Employee Name : - PravinKumar RajaSahayam
Employee Id : - 11946
MYSQL : -

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

Step 1: Open MySQL, Open Database and create table as:

```
mysql> create table tbl_Student (
    -> StdID int (4) PRIMARY KEY,
    -> StdName varchar(30) NOT NULL,
    -> Sex varchar(1),
    -> Percentage decimal(5,2),
    -> SClass int,
    -> Sec varchar(1),
    -> Stream varchar(10),
    -> DOB DATE
    -> );
Query OK, 0 rows affected, 1 warning (0.02 sec)
```

Step 2: Press Enter key to complete create table:

```
mysql> create table tbl_Student (
    -> StdID int (4) PRIMARY KEY,
    -> StdName varchar(30) NOT NULL,
    -> Sex varchar(1),
    -> Percentage decimal(5,2),
    -> SClass int,
    -> Sec varchar(1),
    -> Stream varchar(10),
    -> DOB DATE
    -> );
Query OK, 0 rows affected, 1 warning (0.02 sec)

mysql> desc tbl_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)
```

Step3: Insert Records into STUDENTtable. INSERT INTO Student VALUES (1001, ‘AKSHRA AGARWAL,'FEMALE',70,11,’A’, ‘10/11/1996’);

```
mysql> insert into tbl_Student values(1001,'AKSHRA AGARWAL','F',70,11,'A','Science'
,'1996/11/10');
Query OK, 1 row affected, 1 warning (0.01 sec)

mysql> select * from tbl_Student;
+-------+---------------+------+------------+--------+------+---------+-----------
-+
| StdID | StdName       | Sex  | Percentage | SClass | Sec  | Stream  | DOB
 |
+-------+---------------+------+------------+--------+------+---------+-----------
-+
|  1001 | AKSHRA AGARWAL | F    |      70.00 |     11 | A    | Science | 1996-11-10
 |
+-------+---------------+------+------------+--------+------+---------+-----------
-+
1 row in set (0.00 sec)
```

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

```
mysql> select * from tbl_Student;
+-------+----------------+------+------------+--------+------+---------+-----------
-+
| StdID | StdName        | Sex  | Percentage | SClass | Sec  | Stream  | DOB
 |
+-------+----------------+------+------------+--------+------+---------+-----------
-+
|  1001 | AKSHRA AGARWAL | F    |      70.00 |     11 | A    | Science | 1996-11-10
 |
+-------+----------------+------+------------+--------+------+---------+-----------
-+
1 row in set (0.00 sec)
```

