**SQL Queries**

**Problem Statement:**

**1. Create table Student with schema (roll\_no, name, division, branch, city, marks)**

**mysql> create table student(Rollno int, name varchar(50), division char, branch varchar(20), city varchar(40), marks float);**

Query OK, 0 rows affected (0.07 sec)

**2. Insert 10 records to the table students**

**mysql> insert into student values(1, "Zulfa", "A", "Computer", "Pune", "100");**

Query OK, 1 row affected (0.01 sec)

**mysql> insert into student values(2, "Alex", "B", "ENTC", "Mumbai", "70");**

Query OK, 1 row affected (0.01 sec)

**mysql> insert into student values(3, "Amar", "D", "Mechanical", "Chennai", 80);**

Query OK, 1 row affected (0.01 sec)

**mysql> insert into student values(4, "Raju", "C", "Civil", "Kolkata", 50);**

Query OK, 1 row affected (0.01 sec)

**mysql> insert into student values(5, "Karan", "A", "Computer", "Bihar", 100);**

Query OK, 1 row affected (0.01 sec)

**mysql> insert into student values(6, "Geeta", "B", "ENTC", "Guwahati", 95);**

Query OK, 1 row affected (0.01 sec)

**mysql> insert into student values(7, "Priya", "D", "Computer", "Bangalore", 98);**

Query OK, 1 row affected (0.01 sec)

**mysql> insert into student values(8, "Riya", "A", "Computer", "Mysore", 97);**

Query OK, 1 row affected (0.01 sec)

**mysql> insert into student values(9, "Aditya", "B", "Mechanical", "Kerala", 91);**

Query OK, 1 row affected (0.01 sec)

**mysql> insert into student values(10, "Akash", "C", "Civil", "Assam", 94);**

Query OK, 1 row affected (0.01 sec)

**3. List all the student names with their corresponding city**

**Ans:**

**mysql> select name, city from student;**

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

| name | city |

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

| Zulfa | Pune |

| Alex | Mumbai |

| Amar | Chennai |

| Raju | Kolkata |

| Karan | Bihar |

| Geeta | Guwahati |

| Priya | Bangalore |

| Riya | Mysore |

| Aditya | Kerala |

| Akash | Assam |

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

10 rows in set (0.00 sec)

**4. List all the distinct names of the students**

**mysql> select distinct name from student;**

+--------+

| name |

+--------+

| Zulfa |

| Alex |

| Amar |

| Raju |

| Karan |

| Geeta |

| Priya |

| Riya |

| Aditya |

| Akash |

+--------+

10 rows in set (0.00 sec)

**5. List all the records of the students with all the attributes**

**mysql> select \* from Student;**

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

| Rollno | name | division | branch | city | marks |

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

| 1 | Zulfa | A | Computer | Pune | 100 |

| 2 | Alex | B | ENTC | Mumbai | 70 |

| 3 | Amar | D | Mechanical | Chennai | 80 |

| 4 | Raju | C | Civil | Kolkata | 50 |

| 5 | Karan | A | Computer | Bihar | 100 |

| 6 | Geeta | B | ENTC | Guwahati | 95 |

| 7 | Priya | D | Computer | Bangalore | 98 |

| 8 | Riya | A | Computer | Mysore | 97 |

| 9 | Aditya | B | Mechanical | Kerala | 91 |

| 10 | Akash | C | Civil | Assam | 94 |

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

10 rows in set (0.00 sec)

**6. List all the students whose marks are greater than 75**

**mysql> select \* from Student where marks> 75;**

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

| Rollno | name | division | branch | city | marks |

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

| 1 | Zulfa | A | Computer | Pune | 100 |

| 3 | Amar | D | Mechanical | Chennai | 80 |

| 5 | Karan | A | Computer | Bihar | 100 |

| 6 | Geeta | B | ENTC | Guwahati | 95 |

| 7 | Priya | D | Computer | Bangalore | 98 |

| 8 | Riya | A | Computer | Mysore | 97 |

| 9 | Aditya | B | Mechanical | Kerala | 91 |

| 10 | Akash | C | Civil | Assam | 94 |

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

8 rows in set (0.00 sec)

