SQL PRACTICAL ASSIGNMENT

Lab Activity 1: Create a table STUDENT with under mentioned structure by using SQL Statement:

StdID Number Primary Key
StdName Character (30) NOT NULL
Sex Character(6) Male or Female
Percentage Number
SClass Number
Sec Character
Stream Character(10) Science or Commerce
DOB Date   Date of Birth

Output:

```
mysql> create table student(stdId int (4) primary key,StdName varchar(30) not null, Sex varchar(10),Percentage decimal(5,2), sclass int, sec varchar(1), stream varchar(
10), DOB date );
Query OK, 0 rows affected, 1 warning (0.04 sec)

mysql> insert into student values (1001,'AKSHRA AGARWAL','FEMALE',70,11,'A','Science','10-11-1996');
ERROR 1292 (22007): Incorrect date value: '10-11-1996' for column 'DOB' at row 1
mysql> insert into student values (1002,'ANJANI SHARMA','FEMALE',75,11,'A','Commerce','1996-09-18');
Query OK, 1 row affected (0.01 sec)

mysql> insert into student values (1003,'ANSHUL SAXENA','MALE',78,11,'A','Commerce','1996-11-19');
Query OK, 1 row affected (0.01 sec)

mysql> insert into student values (1004,'AISHWARYA SINGH','FEMALE',79,11,'A','Commerce','1996-11-1');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> desc student;
+------------+--------------+------+-----+---------+-------+
| Field      | Type         | Null | Key | Default | Extra |
+------------+--------------+------+-----+---------+-------+
| stdId      | int          | NO   | PRI | NULL    |       |
| StdName    | varchar(30)  | NO   |     | NULL    |       |
| Sex        | varchar(1)   | YES  |     | NULL    |       |
| Percentage | decimal(5,2) | YES  |     | NULL    |       |
| sclass     | int          | YES  |     | NULL    |       |
| sec        | varchar(1)   | YES  |     | NULL    |       |
| stream     | varchar(10)  | YES  |     | NULL    |       |
| DOB        | date         | YES  |     | NULL    |       |
+------------+--------------+------+-----+---------+-------+
8 rows in set (0.00 sec)
```

Step 2: Press Enter key to complete create table:

Step3: Insert records into STUDENTtable.

INSERT INTO Student VALUES (1001, 'AKSHRA AGARWAL,'FEMALE',70,11,'A', '10/11/1996');

Step4:As you press enter key after typing above statement,1 record will be stored into STUDENT table.

Step5: Similarly like step 3, enter other records of the following table.

Output:

```
mysql> select * from student;
+-------+------------------------+--------+------------+--------+------+----------+------------+
| stdId | StdName                | Sex    | Percentage | sclass | sec  | stream   | DOB        |
+-------+------------------------+--------+------------+--------+------+----------+------------+
|  1002 | ANJANI SHARMA          | FEMALE |      75.00 |     11 | A    | Commerce | 1996-09-18 |
|  1003 | ANSHUL SAXENA          | MALE   |      78.00 |     11 | A    | Commerce | 1996-11-19 |
|  1004 | AISHWARYA SINGH        | FEMALE |      79.00 |     11 | A    | Commerce | 1996-11-01 |
|  1005 | AKRITI SAXENA          | FEMALE |      76.00 |     11 | A    | Commerce | 1996-09-20 |
|  1006 | KHUSHI AGARWAL         | FEMALE |      77.00 |     11 | A    | Commerce | 2003-09-14 |
|  1007 | MAAHI AGARWAL          | FEMALE |      74.00 |     11 | A    | Science  | 1997-04-21 |
|  1008 | MITALI GUPTA           | FEMALE |      78.00 |     12 | A    | Science  | 1997-11-26 |
|  1009 | NIKUNJ AGARWAL         | MALE   |      58.00 |     12 | A    | Science  | 1997-07-12 |
|  1010 | PARKHI                 | FEMALE |      59.00 |     12 | A    | Commerce | 1997-12-20 |
|  1011 | PRAKHAR TIWARI         | MALE   |      43.00 |     12 | A    | Science  | 1997-04-22 |
|  1012 | PRAGHAV GANGWAR        | MALE   |      58.00 |     12 | A    | Commerce | 1997-12-21 |
|  1013 | SAHIL SARASWAT         | MALE   |      57.00 |     12 | A    | Commerce | 1997-08-13 |
|  1014 | HARSH AGARWAL          | MALE   |      58.00 |     11 | A    | Science  | 1996-08-28 |
|  1015 | SWATI MISHRA           | FEMALE |      98.00 |     11 | A    | Science  | 2003-08-28 |
|  1016 | HARSHIT KUMAR          | MALE   |      98.00 |     11 | B    | Science  | 2003-05-22 |
|  1017 | JAHANVI KAPOOR         | MALE   |      65.00 |     11 | B    | Science  | 1997-01-10 |
|  1018 | SHUTI MISHRA           | MALE   |      66.00 |     11 | C    | Commerce | 1996-01-10 |
|  1019 | SURYANSH KUMAR AGARWAL | MALE   |      85.00 |     11 | C    | Commerce | 2007-08-22 |
|  1020 | TANI RASTOGI           | FEMALE |      75.00 |     11 | C    | Commerce | 1998-01-15 |
|  1021 | TANISHK GUPTA          | MALE   |      55.00 |     12 | C    | Science  | 1998-04-11 |
|  1022 | TANMAY AGARWAL         | MALE   |      57.00 |     11 | C    | Commerce | 1998-06-28 |
|  1023 | YASH SAXENA            | MALE   |      79.00 |     11 | C    | Science  | 1998-03-13 |
|  1024 | YASH DUBEY             | MALE   |      85.00 |     12 | C    | Commerce | 1998-03-03 |
+-------+------------------------+--------+------------+--------+------+----------+------------+
23 rows in set (0.00 sec)
```

