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
mysgl> 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)
mysgl> 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 |
| +-----+
```

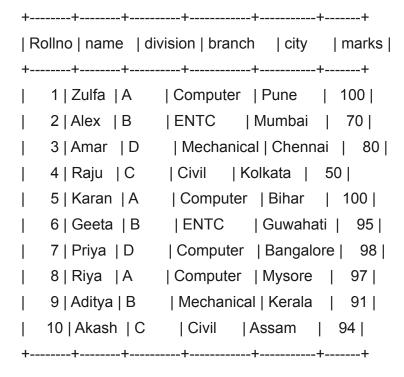
4. List all the distinct names of the students

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;



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

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)
```

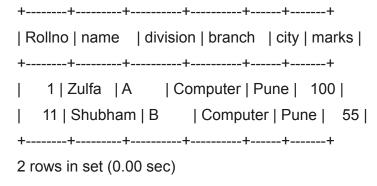
8. List all the students whose marks are in the range of 50 to 60

mysgl> 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";



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)

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;

mysql> insert into TE_Student value (18, "Krish");

Query OK, 1 row affected (0.01 sec)

,	, - 4				
++					
rc	rollno				
++					
	1				
	2				
	3				
	4				
	5				
	6				
	7				
	8				
	9				

```
| 10 |
| 11 |
| 12 |
| 13 |
| 15 |
| 16 |
| 17 |
| 18 |
+-----+
```

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			
SHUBHA	λM		
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 se

14 rows in set, 1 warning (0.00 sec)

mysql> select hex(marks) from Student;

| 62 |

| 61 |

| 5B |

|5E |

| 37 |

14 rows in set (0.00 sec)