

SQL PRACTICAL ASSIGNMENT - 4

Activity 1:

Create a table STUDENT with under mentioned structure by using SQL Statement:

```
mysql> use mydb  
Database changed
```

Table Creation:

```
mysql> create table student(stdID int(4)primary key, stdName varchar(30) NOT NULL, sex varchar(6),  
Percentage int, SClass int, Sec varchar(1), Stream varchar(10), DOB Date);  
Query OK, 0 rows affected, 1 warning (0.06 sec)
```

Data Inserting:

```
mysql> insert into student values(1001, 'AKSHRA AGARWAL', 'FEMALE',  
70,11,'A','Science','1996-11-10');  
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into student values(1002, 'ANJANI SHARMA', 'FEMALE',  
75,11,'A','Commerce','1996-09-18');  
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into student values(1003, 'ANSHUL SAXENA', 'MALE', 78,11,'A','Commerce','1996-11-19');  
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into student values(1004, 'AISHWARYA SINGH', 'FEMALE',  
79,11,'A','Commerce','1996-11-1');  
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into student values(1005, 'AKRITI SAXENA', 'FEMALE', 76,11,'A','Commerce','1996-09-20');  
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into student values(1006, 'KHUSHI AGARWAL', 'FEMALE',  
77,11,'A','Commerce','2003-09-14');  
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into student values(1007, 'MAAHI AGARWAL', 'FEMALE', 74,11,'A','Science','1997-04-21');  
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into student values(1008, 'MITALI GUPTA', 'FEMALE', 78,12,'A','Science','1997-11-26');  
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into student values(1009, 'NIKUNJ AGARWAL', 'MALE', 58,12,'A','Science','1997-7-12');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into student values(1010, 'PARKHI', 'FEMALE', 59,12,'A','Commerce','1997-12-20');  
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into student values (1011,'PARKHAR TIWARI','MALE',43,12,'A','Science','1997-4-22');  
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into student values (1012,'RAGHAV  
GANGWAR','MALE',58,12,'A','Commerce','1997-12-21');  
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into student values (1013,'SAHIL SARASWAT','MALE',57,12,'A','Commerce','1997-08-13');  
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into student values (1014,'SWATI MISHRA','FEMALE',98,11,'A','Science','1996-08-13');  
Query OK, 1 row affected (0.00 sec)
```

```
mysql> insert into student values (1015,'HARSH AGARWAL','MALE',58,11,'B','Science','2003-08-28');  
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into student values (1016,'HARSHIT KUMAR','MALE',98,11,'B','Science','2003-05-22');  
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into student values (1017,'JAHANVI KAPOOR','MALE',65,11,'B','Science','1997-01-10');  
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into student values (1018,'STUTI MISHRA','MALE',66,11,'C','Commerce','1996-01-10');  
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into student values (1019,'SURYANSH KUMAR  
AGARWAL','MALE',85,11,'C','Commerce','2007-08-22');  
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into student values (1020,'TANI RASTOGI','FEMALE',75,12,'C','Commerce','1998-01-15');  
Query OK, 1 row affected (0.02 sec)
```

```
mysql>  
mysql> insert into student values (1021,'TANISHK GUPTA','MALE',55,12,'C','Science','1998-04-11');  
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into student values (1022,'TANMAY AGARWAL','MALE',57,11,'C','Commerce','1998-06-28');  
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into student values (1023,'YASH SAXENA','MALE',79,11,'C','Science','1998-03-13');  
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into student values (1024,'YESH DUBEY','MALE',85,12,'C','Commerce','1998-04-03');  
Query OK, 1 row affected (0.02 sec)
```

Activity 2:

1. To display all the records from the STUDENT table.

```
mysql> select * from student;
```

| stdID | stdName | sex | Percentage | SClass | Sec | Stream | DOB |
|-------|------------------------|--------|------------|--------|-----|----------|------------|
| 1001 | AKSHRA AGARWAL | FEMALE | 70 | 11 | A | Science | 1996-11-10 |
| 1002 | ANJANI SHARMA | FEMALE | 75 | 11 | A | Commerce | 1996-09-18 |
| 1003 | ANSHUL SAXENA | MALE | 78 | 11 | A | Commerce | 1996-11-19 |
| 1004 | AISHWARYA SINGH | FEMALE | 79 | 11 | A | Commerce | 1996-11-01 |
| 1005 | AKRITI SAXENA | FEMALE | 76 | 11 | A | Commerce | 1996-09-20 |
| 1006 | KHUSHI AGARWAL | FEMALE | 77 | 11 | A | Commerce | 2003-09-14 |
| 1007 | MAAHI AGARWAL | FEMALE | 74 | 11 | A | Science | 1997-04-21 |
| 1008 | MITALI GUPTA | FEMALE | 78 | 12 | A | Science | 1997-11-26 |
| 1009 | NIKUNJ AGARWAL | MALE | 58 | 12 | A | Science | 1997-07-12 |
| 1010 | PARKHI | FEMALE | 59 | 12 | A | Commerce | 1997-12-20 |
| 1011 | PARKHAR TIWARI | MALE | 43 | 12 | A | Science | 1997-04-22 |
| 1012 | RAGHAV GANGWAR | MALE | 58 | 12 | A | Commerce | 1997-12-21 |
| 1013 | SAHIL SARASWAT | MALE | 57 | 12 | A | Commerce | 1997-08-13 |
| 1014 | SWATI MISHRA | FEMALE | 98 | 11 | A | Science | 1996-08-13 |
| 1015 | HARSH AGARWAL | MALE | 58 | 11 | B | Science | 2003-08-28 |
| 1016 | HARSHIT KUMAR | MALE | 98 | 11 | B | Science | 2003-05-22 |
| 1017 | JAHANVI KAPOOR | MALE | 65 | 11 | B | Science | 1997-01-10 |
| 1018 | STUTI MISHRA | MALE | 66 | 11 | C | Commerce | 1996-01-10 |
| 1019 | SURYANSH KUMAR AGARWAL | MALE | 85 | 11 | C | Commerce | 2007-08-22 |
| 1020 | TANI RASTOGI | FEMALE | 75 | 12 | C | Commerce | 1998-01-15 |
| 1021 | TANISHK GUPTA | MALE | 55 | 12 | C | Science | 1998-04-11 |
| 1022 | TANMAY AGARWAL | MALE | 57 | 11 | C | Commerce | 1998-06-28 |
| 1023 | YASH SAXENA | MALE | 79 | 11 | C | Science | 1998-03-13 |
| 1024 | YESH DUBEY | MALE | 85 | 12 | C | Commerce | 1998-04-03 |

24 rows in set (0.00 sec)

2. To display only name and date of birth from the table STUDENT.

```
mysql> select stdName,DOB from student;
```

| stdName | DOB |
|-----------------|------------|
| AKSHRA AGARWAL | 1996-11-10 |
| ANJANI SHARMA | 1996-09-18 |
| ANSHUL SAXENA | 1996-11-19 |
| AISHWARYA SINGH | 1996-11-01 |
| AKRITI SAXENA | 1996-09-20 |
| KHUSHI AGARWAL | 2003-09-14 |
| MAAHI AGARWAL | 1997-04-21 |
| MITALI GUPTA | 1997-11-26 |
| NIKUNJ AGARWAL | 1997-07-12 |

```
| PARKHI          | 1997-12-20 |
| PARKHAR TIWARI   | 1997-04-22 |
| RAGHAV GANGWAR   | 1997-12-21 |
| SAHIL SARASWAT   | 1997-08-13 |
| SWATI MISHRA     | 1996-08-13 |
| HARSH AGARWAL    | 2003-08-28 |
| HARSHIT KUMAR    | 2003-05-22 |
| JAHANVI KAPOOR   | 1997-01-10 |
| STUTI MISHRA     | 1996-01-10 |
| SURYANSH KUMAR AGARWAL | 2007-08-22 |
| TANI RASTOGI     | 1998-01-15 |
| TANISHK GUPTA    | 1998-04-11 |
| TANMAY AGARWAL   | 1998-06-28 |
| YASH SAXENA      | 1998-03-13 |
| YESH DUBEY       | 1998-04-03 |
+-----+-----+
24 rows in set (0.00 sec)
```

3. To display all students record where percentage is greater of equal to 80 FROM student table.

```
mysql> select * from student where percentage >=80;
+-----+-----+-----+-----+-----+-----+-----+
| stdID | stdName          | sex | Percentage | SClass | Sec | Stream | DOB      |
+-----+-----+-----+-----+-----+-----+-----+
| 1014 | SWATI MISHRA     | FEMALE | 98 | 11 | A | Science | 1996-08-13 |
| 1016 | HARSHIT KUMAR    | MALE | 98 | 11 | B | Science | 2003-05-22 |
| 1019 | SURYANSH KUMAR AGARWAL | MALE | 85 | 11 | C | Commerce | 2007-08-22 |
| 1024 | YESH DUBEY       | MALE | 85 | 12 | C | Commerce | 1998-04-03 |
+-----+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

4. To display student name, stream and percentage where percentage of student is more than 80

```
mysql> select stdName,Stream,percentage from student where percentage>80;
+-----+-----+-----+
| stdName          | Stream | percentage |
+-----+-----+-----+
| SWATI MISHRA     | Science | 98 |
| HARSHIT KUMAR    | Science | 98 |
| SURYANSH KUMAR AGARWAL | Commerce | 85 |
| YESH DUBEY       | Commerce | 85 |
+-----+-----+-----+
4 rows in set (0.00 sec)
```

5. To display all records of science students whose percentage is more than 75 form a student table.