Lab Activity 2: Open school database, then select student table and use following SQL statements.

TYPE THE STATEMENT, PRESS ENTER AND NOTE THE OUTPUT

1 To display all the records form STUDENT table.

SELECT * FROM student ;

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

SELECT StdName, DOB FROM student ;

Output:

```
mysql> select stdName,DOB from student;
+-------------------------+------------+
| stdName                 | DOB        |
+-------------------------+------------+
| 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 |
| PRAKHAR TIWARI          | 1997-04-22 |
| PRAGHAV GANGWAR         | 1997-12-21 |
| SAHIL SARASWAT          | 1997-08-13 |
| HARSH AGARWAL           | 1996-08-28 |
| SWATI MISHRA            | 2003-08-28 |
| HARSHIT KUMAR           | 2003-05-22 |
| JAHANVI KAPOOR          | 1997-01-10 |
| SHUTI 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 |
| YASH DUBEY              | 1998-03-03 |
+-------------------------+------------+
23 rows in set (0.00 sec)
```

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

SELECT * FROM student WHERE percentage >= 80;

```
mysql> select*from student where percentage >=80;
+-------+------------------------+--------+------------+--------+------+----------+------------+
| stdId | StdName                | Sex    | Percentage | sclass | sec  | stream   | DOB        |
+-------+------------------------+--------+------------+--------+------+----------+------------+
|  1015 | SWATI MISHRA           | FEMALE |      98.00 |     11 | A    | Science  | 2003-08-28 |
|  1016 | HARSHIT KUMAR          | MALE   |      98.00 |     11 | B    | Science  | 2003-05-22 |
|  1019 | SURYANSH KUMAR AGARWAL | MALE   |      85.00 |     11 | C    | Commerce | 2007-08-22 |
|  1024 | YASH DUBEY             | MALE   |      85.00 |     12 | C    | Commerce | 1998-03-03 |
+-------+------------------------+--------+------------+--------+------+----------+------------+
4 rows in set (0.00 sec)
```

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

SELECT StdName, Stream, Percentage WHERE percentage > 80;
Output:

```
mysql> select stdName,stream,Percentage from student where percentage >80;
+-----------------------+------------+------------+
| stdName               | stream     | Percentage |
+-----------------------+------------+------------+
| SWATI MISHRA          | Science    |      98.00 |
| HARSHIT KUMAR         | Science    |      98.00 |
| SURYANSH KUMAR AGARWAL | Commerce  |      85.00 |
| YASH DUBEY            | Commerce   |      85.00 |
+-----------------------+------------+------------+
4 rows in set (0.00 sec)
```

5. To display all records of science students whose percentage is more than 75 form student table.
SELECT * FORM student WHERE stream = 'Science' AND percentage > 75;

