//Name -Prerana Gajare Roll no-SI41 Class-SEIT

2 a) Implementation of relational operators in SQL

// To show databases

mysql> show databases;

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

| Database |

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

| class |

| emp |

| employee |

| information\_schema |

| mysql |

| performance\_schema |

| student |

| sys |

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

8 rows in set (0.00 sec)

// Use employee database

mysql> use employee; Database changed

// To show databases in use

mysql> select database();

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

| database() |

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

| employee |

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

1 row in set (0.00 sec)

// To show tables

mysql> show tables;

Empty set (0.02 sec)

// Create table name employee

mysql> create table employee(eid int primary key,ename varchar(10),doj date,toj time,city varchar(10),salary int);

Query OK, 0 rows affected (0.02 sec)

// describing table employee

mysql> desc employee;

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

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

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

| eid | int | NO | PRI | NULL | |

| ename | varchar(10) | YES | | NULL | |

| doj | date | YES | | NULL | |

| toj | time | YES | | NULL | |

| city | varchar(10) | YES | | NULL | |

| salary | int | YES | | NULL | |

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

6 rows in set (0.00 sec)

// Inserting data into the table employee

mysql> insert into employee values(101,"Abhi",'2021-01-27','08:15:32',"pune",10000);

Query OK, 1 row affected (0.01 sec)

// Inserting data into the table employee

mysql> insert into employee values(102,"Bhim",'2021-0615','09:05:10',"nagpur",15000),(103,"Caira",'2021-09-

04','08:30:20',"pune",20000),(104,"Dev",'2021-12-

22','09:15:30',"mumbai",50000),(105,"Esha",'2022-01-17','08:42:25',"pune",10000);

Query OK, 4 rows affected (0.00 sec)

Records: 4 Duplicates: 0 Warnings: 0

//Display all the records

mysql> select \* from employee;

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

| eid | ename | doj | toj | city | salary |

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

| 101 | Abhi | 2021-01-27 | 08:15:32 | pune | 10000 |

| 102 | Bhim | 2021-06-15 | 09:05:10 | nagpur | 15000 |

| 103 | Caira | 2021-09-04 | 08:30:20 | pune | 20000 |

| 104 | Dev | 2021-12-22 | 09:15:30 | mumbai | 50000 |

| 105 | Esha | 2022-01-17 | 08:42:25 | pune | 10000 |

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

5 rows in set (0.00 sec)

// Inserting data into the table employee

mysql> insert into employee values(106,"Fara",'2022-02-1','08:15:32',"pune",10000);

Query OK, 1 row affected (0.00 sec)

//Relational operators

//1)Equal to operator

mysql> select \* from employee

-> where salary=10000;

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

| eid | ename | doj | toj | city | salary |

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

| 101 | Abhi | 2021-01-27 | 08:15:32 | pune | 10000 | | 105 | Esha | 2022-01-17 | 08:42:25 | pune | 10000 |

| 106 | Fara | 2022-02-01 | 08:15:32 | pune | 10000 |

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

3 rows in set (0.00 sec)

//2) Greater than operator

mysql> select \* from employee

-> where salary > 15000;

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

| eid | ename | doj | toj | city | salary |

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

| 103 | Caira | 2021-09-04 | 08:30:20 | pune | 20000 |

| 104 | Dev | 2021-12-22 | 09:15:30 | mumbai | 50000 |

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

1. rows in set (0.00 sec)

//3) Less than operator

mysql> select \* from employee

-> where salary<20000;

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

| eid | ename | doj | toj | city | salary |

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

| 101 | Abhi | 2021-01-27 | 08:15:32 | pune | 10000 |

| 102 | Bhim | 2021-06-15 | 09:05:10 | nagpur | 15000 |

| 105 | Esha | 2022-01-17 | 08:42:25 | pune | 10000 |

| 106 | Fara | 2022-02-01 | 08:15:32 | pune | 10000 |

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

4 rows in set (0.00 sec)

//4)Greater than equal to operator

mysql> select \* from employee

-> where salary >=15000;

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

| eid | ename | doj | toj | city | salary |

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

| 102 | Bhim | 2021-06-15 | 09:05:10 | nagpur | 15000 |

| 103 | Caira | 2021-09-04 | 08:30:20 | pune | 20000 |

| 104 | Dev | 2021-12-22 | 09:15:30 | mumbai | 50000 |

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

3 rows in set (0.00 sec)

//5)Less than equal to operator

mysql> select \* from employee

-> where salary <=15000;

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

| eid | ename | doj | toj | city | salary |

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

| 101 | Abhi | 2021-01-27 | 08:15:32 | pune | 10000 |

| 102 | Bhim | 2021-06-15 | 09:05:10 | nagpur | 15000 |

| 105 | Esha | 2022-01-17 | 08:42:25 | pune | 10000 |

| 106 | Fara | 2022-02-01 | 08:15:32 | pune | 10000 |

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

4 rows in set (0.00 sec)

//6)Not Equal to operator

mysql> select \* from employee

-> where salary!=10000;

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

| eid | ename | doj | toj | city | salary |

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

| 102 | Bhim | 2021-06-15 | 09:05:10 | nagpur | 15000 |

| 103 | Caira | 2021-09-04 | 08:30:20 | pune | 20000 |

| 104 | Dev | 2021-12-22 | 09:15:30 | mumbai | 50000 |

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

1. rows in set (0.00 sec)