```
mysql> select * from student where stream = 'Science' AND percentage > 75;
```

| stdID | stdName | sex | Percentage | SClass | Sec | Stream | DOB |
|-------|---------------|--------|------------|--------|-----|---------|------------|
| 1008 | MITALI GUPTA | FEMALE | 78 | 12 | A | Science | 1997-11-26 |
| 1014 | SWATI MISHRA | FEMALE | 98 | 11 | A | Science | 1996-08-13 |
| 1016 | HARSHIT KUMAR | MALE | 98 | 11 | B | Science | 2003-05-22 |
| 1023 | YASH SAXENA | MALE | 79 | 11 | C | Science | 1998-03-13 |

4 rows in set (0.00 sec)

Activity 3:

1. To display the STUDENT table structure.

```
mysql> desc student;
```

| Field | Type | Null | Key | Default | Extra |
|------------|-------------|------|-----|---------|-------|
| stdID | int | NO | PRI | NULL | |
| stdName | varchar(30) | NO | | NULL | |
| sex | varchar(6) | YES | | NULL | |
| Percentage | int | YES | | NULL | |
| SClass | int | YES | | NULL | |
| Sec | varchar(1) | YES | | NULL | |
| Stream | varchar(10) | YES | | NULL | |
| DOB | date | YES | | NULL | |

8 rows in set (0.02 sec)

2. To add a column (FIELD)in the STUDENT table,for example TeacherID as VARCHAR(20);

```
mysql> alter table student add TeacherId varchar(20);
Query OK, 0 rows affected (0.02 sec)
Records: 0 Duplicates: 0 Warnings: 0
```

3. Type the statement

```
mysql> desc student;
```

| Field | Type | Null | Key | Default | Extra |
|------------|-------------|------|-----|---------|-------|
| stdID | int | NO | PRI | NULL | |
| stdName | varchar(30) | NO | | NULL | |
| sex | varchar(6) | YES | | NULL | |
| Percentage | int | YES | | NULL | |
| SClass | int | YES | | NULL | |
| Sec | varchar(1) | YES | | NULL | |
| Stream | varchar(10) | YES | | NULL | |
| DOB | date | YES | | NULL | |

```
| TeacherId | varchar(20) | YES | | NULL | |
+-----+-----+-----+-----+-----+
9 rows in set (0.00 sec)
```

4. Type the statement and press enter key, note the new field that you have added as TeacherID

```
mysql> select * from student;
```

```
+-----+-----+-----+-----+-----+-----+-----+
| stdID | stdName          | sex | Percentage | SClass | Sec | Stream | DOB       | TeacherId |
+-----+-----+-----+-----+-----+-----+-----+
| 1001 | AKSHRA AGARWAL   | FEMALE | 70 | 11 | A | Science | 1996-11-10 | NULL |
| 1002 | ANJANI SHARMA    | FEMALE | 75 | 11 | A | Commerce | 1996-09-18 | NULL |
| 1003 | ANSHUL SAXENA    | MALE | 78 | 11 | A | Commerce | 1996-11-19 | NULL |
| 1004 | AISHWARYA SINGH  | FEMALE | 79 | 11 | A | Commerce | 1996-11-01 | NULL |
| 1005 | AKRITI SAXENA    | FEMALE | 76 | 11 | A | Commerce | 1996-09-20 | NULL |
| 1006 | KHUSHI AGARWAL   | FEMALE | 77 | 11 | A | Commerce | 2003-09-14 | NULL |
| 1007 | MAAHI AGARWAL    | FEMALE | 74 | 11 | A | Science | 1997-04-21 | NULL |
| 1008 | MITALI GUPTA     | FEMALE | 78 | 12 | A | Science | 1997-11-26 | NULL |
| 1009 | NIKUNJ AGARWAL   | MALE | 58 | 12 | A | Science | 1997-07-12 | NULL |
| 1010 | PARKHI           | FEMALE | 59 | 12 | A | Commerce | 1997-12-20 | NULL |
| 1011 | PARKHAR TIWARI   | MALE | 43 | 12 | A | Science | 1997-04-22 | NULL |
| 1012 | RAGHAV GANGWAR   | MALE | 58 | 12 | A | Commerce | 1997-12-21 | NULL |
| 1013 | SAHIL SARASWAT   | MALE | 57 | 12 | A | Commerce | 1997-08-13 | NULL |
| 1014 | SWATI MISHRA     | FEMALE | 98 | 11 | A | Science | 1996-08-13 | NULL |
| 1015 | HARSH AGARWAL    | MALE | 58 | 11 | B | Science | 2003-08-28 | NULL |
| 1016 | HARSHIT KUMAR    | MALE | 98 | 11 | B | Science | 2003-05-22 | NULL |
| 1017 | JAHANVI KAPOOR   | MALE | 65 | 11 | B | Science | 1997-01-10 | NULL |
| 1018 | STUTI MISHRA     | MALE | 66 | 11 | C | Commerce | 1996-01-10 | NULL |
| 1019 | SURYANSH KUMAR AGARWAL | MALE | 85 | 11 | C | Commerce | 2007-08-22 | NULL |
| 1020 | TANI RASTOGI     | FEMALE | 75 | 12 | C | Commerce | 1998-01-15 | NULL |
| 1021 | TANISHK GUPTA    | MALE | 55 | 12 | C | Science | 1998-04-11 | NULL |
| 1022 | TANMAY AGARWAL   | MALE | 57 | 11 | C | Commerce | 1998-06-28 | NULL |
| 1023 | YASH SAXENA      | MALE | 79 | 11 | C | Science | 1998-03-13 | NULL |
| 1024 | YESH DUBEY       | MALE | 85 | 12 | C | Commerce | 1998-04-03 | NULL |
+-----+-----+-----+-----+-----+-----+-----+
24 rows in set (0.00 sec)
```

5. To modify the TeacherID data type from character to integer.