Output:

```
mysql> select*from student where stream = 'Science'and percentage > 75;
+-------+---------------+--------+------------+--------+------+---------+------------+
| stdId | StdName       | Sex    | Percentage | sclass | sec  | stream  | DOB        |
+-------+---------------+--------+------------+--------+------+---------+------------+
|  1008 | MITALI GUPTA  | FEMALE |      78.00 |     12 | A    | Science | 1997-11-26 |
|  1015 | SWATI MISHRA  | FEMALE |      98.00 |     11 | A    | Science | 2003-08-28 |
|  1016 | HARSHIT KUMAR | MALE   |      98.00 |     11 | B    | Science | 2003-05-22 |
|  1023 | YASH SAXENA   | MALE   |      79.00 |     11 | C    | Science | 1998-03-13 |
+-------+---------------+--------+------------+--------+------+---------+------------+
4 rows in set (0.00 sec)
```

Lab Activity 3: Open school database, then select student table and use following SQL statements.
TYPE THE STATEMENT, PRESS ENTER AND NOTE THE OUTPUT
1. To display the STUDENT table structure.
DESCRIBE Student;

Output:

```
mysql> describe student;
+------------+--------------+------+-----+---------+-------+
| Field      | Type         | Null | Key | Default | Extra |
+------------+--------------+------+-----+---------+-------+
| stdId      | int          | NO   | PRI | NULL    |       |
| StdName    | varchar(30)  | NO   |     | NULL    |       |
| Sex        | varchar(10)  | YES  |     | NULL    |       |
| Percentage | decimal(5,2) | YES  |     | NULL    |       |
| sclass     | int          | YES  |     | NULL    |       |
| sec        | varchar(1)   | YES  |     | NULL    |       |
| stream     | varchar(10)  | YES  |     | NULL    |       |
| DOB        | date         | YES  |     | NULL    |       |
+------------+--------------+------+-----+---------+-------+
8 rows in set (0.00 sec)
```

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

ALTER TABLE Student ADD TeacherID VARCHAR(20);

Output:

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

mysql> describe student;
+------------+--------------+------+-----+---------+-------+
| Field      | Type         | Null | Key | Default | Extra |
+------------+--------------+------+-----+---------+-------+
| stdId      | int          | NO   | PRI | NULL    |       |
| StdName    | varchar(30)  | NO   |     | NULL    |       |
| Sex        | varchar(10)  | YES  |     | NULL    |       |
| Percentage | decimal(5,2) | 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)
```

3. Type the statement
DESC Student;

Press enter key, now note the difference in table structure.

```
mysql> describe student;
+------------+--------------+------+-----+---------+-------+
| Field      | Type         | Null | Key | Default | Extra |
+------------+--------------+------+-----+---------+-------+
| stdId      | int          | NO   | PRI | NULL    |       |
| StdName    | varchar(30)  | NO   |     | NULL    |       |
| Sex        | varchar(10)  | YES  |     | NULL    |       |
| Percentage | decimal(5,2) | 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