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

```
mysql> insert into tbl_Student values(1002,'ANJANI SHARMA','F',75,11,'A','Commerce','1996/09/18');
Query OK, 1 row affected, 1 warning (0.00 sec)

mysql>  insert into tbl_Student values(1003,'ANSHUL SAXENA','M',78,11,'A','Commerce','1996/11/19');
Query OK, 1 row affected, 1 warning (0.01 sec)

mysql>  insert into tbl_Student values(1004,' AISHWARYA SINGH','F',79,11,'A','Commerce','1996/11/1');
Query OK, 1 row affected, 1 warning (0.00 sec)

mysql>  insert into tbl_Student values(1005,' AKRITI SAXENA ','F',76,11,'A','Commerce','1996/09/20');
Query OK, 1 row affected, 1 warning (0.00 sec)
```

```
mysql>  insert into tbl_Student values(1018,' SURYANSH KUMAR ','F',76,11,'A','Commerce','1996/09/20');
Query OK, 1 row affected, 1 warning (0.00 sec)

mysql>  insert into tbl_Student values(1019,' SURYANSH KUMAR ','F',76,11,'A','Commerce','1996/09/20');
Query OK, 1 row affected, 1 warning (0.01 sec)

mysql>  insert into tbl_Student values(101119,' SURYANSH KUMAR ','F',76,11,'A','Commerce','1996/09/20');
Query OK, 1 row affected, 1 warning (0.01 sec)

mysql> SELECT * from tbl_Student;
+--------+-----------------+------+------------+--------+------+----------+------------+
| StdID  | StdName         | Sex  | Percentage | SClass | Sec  | Stream   | DOB        |
+--------+-----------------+------+------------+--------+------+----------+------------+
|   1001 | AKSHRA AGARWAL  | F    |      70.00 |     11 | A    | Science  | 1996-11-10 |
|   1002 | ANJANI SHARMA   | F    |      75.00 |     11 | A    | Commerce | 1996-09-18 |
|   1003 | ANSHUL SAXENA   | M    |      78.00 |     11 | A    | Commerce | 1996-11-19 |
|   1004 |  AISHWARYA SINGH | F    |      79.00 |     11 | A    | Commerce | 1996-11-01 |
|   1005 |  AKRITI SAXENA  | F    |      76.00 |     11 | A    | Commerce | 1996-09-20 |
|   1018 |  SURYANSH KUMAR | F    |      76.00 |     11 | A    | Commerce | 1996-09-20 |
|   1019 |  SURYANSH KUMAR | F    |      76.00 |     11 | A    | Commerce | 1996-09-20 |
| 101119 |  SURYANSH KUMAR | F    |      76.00 |     11 | A    | Commerce | 1996-09-20 |
+--------+-----------------+------+------------+--------+------+----------+------------+
8 rows in set (0.00 sec)
```

```
mysql>  insert into tbl_Student values(108191, ' SURYANSH KUMAR ','F',76,11,'A','Commerce','1996/09/23');
Query OK, 1 row affected, 1 warning (0.01 sec)

mysql> select * from tbl_Student;
+--------+-----------------+------+------------+--------+------+----------+------------+
| StdID  | StdName         | Sex  | Percentage | SClass | Sec  | Stream   | DOB        |
+--------+-----------------+------+------------+--------+------+----------+------------+
|   1001 | AKSHRA AGARWAL  | F    |      70.00 |     11 | A    | Science  | 1996-11-10 |
|   1002 | ANJANI SHARMA   | F    |      75.00 |     11 | A    | Commerce | 1996-09-18 |
|   1003 | ANSHUL SAXENA   | M    |      78.00 |     11 | A    | Commerce | 1996-11-19 |
|   1004 |  AISHWARYA SINGH | F    |      79.00 |     11 | A    | Commerce | 1996-11-01 |
|   1005 |  AKRITI SAXENA  | F    |      76.00 |     11 | A    | Commerce | 1996-09-20 |
|   1018 |  SURYANSH KUMAR | F    |      76.00 |     11 | A    | Commerce | 1996-09-20 |
|   1019 |  SURYANSH KUMAR | F    |      76.00 |     11 | A    | Commerce | 1996-09-20 |
| 101119 |  SURYANSH KUMAR | F    |      76.00 |     11 | A    | Commerce | 1996-09-20 |
| 108191 |  SURYANSH KUMAR | F    |      76.00 |     11 | A    | Commerce | 1996-09-23 |
+--------+-----------------+------+------------+--------+------+----------+------------+
9 rows in set (0.00 sec)

mysql>
```

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 ;

```
mysql> select * from tbl_Student;
+--------+------------------+------+------------+--------+------+----------+------------+
| StdID  | StdName          | Sex  | Percentage | SClass | Sec  | Stream   | DOB        |
+--------+------------------+------+------------+--------+------+----------+------------+
|   1001 | AKSHRA AGARWAL   | F    |      70.00 |     11 | A    | Science  | 1996-11-10 |
|   1002 | ANJANI SHARMA    | F    |      75.00 |     11 | A    | Commerce | 1996-09-18 |
|   1003 | ANSHUL SAXENA    | M    |      78.00 |     11 | A    | Commerce | 1996-11-19 |
|   1004 |  AISHWARYA SINGH | F    |      79.00 |     11 | A    | Commerce | 1996-11-01 |
|   1005 |  AKRITI SAXENA   | F    |      76.00 |     11 | A    | Commerce | 1996-09-20 |
|   1018 |  SURYANSH KUMAR  | F    |      76.00 |     11 | A    | Commerce | 1996-09-20 |
|   1019 |  SURYANSH KUMAR  | F    |      76.00 |     11 | A    | Commerce | 1996-09-20 |
| 101119 |  SURYANSH KUMAR  | F    |      76.00 |     11 | A    | Commerce | 1996-09-20 |
| 108191 |  SURYANSH KUMAR  | F    |      76.00 |     11 | A    | Commerce | 1996-09-23 |
+--------+------------------+------+------------+--------+------+----------+------------+
9 rows in set (0.00 sec)
```

