MY SQL Practice

Create a database.

Use the same database.

```
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> create database sju;
Query OK, 1 row affected (0.01 sec)

mysql> use sju;
Database changed
mysql>
```

Create a table employee with fields/attributes " emp_id, emp_name, designation, years_of_exp, age, city".

```
mysql> create table employee(emp_id int,emp_name varchar(20),designation varchar(20),yrs_exp int ,age int ,city varchar (20));
Query OK, 0 rows affected (0.03 sec)
```

Insert 5 records into employee.

```
mysql>  insert into employee values(01,'rekha','analyst',2, 19, "banglore");
Query OK, 1 row affected (0.01 sec)

mysql> insert into employee values (02,'rohan','manager',3,20,'manglore');
Query OK, 1 row affected (0.00 sec)

mysql> insert into employee values (03,'gagan','hr',2.3,18,'mysore');
Query OK, 1 row affected (0.01 sec)

mysql> insert into employee values (04,'arjun','devloper',3,21,'mandya');
Query OK, 1 row affected (0.01 sec)

mysql> insert into employee values (05,'kiran','gamer',7,25,'delhi');
Query OK, 1 row affected (0.00 sec)
```

Display the data from employee table

```
mysql> select * from employee;
+--------+----------+-------------+---------+------+----------+
| emp_id | emp_name | designation | yrs_exp | age  | city     |
+--------+----------+-------------+---------+------+----------+
|      1 | rekha    | analyst     |       2 |   19 | banglore |
|      2 | rohan    | manager     |       3 |   20 | manglore |
|      3 | gagan    | hr          |       2 |   18 | mysore   |
|      4 | arjun    | devloper    |       3 |   21 | mandya   |
|      5 | kiran    | gamer       |       7 |   25 | delhi    |
+--------+----------+-------------+---------+------+----------+
5 rows in set (0.00 sec)
```

Display emp_id from employee table.

```
mysql> select emp_id from employee;
+--------+
| emp_id |
+--------+
|      1 |
|      2 |
|      3 |
|      4 |
|      5 |
+--------+
5 rows in set (0.00 sec)
```

Display emp_id and emp_name.

```
mysql> select emp_id, emp_name from employee;
+--------+----------+
| emp_id | emp_name |
+--------+----------+
|      1 | rekha    |
|      2 | rohan    |
|      3 | gagan    |
|      4 | arjun    |
|      5 | kiran    |
+--------+----------+
5 rows in set (0.00 sec)
```

Display the details of employee where the designation is “Manager”,

```
mysql> select * from employee where designation = 'manager';
+--------+----------+-------------+---------+------+----------+
| emp_id | emp_name | designation | yrs_exp | age  | city     |
+--------+----------+-------------+---------+------+----------+
|      2 | rohan    | manager     |       3 |   20 | manglore |
+--------+----------+-------------+---------+------+----------+
1 row in set (0.00 sec)
```

Display the emp_id and emp_name of “Bangalore” employees.

```
mysql> select emp_id, emp_name from employee where city='banglore';
+--------+----------+
| emp_id | emp_name |
+--------+----------+
|      1 | rekha    |
+--------+----------+
1 row in set (0.00 sec)
```

Display the name of employees with age < 35.

```
mysql> select emp_name from employee where age<20;
+----------+
| emp_name |
+----------+
| rekha    |
| gagan    |
+----------+
2 rows in set (0.00 sec)
```

Display the employee data according to data name.

```
mysql> select * from employee order by emp_name;
+--------+----------+-------------+---------+------+----------+
| emp_id | emp_name | designation | yrs_exp | age  | city     |
+--------+----------+-------------+---------+------+----------+
|      4 | arjun    | devloper    |       3 |   21 | mandya   |
|      3 | gagan    | hr          |       2 |   18 | mysore   |
|      5 | kiran    | gamer       |       7 |   25 | delhi    |
|      1 | rekha    | analyst     |       2 |   19 | banglore |
|      2 | rohan    | manager     |       3 |   20 | manglore |
+--------+----------+-------------+---------+------+----------+
5 rows in set (0.00 sec)
```