SELECT * FROM student;

```
mysql> select * from student;
+-------+----------------------+--------+------------+--------+-----+----------+------------+-----------+
| stdId | StdName              | Sex    | Percentage | sclass | sec | stream   | DOB        | teacherID |
+-------+----------------------+--------+------------+--------+-----+----------+------------+-----------+
|  1002 | ANJANI SHARMA        | FEMALE |      75.00 |     11 | A   | Commerce | 1996-09-18 | NULL      |
|  1003 | ANSHUL SAXENA        | MALE   |      78.00 |     11 | A   | Commerce | 1996-11-19 | NULL      |
|  1004 | AISHWARYA SINGH      | FEMALE |      79.00 |     11 | A   | Commerce | 1996-11-01 | NULL      |
|  1005 | AKRITI SAXENA        | FEMALE |      76.00 |     11 | A   | Commerce | 1996-09-20 | NULL      |
|  1006 | KHUSHI AGARWAL       | FEMALE |      77.00 |     11 | A   | Commerce | 2003-09-14 | NULL      |
|  1007 | MAAHI AGARWAL        | FEMALE |      74.00 |     11 | A   | Science  | 1997-04-21 | NULL      |
|  1008 | MITALI GUPTA         | FEMALE |      78.00 |     12 | A   | Science  | 1997-11-26 | NULL      |
|  1009 | NIKUNJ AGARWAL       | MALE   |      58.00 |     12 | A   | Science  | 1997-07-12 | NULL      |
|  1010 | PARKHI               | FEMALE |      59.00 |     12 | A   | Commerce | 1997-12-20 | NULL      |
|  1011 | PRAKHAR TIWARI       | MALE   |      43.00 |     12 | A   | Science  | 1997-04-22 | NULL      |
|  1012 | PRAGHAV GANGWAR      | MALE   |      58.00 |     12 | A   | Commerce | 1997-12-21 | NULL      |
|  1013 | SAHIL SARASWAT       | MALE   |      57.00 |     12 | A   | Commerce | 1997-08-13 | NULL      |
|  1014 | HARSH AGARWAL        | MALE   |      58.00 |     11 | A   | Science  | 1996-08-28 | NULL      |
|  1015 | SWATI MISHRA         | FEMALE |      98.00 |     11 | A   | Science  | 2003-08-28 | NULL      |
|  1016 | HARSHIT KUMAR        | MALE   |      98.00 |     11 | B   | Science  | 2003-05-22 | NULL      |
|  1017 | JAHANVI KAPOOR       | MALE   |      65.00 |     11 | B   | Science  | 1997-01-10 | NULL      |
|  1018 | SHUTI MISHRA         | MALE   |      66.00 |     11 | C   | Commerce | 1996-01-10 | NULL      |
|  1019 | SURYANSH KUMAR AGARWAL | MALE |      85.00 |     11 | C   | Commerce | 2007-08-22 | NULL      |
|  1020 | TANI RASTOGI         | FEMALE |      75.00 |     11 | C   | Commerce | 1998-01-15 | NULL      |
|  1021 | TANISHK GUPTA        | MALE   |      55.00 |     12 | C   | Science  | 1998-04-11 | NULL      |
|  1022 | TANMAY AGARWAL       | MALE   |      57.00 |     11 | C   | Commerce | 1998-06-28 | NULL      |
|  1023 | YASH SAXENA          | MALE   |      79.00 |     11 | C   | Science  | 1998-03-13 | NULL      |
|  1024 | YASH DUBEY           | MALE   |      85.00 |     12 | C   | Commerce | 1998-03-03 | NULL      |
+-------+----------------------+--------+------------+--------+-----+----------+------------+-----------+
23 rows in set (0.00 sec)
```

