10000 | Infosys | IT | 23456789 | dhanalakshmi@gmail.com | 16-10-1996 | bangalore |

| 6 | vamsi | M | 65000 | LTI | HR | 2377689 | vamsi@gmail.com | 16-8-1997 | bangalore |

| 7 | Mahesh | M | 75000 | TCS | Marketing | 2354321 | Mahesh@gmail.com | 17-8-1997 | Hyderabad |

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

7 rows in set (0.00 sec)

mysql> select \* from employee\_details limit 1;

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth | city |

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

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 | Hyderabad |

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

1 row in set (0.06 sec)

mysql> select \* from employee\_details limit 2;

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth | city |

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

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 | Hyderabad |

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 | Guntur |

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

2 rows in set (0.00 sec)

mysql> select \* from employee\_details limit 3;

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth | city |

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

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 | Hyderabad |

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 | Guntur |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 | Vijayawada |

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

3 rows in set (0.00 sec)

mysql> select \* from employee\_details limit 4;

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth | city |

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

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 | Hyderabad |

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 | Guntur |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 | Vijayawada |

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 | Vishakapatnam |

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

4 rows in set (0.00 sec)

mysql> select \* from employee\_details where emp\_department='IT' limit 4;

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth | city |

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

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 | Hyderabad |

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 | Guntur |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 | Vijayawada |

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 | Vishakapatnam |

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

4 rows in set (0.05 sec)

mysql> select \* from employee\_details where emp\_department='IT' limit 2;

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth | city |

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

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 | Hyderabad |

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 | Guntur |

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

2 rows in set (0.00 sec)

mysql> select count(emp\_id) from employee\_details;

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

| count(emp\_id) |

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

| 7 |

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

1 row in set (0.14 sec)

mysql> select count(emp\_id), city from employee\_details group by city;

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

| count(emp\_id) | city |

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

| 2 | Hyderabad |

| 1 | Guntur |

| 1 | Vijayawada |

| 1 | Vishakapatnam |

| 2 | bangalore |

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

5 rows in set (0.07 sec)

mysql> select count(emp\_id), emp\_department from employee\_details group by emp\_department;

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

| count(emp\_id) | emp\_department |

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

| 5 | IT |

| 1 | HR |

| 1 | Marketing |

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

3 rows in set (0.00 sec)

**mysql> select city, max(emp\_salary) from employee\_details group by city;**

**+---------------+-----------------+**

**| city | max(emp\_salary) |**

**+---------------+-----------------+**

**| Hyderabad | 75000 |**

**| Guntur | 30000 |**

**| Vijayawada | 25000 |**

**| Vishakapatnam | 15000 |**

**| bangalore | 65000 |**

**+---------------+-----------------+**

**5 rows in set (0.03 sec)**

**25/01/22**

mysql> select \* from employee\_details;

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth | city |

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

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 | Hyderabad |

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 | Guntur |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 | Vijayawada |

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 | Vishakapatnam |

| 5 | Dhanalakshmi | F | 10000 | Infosys | IT | 23456789 | dhanalakshmi@gmail.com | 16-10-1996 | bangalore |

| 6 | vamsi | M | 65000 | LTI | HR | 2377689 | vamsi@gmail.com | 16-8-1997 | bangalore |

| 7 | Mahesh | M | 75000 | TCS | Marketing | 2354321 | Mahesh@gmail.com | 17-8-1997 | Hyderabad |

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

7 rows in set (0.01 sec)

mysql> select emp\_salary, city, emp\_name from employee\_details where emp\_salary = (select max(emp\_salary) from employee\_details where city = 'Guntur') and city = 'Guntur';

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

| emp\_salary | city | emp\_name |

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

| 30000 | Guntur | pavan |

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

1 row in set (0.08 sec)

mysql> **select emp\_salary, city, emp\_name from employee\_details where emp\_salary = (select max(emp\_salary) from employee\_details where city = 'Hyderabad') and city = 'Hyderabad';**