Sort the data in ascending order.

```
mysql>  select * from employee order by emp_id;
+--------+----------+-------------+---------+------+----------+
| emp_id | emp_name | designation | yrs_exp | age  | city     |
+--------+----------+-------------+---------+------+----------+
|      1 | rekha    | analyst     |       2 |   19 | banglore |
|      2 | rohan    | manager     |       3 |   20 | manglore |
|      3 | gagan    | hr          |       2 |   18 | mysore   |
|      4 | arjun    | devloper    |       3 |   21 | mandya   |
|      5 | kiran    | gamer       |       7 |   25 | delhi    |
+--------+----------+-------------+---------+------+----------+
5 rows in set (0.00 sec)
```

Create a table employee 3 with the same structure and data of the employee table.

```
mysql> create table employee3 as select *from employee;
Query OK, 5 rows affected (0.02 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql> select * from employee3;
+--------+----------+-------------+---------+------+----------+
| emp_id | emp_name | designation | yrs_exp | age  | city     |
+--------+----------+-------------+---------+------+----------+
|      1 | rekha    | analyst     |       2 |   19 | banglore |
|      2 | rohan    | manager     |       3 |   20 | manglore |
|      3 | gagan    | hr          |       2 |   18 | mysore   |
|      4 | arjun    | devloper    |       3 |   21 | mandya   |
|      5 | kiran    | gamer       |       7 |   25 | delhi    |
+--------+----------+-------------+---------+------+----------+
5 rows in set (0.00 sec)
```

Create a table employee 4 with the structure of employee and specific rows.

```
mysql> create table employee4 as select * from employee where age>20;
Query OK, 2 rows affected (0.02 sec)
Records: 2  Duplicates: 0  Warnings: 0

mysql> select * from employee4;
+--------+----------+-------------+---------+------+--------+
| emp_id | emp_name | designation | yrs_exp | age  | city   |
+--------+----------+-------------+---------+------+--------+
|      4 | arjun    | devloper    |       3 |   21 | mandya |
|      5 | kiran    | gamer       |       7 |   25 | delhi  |
+--------+----------+-------------+---------+------+--------+
2 rows in set (0.00 sec)
```

Create a database student.

```
mysql> create database stud;
Query OK, 1 row affected (0.01 sec)

mysql> use stud;
Database changed
```

Display the details of a student where the name is“Rohan” and the reg_no is 3

```
mysql> insert into stud_info values( 03,"rohan");
Query OK, 1 row affected (0.00 sec)

mysql> select * from stud_info;
+--------+-------+
| reg_no | name  |
+--------+-------+
|      1 | abhi  |
|      2 | rohan |
|      3 | hemu  |
|      3 | rohan |
+--------+-------+
4 rows in set (0.00 sec)
```

```
mysql> select * from stud_info where name ="rohan" and reg_no =03;
+--------+-------+
| reg_no | name  |
+--------+-------+
|      3 | rohan |
+--------+-------+
1 row in set (0.00 sec)
```

Find out if we can have multiple columns with distinct.

```
mysql> select distinct name from stud_info;
+-------+
| name  |
+-------+
| abhi  |
| rohan |
| hemu  |
+-------+
3 rows in set (0.00 sec)

mysql> select distinct name,reg_no from stud_info;
+-------+--------+
| name  | reg_no |
+-------+--------+
| abhi  |      1 |
| rohan |      2 |
| hemu  |      3 |
| rohan |      3 |
+-------+--------+
4 rows in set (0.00 sec)

mysql> select distinct reg_no from stud_info;
+--------+
| reg_no |
+--------+
|      1 |
|      2 |
|      3 |
+--------+
3 rows in set (0.00 sec)
```

Can we use star(*) with distinct..?

```
mysql> select distinct * from stud_info;
+--------+-------+
| reg_no | name  |
+--------+-------+
|      1 | abhi  |
|      2 | rohan |
|      3 | hemu  |
|      3 | rohan |
+--------+-------+
4 rows in set (0.00 sec)
```