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

66

ALTER TABLE Student MODIFY TeacherID INTEGER ;
DESC Student;
SELECT * FROM student;

```
mysql> alter table student modify teacherID integer;
Query OK, 23 rows affected (0.09 sec)
Records: 23  Duplicates: 0  Warnings: 0

mysql> describe student;
+------------+--------------+------+-----+---------+-------+
| Field      | Type         | Null | Key | Default | Extra |
+------------+--------------+------+-----+---------+-------+
| stdId      | int          | NO   | PRI | NULL    |       |
| StdName    | varchar(30)  | NO   |     | NULL    |       |
| Sex        | varchar(10)  | YES  |     | NULL    |       |
| Percentage | decimal(5,2) | 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)
```

```
mysql> select*from student ;
+-------+----------------------+--------+------------+--------+-----+----------+------------+-----------+
| stdId | StdName              | Sex    | Percentage | sclass | sec | stream   | DOB        | teacherID |
+-------+----------------------+--------+------------+--------+-----+----------+------------+-----------+
|  1002 | ANJANI SHARMA        | FEMALE |      75.00 |     11 | A   | Commerce | 1996-09-18 |      NULL |
|  1003 | ANSHUL SAXENA        | MALE   |      78.00 |     11 | A   | Commerce | 1996-11-19 |      NULL |
|  1004 | AISHWARYA SINGH      | FEMALE |      79.00 |     11 | A   | Commerce | 1996-11-01 |      NULL |
|  1005 | AKRITI SAXENA        | FEMALE |      76.00 |     11 | A   | Commerce | 1996-09-20 |      NULL |
|  1006 | KHUSHI AGARWAL       | FEMALE |      77.00 |     11 | A   | Commerce | 2003-09-14 |      NULL |
|  1007 | MAAHI AGARWAL        | FEMALE |      74.00 |     11 | A   | Science  | 1997-04-21 |      NULL |
|  1008 | MITALI GUPTA         | FEMALE |      78.00 |     12 | A   | Science  | 1997-11-26 |      NULL |
|  1009 | NIKUNJ AGARWAL       | MALE   |      58.00 |     12 | A   | Science  | 1997-07-12 |      NULL |
|  1010 | PARKHI               | FEMALE |      59.00 |     12 | A   | Commerce | 1997-12-20 |      NULL |
|  1011 | PRAKHAR TIWARI       | MALE   |      43.00 |     12 | A   | Science  | 1997-04-22 |      NULL |
|  1012 | PRAGHAV GANGWAR      | MALE   |      58.00 |     12 | A   | Commerce | 1997-12-21 |      NULL |
|  1013 | SAHIL SARASWAT       | MALE   |      57.00 |     12 | A   | Commerce | 1997-08-13 |      NULL |
|  1014 | HARSH AGARWAL        | MALE   |      58.00 |     11 | A   | Science  | 1996-08-28 |      NULL |
|  1015 | SWATI MISHRA         | FEMALE |      98.00 |     11 | A   | Science  | 2003-08-28 |      NULL |
|  1016 | HARSHIT KUMAR        | MALE   |      98.00 |     11 | B   | Science  | 2003-05-22 |      NULL |
|  1017 | JAHANVI KAPOOR       | MALE   |      65.00 |     11 | B   | Science  | 1997-01-10 |      NULL |
|  1018 | SHUTI MISHRA         | MALE   |      66.00 |     11 | C   | Commerce | 1996-01-10 |      NULL |
|  1019 | SURYANSH KUMAR AGARWAL | MALE |      85.00 |     11 | C   | Commerce | 2007-08-22 |      NULL |
|  1020 | TANI RASTOGI         | FEMALE |      75.00 |     11 | C   | Commerce | 1998-01-15 |      NULL |
|  1021 | TANISHK GUPTA        | MALE   |      55.00 |     12 | C   | Science  | 1998-04-11 |      NULL |
|  1022 | TANMAY AGARWAL       | MALE   |      57.00 |     11 | C   | Commerce | 1998-06-28 |      NULL |
|  1023 | YASH SAXENA          | MALE   |      79.00 |     11 | C   | Science  | 1998-03-13 |      NULL |
|  1024 | YASH DUBEY           | MALE   |      85.00 |     12 | C   | Commerce | 1998-03-03 |      NULL |
+-------+----------------------+--------+------------+--------+-----+----------+------------+-----------+
23 rows in set (0.00 sec)
```

Lab Activity 4

1. To Drop (Delete) a field form a table. For e.g you wantto delete TeacherID field.

ALTER TABLE Student DROP TeacherID;

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

2. To subtract 5 form all students percentage and display name and percentage.

SELECT name, percentage - 5 FROM Student;

```
mysql> select StdName,Percentage-5 from student;
+-----------------------+--------------+
| StdName               | Percentage-5 |
+-----------------------+--------------+
| ANJANI SHARMA         |        70.00 |
| ANSHUL SAXENA         |        73.00 |
| AISHWARYA SINGH       |        74.00 |
| AKRITI SAXENA         |        71.00 |
| KHUSHI AGARWAL        |        72.00 |
| MAAHI AGARWAL         |        69.00 |
| MITALI GUPTA          |        73.00 |
| NIKUNJ AGARWAL        |        53.00 |
| PARKHI                |        54.00 |
| PRAKHAR TIWARI        |        38.00 |
| PRAGHAV GANGWAR       |        53.00 |
| SAHIL SARASWAT        |        52.00 |
| HARSH AGARWAL         |        53.00 |
| SWATI MISHRA          |        93.00 |
| HARSHIT KUMAR         |        93.00 |
| JAHANVI KAPOOR        |        60.00 |
| SHUTI MISHRA          |        61.00 |
| SURYANSH KUMAR AGARWAL |        80.00 |
| TANI RASTOGI          |        70.00 |
| TANISHK GUPTA         |        50.00 |
| TANMAY AGARWAL        |        52.00 |
| YASH SAXENA           |        74.00 |
| YASH DUBEY            |        80.00 |
+-----------------------+--------------+
23 rows in set (0.00 sec)
```