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

| emp\_salary | city | emp\_name |

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

| 75000 | Hyderabad | Mahesh |

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

1 row in set (0.00 sec)

mysql> **select count(\*) from employee\_details;**

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

| count(\*) |

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

| 7 |

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

1 row in set (0.15 sec)

mysql**> select count(\*) from employee\_details where city = 'Hyderabad';**

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

| count(\*) |

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

| 2 |

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

1 row in set (0.00 sec)

**mysql> select sum(emp\_salary) from employee\_details where city = 'Hyderabad';**

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

| sum(emp\_salary) |

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

| 125000 |

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

1 row in set (0.04 sec)

**mysql> select sum(emp\_salary) from employee\_details where city = 'bangalore';**

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

| sum(emp\_salary) |

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

| 75000 |

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

1 row in set (0.00 sec)

mysql> **select max(emp\_salary) from employee\_details where city = 'Guntur';**

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

| max(emp\_salary) |

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

| 30000 |

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

1 row in set (0.00 sec)

mysql> **select min(emp\_salary) from employee\_details where city = 'Guntur';**

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

| min(emp\_salary) |

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

| 30000 |

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

1 row in set (0.00 sec)

mysql> **select min(emp\_salary) from employee\_details;**

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

| min(emp\_salary) |

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

| 10000 |

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

1 row in set (0.00 sec)

mysql> **select avg(emp\_salary) from employee\_details;**

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

| avg(emp\_salary) |

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

| 38571.4286 |

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

1 row in set (0.06 sec)

mysql> select city from employee\_details;

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

| city |

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

| Hyderabad |

| Guntur |

| Vijayawada |

| Vishakapatnam |

| bangalore |

| bangalore |

| Hyderabad |

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

7 rows in set (0.00 sec)

**mysql> select distinct city from employee\_details;**

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

| city |

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

| Hyderabad |

| Guntur |

| Vijayawada |

| Vishakapatnam |

| bangalore |

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

5 rows in set (0.00 sec)

**mysql> alter table employee\_details modify column emp\_id int auto\_increment;**

Query OK, 7 rows affected (2.29 sec)

Records: 7 Duplicates: 0 Warnings: 0

**mysql> insert into employee\_details(emp\_name,emp\_gender,emp\_salary,emp\_company,emp\_department,emp\_phone,emp\_email,emp\_date\_of\_birth,city)values('vasu', 'M', 65000.00, 'LTI', 'HR', 77377689, 'vasu@gmail.com', '16-10-1998','Guntur');**

Query OK, 1 row affected (0.10 sec)

mysql> select \* from employee\_details;

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth | city |

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

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 | Hyderabad |

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 | Guntur |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 | Vijayawada |

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 | Vishakapatnam |

| 5 | Dhanalakshmi | F | 10000 | Infosys | IT | 23456789 | dhanalakshmi@gmail.com | 16-10-1996 | bangalore |

| 6 | vamsi | M | 65000 | LTI | HR | 2377689 | vamsi@gmail.com | 16-8-1997 | bangalore |

| 7 | Mahesh | M | 75000 | TCS | Marketing | 2354321 | Mahesh@gmail.com | 17-8-1997 | Hyderabad |

| 8 | vasu | M | 65000 | LTI | HR | 77377689 | vasu@gmail.com | 16-10-1998 | Guntur |

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

8 rows in set (0.00 sec)

**mysql> select distinct city as city\_name from employee\_details;**

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

| city\_name |

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

| Hyderabad |

| Guntur |

| Vijayawada |

| Vishakapatnam |

| bangalore |

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

5 rows in set (0.00 sec)

**26/01/23**

mysql> create table person(person\_id int primary key, person\_name varchar(50) not null, city varchar(50) not null, mobile\_number bigint unique);