Insert the entered values into capital letters(changing case).

```
mysql> update employee_231bcada34 set city=upper(city);
Query OK, 5 rows affected (0.00 sec)
Rows matched: 5  Changed: 5  Warnings: 0

mysql> select * from employee_231bcada34;
+--------+----------+-------------+---------+------+----------+
| emp_id | emp_name | designation | yrs_exp | age  | city     |
+--------+----------+-------------+---------+------+----------+
|      1 | rekha    | analyst     |       2 |   19 | BANGLORE |
|      2 | rohan    | manager     |       2 |   20 | MANGLORE |
|      3 | gagan    | hr          |       2 |   18 | MYSORE   |
|      4 | arjun    | developer   |       3 |   21 | MANDYA   |
|      5 | kiran    | gamer       |       7 |   25 | DELHI    |
+--------+----------+-------------+---------+------+----------+
5 rows in set (0.00 sec)
```

Check whether the values entered into a table id case sensitive or not

```
mysql> select * from EMPLOYEE_231bcada34 WHERE city = "BANGLORE";
+--------+----------+-------------+---------+------+----------+
| emp_id | emp_name | designation | yrs_exp | age  | city     |
+--------+----------+-------------+---------+------+----------+
|      1 | rekha    | analyst     |       2 |   19 | BANGLORE |
+--------+----------+-------------+---------+------+----------+
1 row in set (0.00 sec)

mysql> select * from EMPLOYEE_231bcada34 WHERE city = "banglore";
+--------+----------+-------------+---------+------+----------+
| emp_id | emp_name | designation | yrs_exp | age  | city     |
+--------+----------+-------------+---------+------+----------+
|      1 | rekha    | analyst     |       2 |   19 | BANGLORE |
+--------+----------+-------------+---------+------+----------+
1 row in set (0.00 sec)
```

21.Find out whether 2 columns can be sorted together or not.

```
mysql> select * from employee_231bcada34 order by emp_name,city;
+--------+----------+-------------+---------+------+----------+
| emp_id | emp_name | designation | yrs_exp | age  | city     |
+--------+----------+-------------+---------+------+----------+
|      4 | arjun    | developer   |       3 |   21 | MANDYA   |
|      3 | gagan    | hr          |       2 |   18 | MYSORE   |
|      5 | kiran    | gamer       |       7 |   25 | DELHI    |
|      1 | rekha    | analyst     |       2 |   19 | BANGLORE |
|      2 | rohan    | manager     |       2 |   20 | MANGLORE |
+--------+----------+-------------+---------+------+----------+
5 rows in set (0.00 sec)
```

22.Find out whether we can sort the column values.

```
mysql> select emp_name,city from employee_231bcada34 order by emp_name,city;
+----------+----------+
| emp_name | city     |
+----------+----------+
| arjun    | MANDYA   |
| gagan    | MYSORE   |
| kiran    | DELHI    |
| rekha    | BANGLORE |
| rohan    | MANGLORE |
+----------+----------+
5 rows in set (0.00 sec)
```

Create a database SJU_student

Use the same database.

Show all the databases created by the user.

```
mysql> create database sju;
Query OK, 1 row affected (0.01 sec)

mysql> use sju;
Database changed
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| employee_34        |
| information_schema |
| mysql              |
| performance_schema |
| sju                |
| sys                |
+--------------------+
6 rows in set (0.00 sec)
```

26.Create a table student with fields/attributes " stud_id, stud_name, age, city, course, year(1,2,3), college_name, add_cred".

```
mysql> create table student (s_id int, s_name varchar(20), age int, city va
rchar(20),course char(20),yr int,clg varchar(20), additional_credit int);
Query OK, 0 rows affected (0.03 sec)

mysql> select* from student;
Empty set (0.00 sec)
```