```
mysql> alter table student modify TeacherId int;
```

```
Query OK, 24 rows affected (0.03 sec)
```

```
Records: 24 Duplicates: 0 Warnings: 0
```

```
mysql> desc student;
```

```
+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
```

```

+-----+-----+-----+-----+-----+
| stdID   | int    | NO | PRI | NULL |   |
| stdName | varchar(30) | NO |   | NULL |   |
| sex     | varchar(6) | YES |   | NULL |   |
| percentage | int    | YES |   | NULL |   |
| SClass  | int    | YES |   | NULL |   |
| Sec     | varchar(1) | YES |   | NULL |   |
| Stream  | varchar(10) | YES |   | NULL |   |
| DOB     | date    | YES |   | NULL |   |
| TeacherId | int    | YES |   | NULL |   |
+-----+-----+-----+-----+-----+
9 rows in set (0.00 sec)

```

Activity 4:

1. To Drop (Delete) a field from a table. For e.g you want to delete the TeacherID field.

```

mysql> alter table student drop TeacherId;
Query OK, 0 rows affected (0.01 sec)
Records: 0 Duplicates: 0 Warnings: 0

```

2. To subtract 5 from all students' percentage and display name and percentage.

```

mysql> select stdName,percentage -5 from student;

```

```

+-----+-----+
| stdName          | percentage -5 |
+-----+-----+
| AKSHRA AGARWAL   | 65 |
| ANJANI SHARMA    | 70 |
| ANSHUL SAXENA    | 73 |
| AISHWARYA SINGH  | 74 |
| AKRITI SAXENA    | 71 |
| KHUSHI AGARWAL   | 72 |
| MAAHI AGARWAL    | 69 |
| MITALI GUPTA     | 73 |
| NIKUNJ AGARWAL   | 53 |
| PARKHI           | 54 |
| PARKHAR TIWARI   | 38 |
| RAGHAV GANGWAR   | 53 |
| SAHIL SARASWAT   | 52 |
| SWATI MISHRA     | 93 |
| HARSH AGARWAL    | 53 |
| HARSHIT KUMAR    | 93 |
| JAHANVI KAPOOR   | 60 |
| STUTI MISHRA     | 61 |
| SURYANSH KUMAR AGARWAL | 80 |
| TANI RASTOGI     | 70 |
| TANISHK GUPTA    | 50 |
| TANMAY AGARWAL   | 52 |

```

| | |
|-------------|----|
| YASH SAXENA | 74 |
| YESH DUBEY | 80 |

24 rows in set (0.02 sec)

3. Using column alias for example we want to display StdName as Student Name and DOB as Date of Birth then the statement will be.