Query OK, 0 rows affected (3.45 sec)

mysql> create table orders(order\_id int primary key, item\_name varchar(50) not null, quantity int not null, person\_id int, foreign key(person\_id) references person(person\_id));

Query OK, 0 rows affected (0.53 sec)

mysql> select \* from person;

Empty set (0.17 sec)

mysql> select \* from orders;

Empty set (0.12 sec)

mysql> insert into person(person\_id,person\_name, city, mobile\_number)values(1,'Naresh','Hyderabad',9951288766);

Query OK, 1 row affected (0.28 sec)

mysql> insert into orders values(1,'Mobile',1,1);

Query OK, 1 row affected (0.05 sec)

mysql> select \* from person;

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

| person\_id | person\_name | city | mobile\_number |

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

| 1 | Naresh | Hyderabad | 9951288766 |

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

1 row in set (0.00 sec)

mysql> select \* from orders;

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

| order\_id | item\_name | quantity | person\_id |

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

| 1 | Mobile | 1 | 1 |

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

1 row in set (0.00 sec)

mysql> create table address(address\_id int primary key, address1 varchar(100) not null, address2 varchar(100) not null, state varchar(50) not null, city varchar(50) not null, country varchar(50) not null, pincode int not null, person\_id int, foreign key(person\_id) references person(person\_id));

Query OK, 0 rows affected (0.75 sec)

mysql> select \* from address;

Empty set (0.10 sec)

mysql> insert into address values(1,'flat no 1005','tualisaim','Telegana','Hyderabad','India',500075,1);

Query OK, 1 row affected (0.08 sec)

mysql> select \* from address;

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

| address\_id | address1 | address2 | state | city | country | pincode | person\_id |

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

| 1 | flat no 1005 | tualisaim | Telegana | Hyderabad | India | 500075 | 1 |

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

1 row in set (0.00 sec)

**How to create foreign key in the existing table?**

**mysql> create table b(id int primary key, name varchar(50) not null,person\_id int);**

**Query OK, 0 rows affected (0.18 sec)**

**mysql> alter table b add foreign key(person\_id) references person(person\_id);**

**Query OK, 0 rows affected (1.06 sec)**

**Records: 0 Duplicates: 0 Warnings: 0**

**27/01/23 28/07/2023**

mysql> with tempEmployeeDetails AS

-> (select max(emp\_salary) as salary, city

-> from employee\_details group by city)

-> select emp\_salary, emp\_name, city

-> from employee\_details where city in

-> (select city from tempEmployeeDetails)

-> and emp\_salary

-> in(select salary from tempEmployeeDetails);

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

| emp\_salary | emp\_name | city |

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

| 25000 | Veerababu | Vijayawada |

| 15000 | Vasavi | Vishakapatnam |

| 65000 | vamsi | bangalore |

| 75000 | Mahesh | Hyderabad |

| 65000 | vasu | Guntur |

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

mysql> insert into person values(2,'Mahesh','hyderabad',776654321);

Query OK, 1 row affected (0.47 sec)

mysql> insert into person values(3,'pavan','hyderabad',766543218);

Query OK, 1 row affected (0.64 sec)

mysql> insert into person values(4,'vasavi','vizag',78665290);

Query OK, 1 row affected (0.10 sec)

mysql> insert into person values(5,'dhanalakshmi','piduguralla',689976090);

Query OK, 1 row affected (0.09 sec)

mysql> select \* from orders;

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

| order\_id | item\_name | quantity | person\_id |

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

| 1 | Mobile | 1 | 1 |

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

1 row in set (0.17 sec)

mysql> insert into orders values(2, Laptop,1,2);

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

mysql> insert into orders values(2,'Laptop',1,2);

Query OK, 1 row affected (0.12 sec)

mysql> select \* from person inner join orders on person.person\_id=orders.person\_id;

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

| person\_id | person\_name | city | mobile\_number | order\_id | item\_name | quantity | person\_id |