27.Insert 5 values.

```
mysql> insert into student values(01, "rekha",19, "bengaluru","data analyti
cs",2,"sju",4)
    -> ;
Query OK, 1 row affected (0.00 sec)

mysql> insert into student values(02, "rohan",20, "mysore","data analytics",2,"sju",4);
Query OK, 1 row affected (0.00 sec)

mysql> insert into student values(03, "gagan",21, "mandya","data science",1
,"sju",3);
Query OK, 1 row affected (0.00 sec)

mysql> insert into student values(04, "yogana",23, "hassan","bcom",4,"mcc",
5);
Query OK, 1 row affected (0.00 sec)

mysql> insert into student values(05, "sanju",25, "manglore","bba",4,"kjc",
2);
Query OK, 1 row affected (0.00 sec)

mysql> select* from student;
+------+--------+------+-----------+----------------+------+------+-------------------+
| s_id | s_name | age  | city      | course         | yr   | clg  | additional_credit |
+------+--------+------+-----------+----------------+------+------+-------------------+
|    1 | rekha  |   19 | bengaluru | data analytics |    2 | sju  |                 4 |
|    2 | rohan  |   20 | mysore    | data analytics |    2 | sju  |                 4 |
|    3 | gagan  |   21 | mandya    | data science   |    1 | sju  |                 3 |
|    4 | yogana |   23 | hassan    | bcom           |    4 | mcc  |                 5 |
|    5 | sanju  |   25 | manglore  | bba            |    4 | kjc  |                 2 |
+------+--------+------+-----------+----------------+------+------+-------------------+
5 rows in set (0.00 sec)
```

28.Display the structure of table.

```
mysql> desc student;
+-------------------+-------------+------+-----+---------+-------+
| Field             | Type        | Null | Key | Default | Extra |
+-------------------+-------------+------+-----+---------+-------+
| s_id              | int         | YES  |     | NULL    |       |
| s_name            | varchar(20) | YES  |     | NULL    |       |
| age               | int         | YES  |     | NULL    |       |
| city              | varchar(20) | YES  |     | NULL    |       |
| course            | char(20)    | YES  |     | NULL    |       |
| yr                | int         | YES  |     | NULL    |       |
| clg               | varchar(20) | YES  |     | NULL    |       |
| additional_credit | int         | YES  |     | NULL    |       |
+-------------------+-------------+------+-----+---------+-------+
8 rows in set (0.00 sec)
```

29.Display the information of 2nd year students from the city “Mysore”.

```
mysql> select * from student where yr =2 and city ="mysore";
+------+--------+------+--------+----------------+------+------+-------------------+
| s_id | s_name | age  | city   | course         | yr   | clg  | additional_credit |
+------+--------+------+--------+----------------+------+------+-------------------+
|    2 | rohan  |   20 | mysore | data analytics |    2 | sju  |                 4 |
+------+--------+------+--------+----------------+------+------+-------------------+
1 row in set (0.00 sec)
```

30.Display the information of student where the age < 20 or year is 1st year.

```
mysql> select * from student where age<20 or yr=1;
+------+--------+------+-----------+----------------+------+------+-------------------+
| s_id | s_name | age  | city      | course         | yr   | clg  | additional_credit |
+------+--------+------+-----------+----------------+------+------+-------------------+
|    1 | rekha  |   19 | bengaluru | data analytics |    2 | sju  |                 4 |
|    3 | gagan  |   21 | mandya    | data science   |    1 | sju  |                 3 |
+------+--------+------+-----------+----------------+------+------+-------------------+
2 rows in set (0.00 sec)
```

31.Display the details of 1st year and 2nd year students.

```
mysql> select * from student where yr=2 or yr=1;
+------+--------+------+-----------+----------------+------+------+-------------------+
| s_id | s_name | age  | city      | course         | yr   | clg  | additional_credit |
+------+--------+------+-----------+----------------+------+------+-------------------+
|    1 | rekha  |   19 | bengaluru | data analytics |    2 | sju  |                 4 |
|    2 | rohan  |   20 | mysore    | data analytics |    2 | sju  |                 4 |
|    3 | gagan  |   21 | mandya    | data science   |    1 | sju  |                 3 |
+------+--------+------+-----------+----------------+------+------+-------------------+
3 rows in set (0.00 sec)
```

32.Display the different types of city.

```
mysql> select distinct  city from student;
+-----------+
| city      |
+-----------+
| bengaluru |
| mysore    |
| mandya    |
| hassan    |
| manglore  |
+-----------+
5 rows in set (0.00 sec)
```