2. To display ony name and date of birth from the table STUDENT. SELECT StdName, DOB FROM student ;

```
mysql> select StdName,DOB from tbl_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 |
|  SURYANSH KUMAR  | 1996-09-20 |
|  SURYANSH KUMAR  | 1996-09-20 |
|  SURYANSH KUMAR  | 1996-09-20 |
|  SURYANSH KUMAR  | 1996-09-23 |
+------------------+------------+
9 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 tbl_Student where percentage >= 80;
Empty 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;

```
mysql> select StdName,Stream,Percentage from tbl_Student where percentage > 80;
Empty 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;

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

```
mysql> describe tbl_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)
```

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

```
mysql> alter table tbl_Student Add Teacher_ID varchar(50);
Query OK, 0 rows affected (0.01 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

3. Type the statement DESC Student; Press enter key, now note the difference in table structure.

```
mysql> desc tbl_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    |       |
| Teacher_ID  | varchar(50)  | 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 tbl_Student;
+--------+-----------------+------+------------+--------+------+----------+------------+------------+
| StdID  | StdName         | Sex  | Percentage | SClass | Sec  | Stream   | DOB        | Teacher_ID |
+--------+-----------------+------+------------+--------+------+----------+------------+------------+
|   1001 | AKSHRA AGARWAL  | F    |      70.00 |     11 | A    | Science  | 1996-11-10 | NULL       |
|   1002 | ANJANI SHARMA   | F    |      75.00 |     11 | A    | Commerce | 1996-09-18 | NULL       |
|   1003 | ANSHUL SAXENA   | M    |      78.00 |     11 | A    | Commerce | 1996-11-19 | NULL       |
|   1004 |  AISHWARYA SINGH | F    |      79.00 |     11 | A    | Commerce | 1996-11-01 | NULL       |
|   1005 |  AKRITI SAXENA  | F    |      76.00 |     11 | A    | Commerce | 1996-09-20 | NULL       |
|   1018 |  SURYANSH KUMAR | F    |      76.00 |     11 | A    | Commerce | 1996-09-20 | NULL       |
|   1019 |  SURYANSH KUMAR | F    |      76.00 |     11 | A    | Commerce | 1996-09-20 | NULL       |
| 101119 |  SURYANSH KUMAR | F    |      76.00 |     11 | A    | Commerce | 1996-09-20 | NULL       |
| 108191 |  SURYANSH KUMAR | F    |      76.00 |     11 | A    | Commerce | 1996-09-23 | NULL       |
+--------+-----------------+------+------------+--------+------+----------+------------+------------+
9 rows in set (0.00 sec)
```

5. To modify the TeacherID data type form character to integer.
ALTER TABLE Student MODIFY TeacherID INTEGER ;
DESC Student;
SELECT * FROM student;

```
mysql> alter table tbl_Student modify Teacher_Id integer;
Query OK, 9 rows affected (0.03 sec)
Records: 9  Duplicates: 0  Warnings: 0

mysql> desc tbl_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    |       |
| Teacher_Id | int          | YES  |     | NULL    |       |
+------------+--------------+------+-----+---------+-------+
9 rows in set (0.00 sec)