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

| 1 | Naresh | Hyderabad | 9951288766 | 1 | Mobile | 1 | 1 |

| 2 | Mahesh | hyderabad | 776654321 | 2 | Laptop | 1 | 2 |

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

2 rows in set (0.17 sec)

mysql> select \* from person inner join orders inner join address on person.person\_id=orders.person\_id and address.person\_id = person.person\_id;

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

| person\_id | person\_name | city | mobile\_number | order\_id | item\_name | quantity | person\_id | address\_id | address1 | address2 | state | city | country | pincode | person\_id |

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

| 1 | Naresh | Hyderabad | 9951288766 | 1 | Mobile | 1 | 1 | 1 | flat no 1005 | tualisaim | Telegana | Hyderabad | India | 500075 | 1 |

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

1 row in set (0.20 sec)

mysql> select \*

-> from person p left join orders o

-> on p.person\_Id = o.person\_Id ;

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

| person\_id | person\_name | city | mobile\_number | order\_id | item\_name | quantity | person\_id |

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

| 1 | Naresh | Hyderabad | 9951288766 | 1 | Mobile | 1 | 1 |

| 2 | Mahesh | hyderabad | 776654321 | 2 | Laptop | 1 | 2 |

| 3 | pavan | hyderabad | 766543218 | NULL | NULL | NULL | NULL |

| 4 | vasavi | vizag | 78665290 | NULL | NULL | NULL | NULL |

| 5 | dhanalakshmi | piduguralla | 689976090 | NULL | NULL | NULL | NULL |

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

5 rows in set (0.14 sec)

mysql> select \* from address;

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

| address\_id | address1 | address2 | state | city | country | pincode | person\_id |

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

| 1 | flat no 1005 | tualisaim | Telegana | Hyderabad | India | 500075 | 1 |

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

1 row in set (0.00 sec)

mysql> select \* from person p right join orders o on p.person\_Id = o.person\_Id;

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

| person\_id | person\_name | city | mobile\_number | order\_id | item\_name | quantity | person\_id |

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

| 1 | Naresh | Hyderabad | 9951288766 | 1 | Mobile | 1 | 1 |

| 2 | Mahesh | hyderabad | 776654321 | 2 | Laptop | 1 | 2 |

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

2 rows in set (0.00 sec)

mysql> select \* from person p left join orders o on p.person\_Id = o.person\_Id;

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

| person\_id | person\_name | city | mobile\_number | order\_id | item\_name | quantity | person\_id |

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

| 1 | Naresh | Hyderabad | 9951288766 | 1 | Mobile | 1 | 1 |

| 2 | Mahesh | hyderabad | 776654321 | 2 | Laptop | 1 | 2 |

| 3 | pavan | hyderabad | 766543218 | NULL | NULL | NULL | NULL |

| 4 | vasavi | vizag | 78665290 | NULL | NULL | NULL | NULL |

| 5 | dhanalakshmi | piduguralla | 689976090 | NULL | NULL | NULL | NULL |

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

5 rows in set (0.00 sec)

mysql> select \* from person cross join orders;

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

| person\_id | person\_name | city | mobile\_number | order\_id | item\_name | quantity | person\_id |

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

| 1 | Naresh | Hyderabad | 9951288766 | 2 | Laptop | 1 | 2 |

| 1 | Naresh | Hyderabad | 9951288766 | 1 | Mobile | 1 | 1 |

| 2 | Mahesh | hyderabad | 776654321 | 2 | Laptop | 1 | 2 |

| 2 | Mahesh | hyderabad | 776654321 | 1 | Mobile | 1 | 1 |

| 3 | pavan | hyderabad | 766543218 | 2 | Laptop | 1 | 2 |

| 3 | pavan | hyderabad | 766543218 | 1 | Mobile | 1 | 1 |

| 4 | vasavi | vizag | 78665290 | 2 | Laptop | 1 | 2 |

| 4 | vasavi | vizag | 78665290 | 1 | Mobile | 1 | 1 |

| 5 | dhanalakshmi | piduguralla | 689976090 | 2 | Laptop | 1 | 2 |

| 5 | dhanalakshmi | piduguralla | 689976090 | 1 | Mobile | 1 | 1 |

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

10 rows in set (0.00 sec)

mysql> select emp\_gender, emp\_id, emp\_name from employee\_details

-> union

-> select person\_name, person\_id,mobile\_number from person;