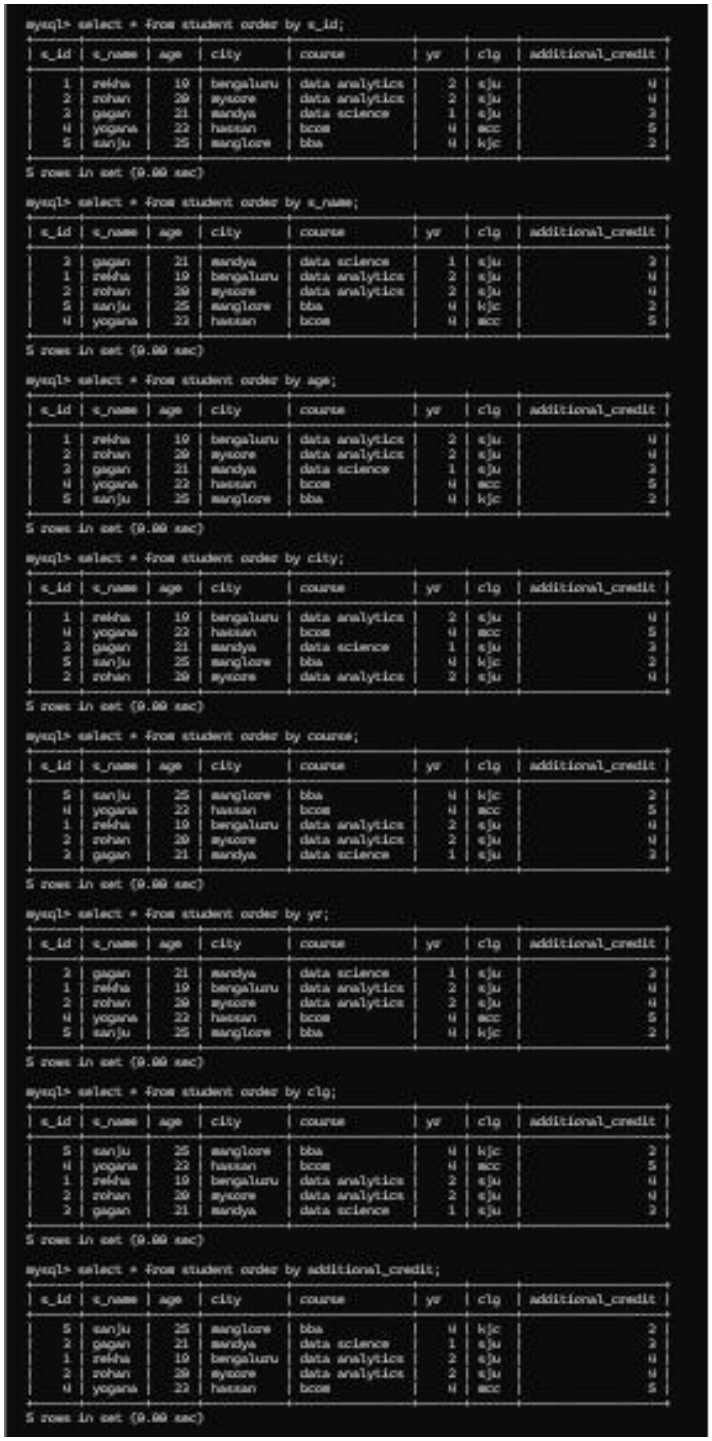
33.Display the stud_id, stud_name and age according to their name in the descending order.

```
mysql> select s_id,s_name,age from student order by s_name desc;
+------+--------+------+
| s_id | s_name | age  |
+------+--------+------+
|    4 | yogana |   23 |
|    5 | sanju  |   25 |
|    2 | rohan  |   20 |
|    1 | rekha  |   19 |
|    3 | gagan  |   21 |
+------+--------+------+
5 rows in set (0.00 sec)
```

34.Display the details of student except SJU.

```
mysql> select * from student where clg != "sju";
+------+---------+------+-----------+---------+------+------+-------------------+
| s_id | s_name  | age  | city      | course  | yr   | clg  | additional_credit |
+------+---------+------+-----------+---------+------+------+-------------------+
|    4 | yogana  |   23 | hassan    | bcom    |    4 | mcc  |                 5 |
|    5 | sanju   |   25 | manglore  | bba     |    4 | kjc  |                 2 |
+------+---------+------+-----------+---------+------+------+-------------------+
2 rows in set (0.00 sec)
```

