**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)