**7. List all the students whose name starts with the alphabet 'S**

**mysql> select \* from student where name like "S%";**

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

| Rollno | name | division | branch | city | marks |

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

| 11 | Shubham | B | Computer | Pune | 55 |

| 12 | Sara | A | IT | Peru | 58 |

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

2 rows in set (0.00 sec)

**8. List all the students whose marks are in the range of 50 to 60**

**mysql> select \* from student where marks between 50 and 60;**

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

| Rollno | name | division | branch | city | marks |

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

| 4 | Raju | C | Civil | Kolkata | 50 |

| 11 | Shubham | B | Computer | Pune | 55 |

| 12 | Sara | A | IT | Peru | 58 |

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

3 rows in set (0.00 sec)

**9. List all the students whose branch is 'computer and city is 'Pune'**

**mysql> select \* from student where branch="Computer" and City="Pune";**

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

| Rollno | name | division | branch | city | marks |

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

| 1 | Zulfa | A | Computer | Pune | 100 |

| 11 | Shubham | B | Computer | Pune | 55 |

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

2 rows in set (0.00 sec)

**10. Update the branch of a student to IT whose roll number is 9**

**mysql> update student set branch="IT" where rollno = 9;**

Query OK, 1 row affected (0.02 sec)

Rows matched: 1 Changed: 1 Warnings: 0

**11. Delete the student records whose division is 'BE’**

**mysql> delete from student where branch= "BE";**

Query OK, 0 rows affected (0.00 sec)

**12. Create another table TE\_Students with Schema( roll\_no, name)**

**mysql> create table TE\_Student(Rollno int, name varchar(50));**

Query OK, 0 rows affected (0.07 sec)

**mysql> insert into TE\_Student value (15, "Ram");**

Query OK, 1 row affected (0.01 sec)

**mysql> insert into TE\_Student value (16, "Vikrant");**

Query OK, 1 row affected (0.01 sec)

**mysql> insert into TE\_Student value (17, "Kunal");**

Query OK, 1 row affected (0.01 sec)

**mysql> insert into TE\_Student value (18, "Krish");**

Query OK, 1 row affected (0.01 sec)

**13) List all the roll numbers unionly in the relations Student and TE\_Students**

**mysql> select rollno from Student union Select rollno from TE\_Student;**

+--------+

| rollno |

+--------+

| 1 |

| 2 |

| 3 |

| 4 |

| 5 |

| 6 |

| 7 |

| 8 |

| 9 |

| 10 |

| 11 |

| 12 |

| 13 |

| 15 |

| 16 |

| 17 |

| 18 |

+--------+

17 rows in set (0.00 sec)

**14. Display name of all the students belonging to relation Student in Upper case**

**mysql> select UPPER(name) from student;**

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

| UPPER(name) |

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

| ZULFA |

| ALEX |

| AMAR |

| RAJU |

| KARAN |

| GEETA |

| PRIYA |

| RIYA |

| ADITYA |

| AKASH |

| SHUBHAM |

| SARA |

| AMIR |

| AMIR |

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

14 rows in set (0.00 sec)

**15. Display the binary and hex equivalent of marks for all the students belonging to Student relation**

**mysql> select binary marks from Student;**

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

| binary marks |

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

| 0x313030 |

| 0x3730 |

| 0x3830 |

| 0x3530 |

| 0x313030 |

| 0x3935 |

| 0x3938 |

| 0x3937 |

| 0x3931 |

| 0x3934 |

| 0x3535 |

| 0x3538 |

| 0x3732 |

| 0x3732 |

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

14 rows in set, 1 warning (0.00 sec)

**mysql> select hex(marks) from Student;**

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

| hex(marks) |

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

| 64 |

| 46 |

| 50 |

| 32 |

| 64 |

| 5F |

| 62 |

| 61 |

| 5B |

| 5E |

| 37 |

| 3A |

| 48 |

| 48 |

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

14 rows in set (0.00 sec)