35.Find orderby for all the columns



```
mysql> select * from student order by s_id;
+------+---------+------+-----------+---------------+------+------+-------------------+
| s_id | s_name  | age  | city      | course        | yr   | clg  | additional_credit |
+------+---------+------+-----------+---------------+------+------+-------------------+
|    1 | rekha   |   19 | bengaluru | data analytics|    2 | sju  |                 4 |
|    2 | rohan   |   20 | mysore    | data analytics|    2 | sju  |                 4 |
|    3 | gagan   |   21 | mandya    | data science  |    1 | sju  |                 3 |
|    4 | yogana  |   23 | hassan    | bcom          |    4 | mcc  |                 5 |
|    5 | sanju   |   25 | manglore  | bba           |    4 | kjc  |                 2 |
+------+---------+------+-----------+---------------+------+------+-------------------+
5 rows in set (0.00 sec)

mysql> select * from student order by s_name;
+------+---------+------+-----------+---------------+------+------+-------------------+
| s_id | s_name  | age  | city      | course        | yr   | clg  | additional_credit |
+------+---------+------+-----------+---------------+------+------+-------------------+
|    3 | gagan   |   21 | mandya    | data science  |    1 | sju  |                 3 |
|    1 | rekha   |   19 | bengaluru | data analytics|    2 | sju  |                 4 |
|    2 | rohan   |   20 | mysore    | data analytics|    2 | sju  |                 4 |
|    5 | sanju   |   25 | manglore  | bba           |    4 | kjc  |                 2 |
|    4 | yogana  |   23 | hassan    | bcom          |    4 | mcc  |                 5 |
+------+---------+------+-----------+---------------+------+------+-------------------+
5 rows in set (0.00 sec)

mysql> select * from student order by age;
+------+---------+------+-----------+---------------+------+------+-------------------+
| s_id | s_name  | age  | city      | course        | yr   | clg  | additional_credit |
+------+---------+------+-----------+---------------+------+------+-------------------+
|    1 | rekha   |   19 | bengaluru | data analytics|    2 | sju  |                 4 |
|    2 | rohan   |   20 | mysore    | data analytics|    2 | sju  |                 4 |
|    3 | gagan   |   21 | mandya    | data science  |    1 | sju  |                 3 |
|    4 | yogana  |   23 | hassan    | bcom          |    4 | mcc  |                 5 |
|    5 | sanju   |   25 | manglore  | bba           |    4 | kjc  |                 2 |
+------+---------+------+-----------+---------------+------+------+-------------------+
5 rows in set (0.00 sec)

mysql> select * from student order by city;
+------+---------+------+-----------+---------------+------+------+-------------------+
| s_id | s_name  | age  | city      | course        | yr   | clg  | additional_credit |
+------+---------+------+-----------+---------------+------+------+-------------------+
|    1 | rekha   |   19 | bengaluru | data analytics|    2 | sju  |                 4 |
|    4 | yogana  |   23 | hassan    | bcom          |    4 | mcc  |                 5 |
|    3 | gagan   |   21 | mandya    | data science  |    1 | sju  |                 3 |
|    5 | sanju   |   25 | manglore  | bba           |    4 | kjc  |                 2 |
|    2 | rohan   |   20 | mysore    | data analytics|    2 | sju  |                 4 |
+------+---------+------+-----------+---------------+------+------+-------------------+
5 rows in set (0.00 sec)

mysql> select * from student order by course;
+------+---------+------+-----------+---------------+------+------+-------------------+
| s_id | s_name  | age  | city      | course        | yr   | clg  | additional_credit |
+------+---------+------+-----------+---------------+------+------+-------------------+
|    5 | sanju   |   25 | manglore  | bba           |    4 | kjc  |                 2 |
|    4 | yogana  |   23 | hassan    | bcom          |    4 | mcc  |                 5 |
|    1 | rekha   |   19 | bengaluru | data analytics|    2 | sju  |                 4 |
|    2 | rohan   |   20 | mysore    | data analytics|    2 | sju  |                 4 |
|    3 | gagan   |   21 | mandya    | data science  |    1 | sju  |                 3 |
+------+---------+------+-----------+---------------+------+------+-------------------+
5 rows in set (0.00 sec)

mysql> select * from student order by yr;
+------+---------+------+-----------+---------------+------+------+-------------------+
| s_id | s_name  | age  | city      | course        | yr   | clg  | additional_credit |
+------+---------+------+-----------+---------------+------+------+-------------------+
|    3 | gagan   |   21 | mandya    | data science  |    1 | sju  |                 3 |
|    1 | rekha   |   19 | bengaluru | data analytics|    2 | sju  |                 4 |
|    2 | rohan   |   20 | mysore    | data analytics|    2 | sju  |                 4 |
|    4 | yogana  |   23 | hassan    | bcom          |    4 | mcc  |                 5 |
|    5 | sanju   |   25 | manglore  | bba           |    4 | kjc  |                 2 |
+------+---------+------+-----------+---------------+------+------+-------------------+
5 rows in set (0.00 sec)

mysql> select * from student order by clg;
+------+---------+------+-----------+---------------+------+------+-------------------+
| s_id | s_name  | age  | city      | course        | yr   | clg  | additional_credit |
+------+---------+------+-----------+---------------+------+------+-------------------+
|    5 | sanju   |   25 | manglore  | bba           |    4 | kjc  |                 2 |
|    4 | yogana  |   23 | hassan    | bcom          |    4 | mcc  |                 5 |
|    1 | rekha   |   19 | bengaluru | data analytics|    2 | sju  |                 4 |
|    2 | rohan   |   20 | mysore    | data analytics|    2 | sju  |                 4 |
|    3 | gagan   |   21 | mandya    | data science  |    1 | sju  |                 3 |
+------+---------+------+-----------+---------------+------+------+-------------------+
5 rows in set (0.00 sec)

mysql> select * from student order by additional_credit;
+------+---------+------+-----------+---------------+------+------+-------------------+
| s_id | s_name  | age  | city      | course        | yr   | clg  | additional_credit |
+------+---------+------+-----------+---------------+------+------+-------------------+
|    5 | sanju   |   25 | manglore  | bba           |    4 | kjc  |                 2 |
|    3 | gagan   |   21 | mandya    | data science  |    1 | sju  |                 3 |
|    1 | rekha   |   19 | bengaluru | data analytics|    2 | sju  |                 4 |
|    2 | rohan   |   20 | mysore    | data analytics|    2 | sju  |                 4 |
|    4 | yogana  |   23 | hassan    | bcom          |    4 | mcc  |                 5 |
+------+---------+------+-----------+---------------+------+------+-------------------+
5 rows in set (0.00 sec)
```