```
mysql> select stdName as "Student Name" , DOB as "Date of Birth" from student;
```

| Student Name | Date of Birth |
|------------------------|---------------|
| AKSHRA AGARWAL | 1996-11-10 |
| ANJANI SHARMA | 1996-09-18 |
| ANSHUL SAXENA | 1996-11-19 |
| AISHWARYA SINGH | 1996-11-01 |
| AKRITI SAXENA | 1996-09-20 |
| KHUSHI AGARWAL | 2003-09-14 |
| MAAHI AGARWAL | 1997-04-21 |
| MITALI GUPTA | 1997-11-26 |
| NIKUNJ AGARWAL | 1997-07-12 |
| PARKHI | 1997-12-20 |
| PARKHAR TIWARI | 1997-04-22 |
| RAGHAV GANGWAR | 1997-12-21 |
| SAHIL SARASWAT | 1997-08-13 |
| SWATI MISHRA | 1996-08-13 |
| HARSH AGARWAL | 2003-08-28 |
| HARSHIT KUMAR | 2003-05-22 |
| JAHANVI KAPOOR | 1997-01-10 |
| STUTI MISHRA | 1996-01-10 |
| SURYANSH KUMAR AGARWAL | 2007-08-22 |
| TANI RASTOGI | 1998-01-15 |
| TANISHK GUPTA | 1998-04-11 |
| TANMAY AGARWAL | 1998-06-28 |
| YASH SAXENA | 1998-03-13 |
| YESH DUBEY | 1998-04-03 |

24 rows in set (0.00 sec)

4. Display the name of all students whose stream is not Science

```
mysql> select stdName from student where Stream <> 'Science';
```

| stdName |
|-----------------|
| ANJANI SHARMA |
| ANSHUL SAXENA |
| AISHWARYA SINGH |


```
| AKRITI SAXENA      |
| KHUSHI AGARWAL    |
| PARKHI            |
| RAGHAV GANGWAR    |
| SAHIL SARASWAT    |
| STUTI MISHRA       |
| SURYANSH KUMAR AGARWAL |
| TANI RASTOGI       |
| TANMAY AGARWAL    |
| YESH DUBEY        |
```

```
+-----+
```

13 rows in set (0.00 sec)

5. Display all name and percentage where percentage is between 60 and 80

```
mysql> select stdName,percentage from student where percentage >= 60 and percentage <= 80;
```

```
+-----+-----+
| stdName      | percentage |
+-----+-----+
| AKSHRA AGARWAL |      70 |
| ANJANI SHARMA  |      75 |
| ANSHUL SAXENA  |      78 |
| AISHWARYA SINGH |      79 |
| AKRITI SAXENA  |      76 |
| KHUSHI AGARWAL |      77 |
| MAAHI AGARWAL  |      74 |
| MITALI GUPTA   |      78 |
| JAHANVI KAPOOR |      65 |
| STUTI MISHRA   |      66 |
| TANI RASTOGI   |      75 |
| YASH SAXENA    |      79 |
```

```
+-----+-----+
```

12 rows in set (0.00 sec)

Activity 5:

1. To change student name from SWATI MISHRA to SWATI VERMA whose StdId is 1014 and also change percentage 86.

```
mysql> update student set stdName = 'SWATI VERMA', percentage = 86 where stdId=1014;
```

Query OK, 1 row affected (0.02 sec)

Rows matched: 1 Changed: 1 Warnings: 0

2. To delete the records from the student table where StdId is 1016.

```
mysql> delete from student where stdId=1016;
```

Query OK, 1 row affected (0.02 sec)