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

SELECT StdName AS "Student Name",
DOB As "Date of Birth" FROM Student;

```
mysql> select stdName as "student name", DOB as "Date Of Birth" from student;
+-------------------------+---------------+
| student name            | Date Of Birth |
+-------------------------+---------------+
| 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    |
| PRAKHAR TIWARI          | 1997-04-22    |
| PRAGHAV GANGWAR         | 1997-12-21    |
| SAHIL SARASWAT          | 1997-08-13    |
| HARSH AGARWAL           | 1996-08-28    |
| SWATI MISHRA            | 2003-08-28    |
| HARSHIT KUMAR           | 2003-05-22    |
| JAHANVI KAPOOR          | 1997-01-10    |
| SHUTI 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    |
| YASH DUBEY              | 1998-03-03    |
+-------------------------+---------------+
23 rows in set (0.00 sec)
```

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

SELECT StdNameFROMstudent
WHERE Stream<>'Science';

```
mysql> select stdName from student where stream <>'science';
+--------------------------+
| stdName                  |
+--------------------------+
| ANJANI SHARMA            |
| ANSHUL SAXENA            |
| AISHWARYA SINGH          |
| AKRITI SAXENA            |
| KHUSHI AGARWAL           |
| PARKHI                   |
| PRAGHAV GANGWAR          |
| SAHIL SARASWAT           |
| SHUTI MISHRA             |
| SURYANSH KUMAR AGARWAL   |
| TANI RASTOGI             |
| TANMAY AGARWAL           |
| YASH DUBEY               |
+--------------------------+
13 rows in set (0.00 sec)
```

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

SELECT StdName, percentage FROM student WHERE percentage >=60 AND
percentage<=80 ;

```
mysql> select stdName,Percentage from student where Percentage >=60 and Percentage<=80;
+-----------------+------------+
| stdName         | Percentage |
+-----------------+------------+
| ANJANI SHARMA   |      75.00 |
| ANSHUL SAXENA   |      78.00 |
| AISHWARYA SINGH |      79.00 |
| AKRITI SAXENA   |      76.00 |
| KHUSHI AGARWAL  |      77.00 |
| MAAHI AGARWAL   |      74.00 |
| MITALI GUPTA    |      78.00 |
| JAHANVI KAPOOR  |      65.00 |
| SHUTI MISHRA    |      66.00 |
| TANI RASTOGI    |      75.00 |
| YASH SAXENA     |      79.00 |
+-----------------+------------+
11 rows in set (0.00 sec)
```

Lab Activity 5:

1.TochangeastudentnamefromSWATIMISHRAtoSWATIVERMAwhoseStdIDis1014andalsoc hange
percentage 86.

UPDATE Student SET StdName = 'SWATI VERMA', percentage = 86
WHERE StdId = 1014;

```
mysql> update student set stdName='SWATI VERMA',percentage=86 where stdID= 1015;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

2. To delete the records form student table where StdId is 1016.
DELETE FROM Student WHERE StdID = 1016;

```
mysql> delete from student where stdID = 1016;
Query OK, 1 row affected (0.01 sec)
```