Show all existing databases

```
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| employee_34        |
| information_schema |
| mysql              |
| performance_schema |
| sju                |
| sys                |
+--------------------+
6 rows in set (0.00 sec)
```

Create a database student_04 and use the same database

```
mysql> create database stud_34;
Query OK, 1 row affected (0.01 sec)

mysql> use stud_34;
Database changed
mysql>
```

Create a table student with id , name, year, department, college and city ,insert 5 values

(note : I already have similar table create in another database so here im creating a table woth same structure and data of the table from another database

```
mysql> create table stud_34.student_34 like sju.student;
Query OK, 0 rows affected (0.02 sec)

mysql> insert into stud_34.student_34 select * from sju.student;
Query OK, 5 rows affected (0.01 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql> select * from student_34;
+------+--------+------+-----------+----------------+------+------+------------------+
| s_id | s_name | age  | city      | course         | yr   | clg  | additional_credit |
+------+--------+------+-----------+----------------+------+------+------------------+
|    1 | rekha  |   19 | bengaluru | data analytics |    2 | sju  |
   4 |
|    2 | rohan  |   20 | mysore    | data analytics |    2 | sju  |
   4 |
|    3 | gagan  |   21 | mandya    | data science   |    1 | sju  |
   3 |
|    4 | yogana |   23 | hassan    | bcom           |    4 | mcc  |
   5 |
|    5 | sanju  |   25 | manglore  | bba            |    4 | kjc  |
   2 |
+------+--------+------+-----------+----------------+------+------+------------------+
5 rows in set (0.00 sec)
```