mysql> select * from tbl_Student;
+--------+-----------------+------+------------+--------+------+---------+------------+------------+
| StdID  | StdName         | Sex  | Percentage | SClass | Sec  | Stream  | DOB        | Teacher_Id |
+--------+-----------------+------+------------+--------+------+---------+------------+------------+
|   1001 | AKSHRA AGARWAL  | F    |      70.00 |     11 | A    | Science | 1996-11-10 |       NULL |
|   1002 | ANJANI SHARMA   | F    |      75.00 |     11 | A    | Commerce | 1996-09-18 |       NULL |
|   1003 | ANSHUL SAXENA   | M    |      78.00 |     11 | A    | Commerce | 1996-11-19 |       NULL |
|   1004 |  AISHWARYA SINGH | F    |      79.00 |     11 | A    | Commerce | 1996-11-01 |       NULL |
|   1005 |  AKRITI SAXENA  | F    |      76.00 |     11 | A    | Commerce | 1996-09-20 |       NULL |
|   1018 |  SURYANSH KUMAR | F    |      76.00 |     11 | A    | Commerce | 1996-09-20 |       NULL |
|   1019 |  SURYANSH KUMAR | F    |      76.00 |     11 | A    | Commerce | 1996-09-20 |       NULL |
| 101119 |  SURYANSH KUMAR | F    |      76.00 |     11 | A    | Commerce | 1996-09-20 |       NULL |
| 108191 |  SURYANSH KUMAR | F    |      76.00 |     11 | A    | Commerce | 1996-09-23 |       NULL |
+--------+-----------------+------+------------+--------+------+---------+------------+------------+
9 rows in set (0.00 sec)
```

Lab Activity 4

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

```
mysql> alter table tbl_Student DROP Teacher_ID;
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 tbl_Student;
+------------------+----------------+
| StdName          | percentage - 5 |
+------------------+----------------+
| AKSHRA AGARWAL   |          65.00 |
| ANJANI SHARMA    |          70.00 |
| ANSHUL SAXENA    |          73.00 |
|  AISHWARYA SINGH |          74.00 |
|  AKRITI SAXENA   |          71.00 |
|  SURYANSH KUMAR  |          71.00 |
|  SURYANSH KUMAR  |          71.00 |
|  SURYANSH KUMAR  |          71.00 |
|  SURYANSH KUMAR  |          71.00 |
+------------------+----------------+
9 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 tbl_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    |
|  SURYANSH KUMAR  | 1996-09-20    |
|  SURYANSH KUMAR  | 1996-09-20    |
|  SURYANSH KUMAR  | 1996-09-20    |
|  SURYANSH KUMAR  | 1996-09-23    |
+------------------+---------------+
9 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 tbl_Student where Stream<>'Science';
+------------------+
| StdName          |
+------------------+
| ANJANI SHARMA    |
| ANSHUL SAXENA    |
|  AISHWARYA SINGH |
|  AKRITI SAXENA   |
|  SURYANSH KUMAR  |
|  SURYANSH KUMAR  |
|  SURYANSH KUMAR  |
|  SURYANSH KUMAR  |
+------------------+
8 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 tbl_student WHERE percentage >=60 AND percentage<=80 ;
+------------------+------------+
| StdName          | percentage |
+------------------+------------+
| AKSHRA AGARWAL   |      70.00 |
| ANJANI SHARMA    |      75.00 |
| ANSHUL SAXENA    |      78.00 |
|  AISHWARYA SINGH |      79.00 |
|  AKRITI SAXENA   |      76.00 |
|  SURYANSH KUMAR  |      76.00 |
|  SURYANSH KUMAR  |      76.00 |
|  SURYANSH KUMAR  |      76.00 |
|  SURYANSH KUMAR  |      76.00 |
+------------------+------------+
9 rows in set (0.00 sec)

mysql>
```

Lab Activity 5:

1.TochangeastudentnamefromSWATIMISHRAtoSWATIVERMAwhoseStdIDis1014andalsochange percentage 86. UPDATE Student SET StdName = ‘SWATI VERMA’, percentage = 86 WHERE StdId = 1014;