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

| emp\_gender | emp\_id | emp\_name |

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

| M | 1 | nareshkambala |

| M | 2 | pavan |

| M | 3 | Veerababu |

| F | 4 | Vasavi |

| F | 5 | Dhanalakshmi |

| M | 6 | vamsi |

| M | 7 | Mahesh |

| M | 8 | vasu |

| Naresh | 1 | 9951288766 |

| Mahesh | 2 | 776654321 |

| pavan | 3 | 766543218 |

| vasavi | 4 | 78665290 |

| dhanalakshmi | 5 | 689976090 |

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

13 rows in set (0.07 sec)

**mysql> select emp\_id, emp\_name from employee\_details**

**-> union**

**-> select person\_name, person\_id from person;**

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

| emp\_id | emp\_name |

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

| 1 | nareshkambala |

| 2 | pavan |

| 3 | Veerababu |

| 4 | Vasavi |

| 5 | Dhanalakshmi |

| 6 | vamsi |

| 7 | Mahesh |

| 8 | vasu |

| Naresh | 1 |

| Mahesh | 2 |

| pavan | 3 |

| vasavi | 4 |

| dhanalakshmi | 5 |

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

13 rows in set (0.00 sec)

**mysql> select emp\_id, emp\_name from employee\_details**

**-> union all**

**-> select person\_id, person\_name from person;**

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

| emp\_id | emp\_name |

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

| 1 | nareshkambala |

| 2 | pavan |

| 3 | Veerababu |

| 4 | Vasavi |

| 5 | Dhanalakshmi |

| 6 | vamsi |

| 7 | Mahesh |

| 8 | vasu |

| 1 | Naresh |

| 2 | Mahesh |

| 3 | pavan |

| 4 | vasavi |

| 5 | dhanalakshmi |

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

13 rows in set (0.00 sec)

mysql> select \* from employee\_details order by

-> (case

-> when city is not null then city

-> else emp\_company END);

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

| emp\_id | emp\_name | emp\_gender | emp\_salary | emp\_company | emp\_department | emp\_phone | emp\_email | emp\_date\_of\_birth | city |

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

| 5 | Dhanalakshmi | F | 10000 | Infosys | IT | 23456789 | dhanalakshmi@gmail.com | 16-10-1996 | bangalore |

| 6 | vamsi | M | 65000 | LTI | HR | 2377689 | vamsi@gmail.com | 16-8-1997 | bangalore |

| 2 | pavan | M | 30000 | IBM | IT | 9786523 | pavan@gmail.com | 18-12-1994 | Guntur |

| 8 | vasu | M | 65000 | LTI | HR | 77377689 | vasu@gmail.com | 16-10-1998 | Guntur |

| 1 | nareshkambala | M | 50000 | IBM | IT | 9988562 | javabatch4@gmail.com | 16-07-1992 | Hyderabad |

| 7 | Mahesh | M | 75000 | TCS | Marketing | 2354321 | Mahesh@gmail.com | 17-8-1997 | Hyderabad |

| 3 | Veerababu | M | 25000 | Microsoft | IT | 4555668 | veeru@gmail.com | 15-11-1992 | Vijayawada |

| 4 | Vasavi | F | 15000 | Amazon | IT | 98765432 | vasavi@gmail.com | 16-12-1999 | Vishakapatnam |

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

8 rows in set (0.05 sec)