```
mysql> select*from student;
+-------+-----------------------+--------+------------+--------+------+----------+------------+
| stdId | StdName               | Sex    | Percentage | sclass | sec  | stream   | DOB        |
+-------+-----------------------+--------+------------+--------+------+----------+------------+
|  1002 | ANJANI SHARMA         | FEMALE |      75.00 |     11 | A    | Commerce | 1996-09-18 |
|  1003 | ANSHUL SAXENA         | MALE   |      78.00 |     11 | A    | Commerce | 1996-11-19 |
|  1004 | AISHWARYA SINGH       | FEMALE |      79.00 |     11 | A    | Commerce | 1996-11-01 |
|  1005 | AKRITI SAXENA         | FEMALE |      76.00 |     11 | A    | Commerce | 1996-09-20 |
|  1006 | KHUSHI AGARWAL        | FEMALE |      77.00 |     11 | A    | Commerce | 2003-09-14 |
|  1007 | MAAHI AGARWAL         | FEMALE |      74.00 |     11 | A    | Science  | 1997-04-21 |
|  1008 | MITALI GUPTA          | FEMALE |      78.00 |     12 | A    | Science  | 1997-11-26 |
|  1009 | NIKUNJ AGARWAL        | MALE   |      58.00 |     12 | A    | Science  | 1997-07-12 |
|  1010 | PARKHI                | FEMALE |      59.00 |     12 | A    | Commerce | 1997-12-20 |
|  1011 | PRAKHAR TIWARI        | MALE   |      43.00 |     12 | A    | Science  | 1997-04-22 |
|  1012 | PRAGHAV GANGWAR       | MALE   |      58.00 |     12 | A    | Commerce | 1997-12-21 |
|  1013 | SAHIL SARASWAT        | MALE   |      57.00 |     12 | A    | Commerce | 1997-08-13 |
|  1014 | HARSH AGARWAL         | MALE   |      58.00 |     11 | A    | Science  | 1996-08-28 |
|  1015 | SWATI VERMA           | FEMALE |      86.00 |     11 | A    | Science  | 2003-08-28 |
|  1017 | JAHANVI KAPOOR        | MALE   |      65.00 |     11 | B    | Science  | 1997-01-10 |
|  1018 | SHUTI MISHRA          | MALE   |      66.00 |     11 | C    | Commerce | 1996-01-10 |
|  1019 | SURYANSH KUMAR AGARWAL| MALE   |      85.00 |     11 | C    | Commerce | 2007-08-22 |
|  1020 | TANI RASTOGI          | FEMALE |      75.00 |     11 | C    | Commerce | 1998-01-15 |
|  1021 | TANISHK GUPTA         | MALE   |      55.00 |     12 | C    | Science  | 1998-04-11 |
|  1022 | TANMAY AGARWAL        | MALE   |      57.00 |     11 | C    | Commerce | 1998-06-28 |
|  1023 | YASH SAXENA           | MALE   |      79.00 |     11 | C    | Science  | 1998-03-13 |
|  1024 | YASH DUBEY            | MALE   |      85.00 |     12 | C    | Commerce | 1998-03-03 |
+-------+-----------------------+--------+------------+--------+------+----------+------------+
22 rows in set (0.00 sec)
```

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

SELECT * FROM Student WHERE StdName LIKE 'G_' ;
SELECT * FROM Student WHERE StdName='G';
SELECT * FROM Student WHERE StdName LIKE 'G%' ;
SELECT * WHERE Student WHERE StdName='%G%' ;

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

mysql> select * from student where stdName like '%G%';
+-------+------------------------+--------+------------+--------+-----+----------+------------+
| stdId | StdName                | Sex    | Percentage | sclass | sec | stream   | DOB        |
+-------+------------------------+--------+------------+--------+-----+----------+------------+
|  1004 | AISHWARYA SINGH        | FEMALE |      79.00 |     11 | A   | Commerce | 1996-11-01 |
|  1006 | KHUSHI AGARWAL         | FEMALE |      77.00 |     11 | A   | Commerce | 2003-09-14 |
|  1007 | MAAHI AGARWAL          | FEMALE |      74.00 |     11 | A   | Science  | 1997-04-21 |
|  1008 | MITALI GUPTA           | FEMALE |      78.00 |     12 | A   | Science  | 1997-11-26 |
|  1009 | NIKUNJ AGARWAL         | MALE   |      58.00 |     12 | A   | Science  | 1997-07-12 |
|  1012 | PRAGHAV GANGWAR        | MALE   |      58.00 |     12 | A   | Commerce | 1997-12-21 |
|  1014 | HARSH AGARWAL          | MALE   |      58.00 |     11 | A   | Science  | 1996-08-28 |
|  1019 | SURYANSH KUMAR AGARWAL | MALE   |      85.00 |     11 | C   | Commerce | 2007-08-22 |
|  1020 | TANI RASTOGI           | FEMALE |      75.00 |     11 | C   | Commerce | 1998-01-15 |
|  1021 | TANISHK GUPTA          | MALE   |      55.00 |     12 | C   | Science  | 1998-04-11 |
|  1022 | TANMAY AGARWAL         | MALE   |      57.00 |     11 | C   | Commerce | 1998-06-28 |
+-------+------------------------+--------+------------+--------+-----+----------+------------+
11 rows in set (0.00 sec)
```

4. Display all the streams in student table.

SELECT DISTINCT Stream FROM Student;

```
mysql> select distinct stream from student;
+----------+
| stream   |
+----------+
| Commerce |
| Science  |
+----------+
2 rows in set (0.00 sec)
```

5. Note the output of the following statement.
SELECT StdName, Sex, Stream FROM Student WHERE percentage BETWEEN 70 AND 80;

```
mysql> select stdName,Sex,stream from student where Percentage between 70 and 80;
+-----------------+--------+----------+
| stdName         | Sex    | stream   |
+-----------------+--------+----------+
| 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  |
+-----------------+--------+----------+
9 rows in set (0.00 sec)
```