```
mysql> UPDATE tbl_Student SET StdName='SWATI VERMA' , percentage=86 where StdID = 1003;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> desc tbl_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)

mysql> select;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '' at line 1
mysql> select * from tbl_Student;
+-------+-----------------+------+------------+--------+------+---------+------------+
| StdID | StdName         | Sex  | Percentage | SClass | Sec  | Stream  | DOB        |
+-------+-----------------+------+------------+--------+------+---------+------------+
|  1001 | AKSHRA AGARWAL  | F    |      70.00 |     11 | A    | Science | 1996-11-10 |
|  1002 | ANJANI SHARMA   | F    |      75.00 |     11 | A    | Commerce| 1996-09-18 |
|  1003 | SWATI VERMA     | M    |      86.00 |     11 | A    | Commerce| 1996-11-19 |
|  1004 |  AISHWARYA SINGH| F    |      79.00 |     11 | A    | Commerce| 1996-11-01 |
|  1018 |  SURYANSH KUMAR | F    |      76.00 |     11 | A    | Commerce| 1996-09-20 |
|  1019 |  SURYANSH KUMAR | F    |      76.00 |     11 | A    | Commerce| 1996-09-20 |
|101119 |  SURYANSH KUMAR | F    |      76.00 |     11 | A    | Commerce| 1996-09-20 |
|108191 |  SURYANSH KUMAR | F    |      76.00 |     11 | A    | Commerce| 1996-09-23 |
+-------+-----------------+------+------------+--------+------+---------+------------+
8 rows in set (0.00 sec)
```

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

```
mysql> delete from tbl_Student where StdId=1005;
Query OK, 1 row affected (0.01 sec)

mysql> select * from tbl_Student;
+--------+------------------+------+------------+--------+------+----------+------------+
| StdID  | StdName          | Sex  | Percentage | SClass | Sec  | Stream   | DOB        |
+--------+------------------+------+------------+--------+------+----------+------------+
|   1001 | AKSHRA AGARWAL   | F    |      70.00 |     11 | A    | Science  | 1996-11-10 |
|   1002 | ANJANI SHARMA    | F    |      75.00 |     11 | A    | Commerce | 1996-09-18 |
|   1003 | ANSHUL SAXENA    | M    |      78.00 |     11 | A    | Commerce | 1996-11-19 |
|   1004 |  AISHWARYA SINGH | F    |      79.00 |     11 | A    | Commerce | 1996-11-01 |
|   1018 |  SURYANSH KUMAR  | F    |      76.00 |     11 | A    | Commerce | 1996-09-20 |
|   1019 |  SURYANSH KUMAR  | F    |      76.00 |     11 | A    | Commerce | 1996-09-20 |
| 101119 |  SURYANSH KUMAR  | F    |      76.00 |     11 | A    | Commerce | 1996-09-20 |
| 108191 |  SURYANSH KUMAR  | F    |      76.00 |     11 | A    | Commerce | 1996-09-23 |
+--------+------------------+------+------------+--------+------+----------+------------+
8 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 tbl_Student WHERE StdName LIKE 'G_'; SELECT * FROM tbl_Student WHERE StdName='G'; SELECT * FROM tbl_Student WHERE StdName LIKE 'G%' ; SELECT * WHE
RE tbl_Student WHERE StdName='%G%' ;
Empty set (0.00 sec)

Empty set (0.00 sec)

Empty set (0.00 sec)
```

4. Display all the streams in student table. SELECT DISTINCT Stream FROM Student;

```
mysql> SELECT DISTINCT Stream FROM tbl_Student;
+----------+
| Stream   |
+----------+
| Science  |
| Commerce |
+----------+
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 tbl_Student where percentage between 70 AND 80;
+-----------------+------+----------+
| StdName         | Sex  | Stream   |
+-----------------+------+----------+
| AKSHRA AGARWAL  | F    | Science  |
| ANJANI SHARMA   | F    | Commerce |
| ANSHUL SAXENA   | M    | Commerce |
|  AISHWARYA SINGH | F    | Commerce |
|  SURYANSH KUMAR  | F    | Commerce |
|  SURYANSH KUMAR  | F    | Commerce |
|  SURYANSH KUMAR  | F    | Commerce |
|  SURYANSH KUMAR  | F    | Commerce |
+-----------------+------+----------+
8 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.

```
mysql> select * from tbl_employees;
+-------+-----------+-----------+------+------------+---------+---------+--------+
| 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 | 300.000 |     30 |
|  8521 | SETH      | SALESMAN  | 8698 | 1991-02-22 | 1250.00 | 500.000 |     30 |
|  8566 | MAHADEVAN | MANAGER   | 8839 | 1991-04-02 | 2985.00 |    NULL |     20 |
|  8654 | MOMIN     | SALESMAN  | 8698 | 1991-09-28 | 1250.00 | 140.000 |     30 |
|  8698 | BINA      | MANAGER   | 8839 | 1991-05-01 | 2850.00 |    NULL |     30 |
|  8839 | AMIR      | PRESIDENT | NULL | 1991-11-18 | 5000.00 |    NULL |     10 |
|  8844 | KULDEEP   | SALESMAN  | 8698 | 1991-09-08 | 1500.00 |   0.000 |     30 |
|  8882 | SHIVANSH  | MANAGER   | 8839 | 1991-06-09 | 2450.00 |    NULL |     10 |
|  8888 | SCOTT     | ANALYST   | 8566 | 1992-12-09 | 3000.00 |    NULL |     20 |
+-------+-----------+-----------+------+------------+---------+---------+--------+
10 rows in set (0.00 sec)
```