```
mysql> select * from student;
```

```
+-----+-----+-----+-----+-----+-----+-----+
```

| stdID | stdName | sex | Percentage | SClass | Sec | Stream | DOB |
|-------|------------------------|--------|------------|--------|-----|----------|------------|
| 1001 | AKSHRA AGARWAL | FEMALE | 70 | 11 | A | Science | 1996-11-10 |
| 1002 | ANJANI SHARMA | FEMALE | 75 | 11 | A | Commerce | 1996-09-18 |
| 1003 | ANSHUL SAXENA | MALE | 78 | 11 | A | Commerce | 1996-11-19 |
| 1004 | AISHWARYA SINGH | FEMALE | 79 | 11 | A | Commerce | 1996-11-01 |
| 1005 | AKRITI SAXENA | FEMALE | 76 | 11 | A | Commerce | 1996-09-20 |
| 1006 | KHUSHI AGARWAL | FEMALE | 77 | 11 | A | Commerce | 2003-09-14 |
| 1007 | MAAHI AGARWAL | FEMALE | 74 | 11 | A | Science | 1997-04-21 |
| 1008 | MITALI GUPTA | FEMALE | 78 | 12 | A | Science | 1997-11-26 |
| 1009 | NIKUNJ AGARWAL | MALE | 58 | 12 | A | Science | 1997-07-12 |
| 1010 | PARKHI | FEMALE | 59 | 12 | A | Commerce | 1997-12-20 |
| 1011 | PARKHAR TIWARI | MALE | 43 | 12 | A | Science | 1997-04-22 |
| 1012 | RAGHAV GANGWAR | MALE | 58 | 12 | A | Commerce | 1997-12-21 |
| 1013 | SAHIL SARASWAT | MALE | 57 | 12 | A | Commerce | 1997-08-13 |
| 1014 | SWATI VERMA | FEMALE | 86 | 11 | A | Science | 1996-08-13 |
| 1015 | HARSH AGARWAL | MALE | 58 | 11 | B | Science | 2003-08-28 |
| 1017 | JAHANVI KAPOOR | MALE | 65 | 11 | B | Science | 1997-01-10 |
| 1018 | STUTI MISHRA | MALE | 66 | 11 | C | Commerce | 1996-01-10 |
| 1019 | SURYANSH KUMAR AGARWAL | MALE | 85 | 11 | C | Commerce | 2007-08-22 |
| 1020 | TANI RASTOGI | FEMALE | 75 | 12 | C | Commerce | 1998-01-15 |
| 1021 | TANISHK GUPTA | MALE | 55 | 12 | C | Science | 1998-04-11 |
| 1022 | TANMAY AGARWAL | MALE | 57 | 11 | C | Commerce | 1998-06-28 |
| 1023 | YASH SAXENA | MALE | 79 | 11 | C | Science | 1998-03-13 |
| 1024 | YESH DUBEY | MALE | 85 | 12 | C | Commerce | 1998-04-03 |

23 rows in set (0.00 sec)

3. Type the following SQL statement and note the output.

```
mysql> select * from student where stdName like 'G_';
Empty set (0.00 sec)
```

```
mysql> select * from student where stdName='G';
Empty set (0.00 sec)
```

```
mysql> select * from student where stdName LIKE 'G%';
Empty set (0.00 sec)
```

```
mysql> select * from student where stdName='%G%';
Empty set (0.00 sec)
```

4. Display all the streams in the student table.

```
mysql> select distinct Stream from student;
+-----+
```

```
| Stream |
+-----+
| Science |
| Commerce |
+-----+
2 rows in set (0.00 sec)
```

5. Note the output of the following statement.

```
mysql> select stdName,Sex,Stream from student where percentage between 70 and 80;
+-----+-----+-----+
| stdName      | Sex   | Stream |
+-----+-----+-----+
| AKSHRA AGARWAL | FEMALE | Science |
| ANJANI SHARMA  | FEMALE | Commerce |
| ANSHUL SAXENA  | MALE   | Commerce |
| AISHWARYA SINGH | FEMALE | Commerce |
| AKRITI SAXENA  | FEMALE | Commerce |
| KHUSHI AGARWAL | FEMALE | Commerce |
| MAAHI AGARWAL  | FEMALE | Science |
| MITALI GUPTA   | FEMALE | Science |
| TANI RASTOGI   | FEMALE | Commerce |
| YASH SAXENA    | MALE   | Science |
+-----+-----+-----+
10 rows in set (0.00 sec)
```

Do yourself:

Create a Table Empl to store employee details as shown below and write statements for following queries based on the table.

| empno | ename | job | mgr | hiredate | sal | comm | deptno |
|-------|-----------|-----------|------|------------|---------|---------|--------|
| 8369 | SMITH | CLERK | 8902 | 1990-12-18 | 800.00 | NULL | 20 |
| 8499 | ANYA | SALESMAN | 8698 | 1991-02-20 | 1600.00 | 300.00 | 30 |
| 8521 | SETH | SALESMAN | 8698 | 1991-02-22 | 1250.00 | 500.00 | 30 |
| 8566 | MAHADEVAN | MANAGER | 8839 | 1991-04-02 | 2985.00 | NULL | 20 |
| 8654 | MOMIN | SALESMAN | 8698 | 1991-09-28 | 1250.00 | 1400.00 | 30 |
| 8698 | BINA | MANAGER | 8839 | 1991-05-01 | 2850.00 | NULL | 30 |
| 8882 | SHIVANSH | MANAGER | 8839 | 1991-06-09 | 2450.00 | NULL | 10 |
| 8888 | SCOTT | ANALYST | 8566 | 1992-12-09 | 3000.00 | NULL | 20 |
| 8839 | AMIR | PRESIDENT | NULL | 1991-11-18 | 5000.00 | NULL | 10 |
| 8844 | KULDEEP | SALESMAN | 8698 | 1991-09-08 | 1500.00 | 0.00 | 30 |

Table Creation:

```
mysql> create table Empl (empno int(4), ename varchar(20), job varchar(20), mgr varchar(5), hiredate date, sal decimal(7,2), comm decimal(7,2), deptno int(2));
```

Query OK, 0 rows affected, 2 warnings (0.06 sec)

Inserting the Records:

```
mysql> insert into Empl(empno,ename,job,mgr,hiredate,sal,deptno) values(8369, "SMITH", "CLERK", 8902, "1990/12/18", 800.00, 20);
```

Query OK, 1 row affected, 1 warning (0.02 sec)

```
mysql> insert into Empl(empno,ename,job,mgr,hiredate,sal,comm,deptno) values(8499, "ANYA", "SALESMAN", 8698, "1991/02/20", 1600.00, 300.00, 30);
```

Query OK, 1 row affected, 1 warning (0.02 sec)

```
mysql> insert into Empl(empno,ename,job,mgr,hiredate,sal,comm,deptno) values(8521, "SETH", "SALESMAN", 8698, "1991/02/22", 1250.00, 500.00, 30);
```

Query OK, 1 row affected, 1 warning (0.02 sec)

```
mysql> insert into Empl(empno,ename,job,mgr,hiredate,sal,comm,deptno) values(8566, "MAHADEVAN", "MANAGER", 8839, "1991/04/02", 2985.00, NULL, 20);
```

Query OK, 1 row affected, 1 warning (0.01 sec)

```
mysql> insert into Empl(empno,ename,job,mgr,hiredate,sal,comm,deptno) values(8654, "MOMIN",  
"SALESMAN", 8698, "1991/09/28", 1250.00, 1400.00, 30);
```

Query OK, 1 row affected, 1 warning (0.02 sec)

```
mysql> insert into Empl(empno,ename,job,mgr,hiredate,sal,comm,deptno) values(8698,"BINA",  
"MANAGER", 8839, "1991/05/01", 2850.00, NULL, 30);
```

Query OK, 1 row affected, 1 warning (0.02 sec)

```
mysql> insert into Empl(empno,ename,job,mgr,hiredate,sal,comm,deptno) values(8882,"SHIVANSH",  
"MANAGER", 8839, "1991/06/09", 2450.00, NULL, 10);
```

Query OK, 1 row affected, 1 warning (0.02 sec)

```
mysql> insert into Empl(empno,ename,job,mgr,hiredate,sal,comm,deptno) values(8888,"SCOTT",  
"ANALYST", 8566, "1992/12/09", 3000.00, NULL, 20);
```

Query OK, 1 row affected, 1 warning (0.02 sec)

```
mysql> insert into Empl(empno,ename,job,mgr,hiredate,sal,comm,deptno) values(8839,"AMIR",  
"PRESIDENT", NULL, "1991/11/18", 5000.00, NULL, 10);
```

Query OK, 1 row affected, 1 warning (0.02 sec)

```
mysql> insert into Empl(empno,ename,job,mgr,hiredate,sal,comm,deptno)  
values(8844,"KULDEEP","SALESMAN", 8698, "1991/09/08", 1500.00, 0.00, 30);
```

Query OK, 1 row affected, 1 warning (0.00 sec)

```
mysql> SELECT * FROM Empl;
```

| empno | ename | job | mgr | hiredate | sal | comm | deptno |
|-------|-----------|-----------|------|------------|---------|---------|--------|
| 8369 | SMITH | CLERK | 8902 | 1990-12-18 | 800.00 | NULL | 20 |
| 8499 | ANYA | SALESMAN | 8698 | 1991-02-20 | 1600.00 | 300.00 | 30 |
| 8521 | SETH | SALESMAN | 8698 | 1991-02-22 | 1250.00 | 500.00 | 30 |
| 8566 | MAHADEVAN | MANAGER | 8839 | 1991-04-02 | 2985.00 | NULL | 20 |
| 8654 | MOMIN | SALESMAN | 8698 | 1991-09-28 | 1250.00 | 1400.00 | 30 |
| 8698 | BINA | MANAGER | 8839 | 1991-05-01 | 2850.00 | NULL | 30 |
| 8882 | SHIVANSH | MANAGER | 8839 | 1991-06-09 | 2450.00 | NULL | 10 |
| 8888 | SCOTT | ANALYST | 8566 | 1992-12-09 | 3000.00 | NULL | 20 |
| 8839 | AMIR | PRESIDENT | NULL | 1991-11-18 | 5000.00 | NULL | 10 |
| 8844 | KULDEEP | SALESMAN | 8698 | 1991-09-08 | 1500.00 | 0.00 | 30 |

10 rows in set (0.00 sec)

1. Consider the Empl table and write SQL commands to get the following.

a. Write a query to display EName and Sal of employees whose salary are greater than or equal to 2200?

```
mysql> select * from Empl where sal >= 2200;
+-----+-----+-----+-----+-----+-----+-----+-----+
| empo | ename   | job    | mgr | hiredate | sal   | comm | deptno |
+-----+-----+-----+-----+-----+-----+-----+
| 8566 | MAHADEVAN | MANAGER | 8839 | 1991-04-02 | 2985.00 | NULL | 20 |
| 8698 | BINA     | MANAGER | 8839 | 1991-05-01 | 2850.00 | NULL | 30 |
| 8882 | SHIVANSH | MANAGER | 8839 | 1991-06-09 | 2450.00 | NULL | 10 |
| 8888 | SCOTT    | ANALYST | 8566 | 1992-12-09 | 3000.00 | NULL | 20 |
| 8839 | AMIR     | PRESIDENT | NULL | 1991-11-18 | 5000.00 | NULL | 10 |
+-----+-----+-----+-----+-----+-----+-----+
5 rows in set (0.02 sec)
```

b. Write a query to display details of employs who are not getting commission?

```
mysql> select ename from Empl where comm is null;
+-----+
| ename   |
+-----+
| SMITH   |
| MAHADEVAN |
| BINA    |
| SHIVANSH |
| SCOTT   |
| AMIR    |
+-----+
6 rows in set (0.00 sec)
```

c. Write a query to display employee name and salary of those employees who don't have their salary in range of 2500 to 4000?

```
mysql> select ename, sal from Empl where sal not between 2500 and 4000;
+-----+-----+
| ename   | sal   |
+-----+-----+
| SMITH   | 800.00 |
| ANYA    | 1600.00 |
| SETH    | 1250.00 |
| MOMIN   | 1250.00 |
| SHIVANSH | 2450.00 |
| AMIR    | 5000.00 |
| KULDEEP | 1500.00 |
+-----+-----+
```

7 rows in set (0.00 sec)

d. Write a query to display the name, job title and salary of employees who don't have manager?

```
mysql> select ename, job, sal from Empl where job != "MANAGER";
```

```
+-----+-----+-----+
| ename | job   | sal   |
+-----+-----+-----+
| SMITH | CLERK | 800.00 |
| ANYA  | SALESMAN | 1600.00 |
| SETH  | SALESMAN | 1250.00 |
| MOMIN | SALESMAN | 1250.00 |
| SCOTT | ANALYST | 3000.00 |
| AMIR  | PRESIDENT | 5000.00 |
| KULDEEP | SALESMAN | 1500.00 |
+-----+-----+-----+
```

7 rows in set (0.00 sec)

e. Write a query to display the name of employee whose name contains "A" as third alphabet?

```
mysql> select ename from Empl where ename like "__A%";
```

Empty set (0.00 sec)

f. Write a query to display the name of employee whose name contains "T" as last alphabet?

```
mysql> select * from Empl where ename like "%T";
```

```
+----+-----+-----+-----+-----+-----+-----+-----+
| empo | ename | job   | mgr | hiredate | sal   | comm | deptno |
+----+-----+-----+-----+-----+-----+-----+-----+
| 8888 | SCOTT | ANALYST | 8566 | 1992-12-09 | 3000.00 | NULL | 20 |
+----+-----+-----+-----+-----+-----+-----+-----+
```

1 row in set (0.00 sec)

g. Write a query to display the name of employee whose name contains "M" as First and "L" as third alphabet?

```
mysql> select * from Empl where ename like "M_%L";
```

Empty set (0.00 sec)

h. Write a query to display details of employees with the text "Not given", if commission is null?

```
mysql> select *, "Not given" from Empl where comm is null;
```

```
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| empno | ename   | job     | mgr | hiredate | sal   | comm | deptno | Not given |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
| 8369 | SMITH   | CLERK   | 8902 | 1990-12-18 | 800.00 | NULL | 20 | Not given |
| 8566 | MAHADEVAN | MANAGER | 8839 | 1990-04-02 | 2985.00 | NULL | 20 | Not given |
| 8698 | BINA    | MANAGER | 8839 | 1991-05-01 | 2850.00 | NULL | 30 | Not given |
| 8882 | SHIVANSH | MANAGER | 8839 | 1991-06-09 | 2450.00 | NULL | 10 | Not given |
+-----+-----+-----+-----+-----+-----+-----+-----+-----+
```

| | | | | | | | | |
|------|-------|-----------|------|------------|---------|------|----|-----------|
| 8888 | SCOTT | ANALYST | 8566 | 1992-12-09 | 3000.00 | NULL | 20 | Not given |
| 8839 | AMIR | PRESIDENT | NULL | 1991-11-18 | 5000.00 | NULL | 10 | Not given |

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

6 rows in set (0.00 sec)