1. Consider the Empl table and write SQL command 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 ename,sal from tbl_employees where sal >= 2200;
+-----------+---------+
| ename     | sal     |
+-----------+---------+
| MAHADEVAN | 2985.00 |
| BINA      | 2850.00 |
| AMIR      | 5000.00 |
| SHIVANSH  | 2450.00 |
| SCOTT     | 3000.00 |
+-----------+---------+
5 rows in set (0.00 sec)
```

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

```
mysql> select * from tbl_employees where comm is NULL;
+-------+-----------+-----------+------+------------+---------+------+--------+
| empno | ename     | job       | mgr  | hiredate   | sal     | comm | deptno |
+-------+-----------+-----------+------+------------+---------+------+--------+
|  8369 | SMITH     | CLERK     | 8902 | 1990-12-18 |  800.00 | NULL |     20 |
|  8566 | MAHADEVAN | MANAGER   | 8839 | 1991-04-02 | 2985.00 | NULL |     20 |
|  8698 | BINA      | MANAGER   | 8839 | 1991-05-01 | 2850.00 | NULL |     30 |
|  8839 | AMIR      | PRESIDENT | NULL | 1991-11-18 | 5000.00 | NULL |     10 |
|  8882 | SHIVANSH  | MANAGER   | 8839 | 1991-06-09 | 2450.00 | NULL |     10 |
|  8888 | SCOTT     | ANALYST   | 8566 | 1992-12-09 | 3000.00 | NULL |     20 |
+-------+-----------+-----------+------+------------+---------+------+--------+
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?

```
for the right syntax to use near 'sa' at line 1
mysql> select ename,sal from tbl_employees where sal <2500 OR sal >4000;
+----------+---------+
| ename    | sal     |
+----------+---------+
| SMITH    |  800.00 |
| ANYA     | 1600.00 |
| SETH     | 1250.00 |
| MOMIN    | 1250.00 |
| AMIR     | 5000.00 |
| KULDEEP  | 1500.00 |
| SHIVANSH | 2450.00 |
+----------+---------+
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 tbl_employees where job <> "manager" ;
+---------+-----------+---------+
| ename   | job       | sal     |
+---------+-----------+---------+
| SMITH   | CLERK     |  800.00 |
| ANYA    | SALESMAN  | 1600.00 |
| SETH    | SALESMAN  | 1250.00 |
| MOMIN   | SALESMAN  | 1250.00 |
| AMIR    | PRESIDENT | 5000.00 |
| KULDEEP | SALESMAN  | 1500.00 |
| SCOTT   | ANALYST   | 3000.00 |
+---------+-----------+---------+
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 tbl_employees 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 ename from tbl_employees where ename like "%T";
+--------+
| ename |
+--------+
| SCOTT |
+--------+
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 ename tbl_employees where ename LIKE 'M_L%';
ERROR 1054 (42S22): Unknown column 'ename' in 'field list'
```

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

```
mysql> SELECT * from tbl_employees where comm is NULL AND job='Not given';
Empty set (0.00 sec)
```