Display all the details

update the college names to sju and display all details

```
mysql> update student_34 set clg="sju";
Query OK, 2 rows affected (0.00 sec)
Rows matched: 5  Changed: 2  Warnings: 0

mysql> select * from student_34;
+------+--------+------+----------+----------------+------+------+-------------------+
| s_id | s_name | age  | city     | course         | yr   | clg  | additional_credit |
+------+--------+------+----------+----------------+------+------+-------------------+
|    1 | rekha  |   19 | bengaluru | data analytics |    2 | sju  |                 4 |
|    2 | rohan  |   20 | mysore    | data analytics |    2 | sju  |                 4 |
|    3 | gagan  |   21 | mandya    | data science   |    1 | sju  |                 3 |
|    4 | yogana |   23 | hassan    | bcom           |    4 | sju  |                 5 |
|    5 | sanju  |   25 | manglore  | bba            |    4 | sju  |                 2 |
+------+--------+------+----------+----------------+------+------+-------------------+
5 rows in set (0.00 sec)
```

Update city into Bengaluru where city is Bangalore and then display

```
mysql> update student_34 set city="banglore" where city="bengaluru";
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from student_34;
+------+--------+------+----------+----------------+------+------+-------------------+
| s_id | s_name | age  | city     | course         | yr   | clg  | additional_credit |
+------+--------+------+----------+----------------+------+------+-------------------+
|    1 | rekha  |   19 | banglore | data analytics |    2 | sju  |                 4 |
|    2 | rohan  |   20 | mysore   | data analytics |    2 | sju  |                 4 |
|    3 | gagan  |   21 | mandya   | data science   |    1 | sju  |                 3 |
|    4 | yogana |   23 | hassan   | bcom           |    4 | sju  |                 5 |
|    5 | sanju  |   25 | manglore | bba            |    4 | sju  |                 2 |
+------+--------+------+----------+----------------+------+------+-------------------+
5 rows in set (0.00 sec)
```

Display all the details of student whose name starts with a

Name ends with a

1st and last letter is a

2nd character is n

3rd character is e

Name with 6 characters

Name with 6 characters and has 2nd letter as n

Name which has letter a in between

Insert a new row with first and last name and fetch the details using last name

```
mysql> select * from student_34 where s_name like "a%";
Empty set (0.00 sec)

mysql> select * from student_34 where s_name like "%a";
+------+---------+------+-----------+----------------+------+------+--------------------+
| s_id | s_name  | age  | city      | course         | yr   | clg  | additional_credit  |
+------+---------+------+-----------+----------------+------+------+--------------------+
|    1 | rekha   |   19 | banglore  | data analytics |    2 | sju  |                  4 |
|    4 | yogana  |   23 | hassan    | bcom           |    4 | sju  |                  5 |
+------+---------+------+-----------+----------------+------+------+--------------------+
2 rows in set (0.00 sec)

mysql> select * from student_34 where s_name like "a%a";
Empty set (0.00 sec)

mysql> select * from student_34 where s_name like "_n";
Empty set (0.00 sec)

mysql> select * from student_34 where s_name like "__e";
Empty set (0.00 sec)

mysql> select * from student_34 where s_name like "______";
+------+---------+------+--------+--------+------+------+--------------------+
| s_id | s_name  | age  | city   | course | yr   | clg  | additional_credit  |
+------+---------+------+--------+--------+------+------+--------------------+
|    4 | yogana  |   23 | hassan | bcom   |    4 | sju  |                  5 |
+------+---------+------+--------+--------+------+------+--------------------+
1 row in set (0.00 sec)

mysql> select * from student_34 where s_name like "_n____";
Empty set (0.00 sec)

mysql> select * from student_34 where s_name like "%a%";
+------+---------+------+-----------+----------------+------+------+--------------------+
| s_id | s_name  | age  | city      | course         | yr   | clg  | additional_credit  |
+------+---------+------+-----------+----------------+------+------+--------------------+
|    1 | rekha   |   19 | banglore  | data analytics |    2 | sju  |                  4 |
|    2 | rohan   |   20 | mysore    | data analytics |    2 | sju  |                  4 |
|    3 | gagan   |   21 | mandya    | data science   |    1 | sju  |                  3 |
|    4 | yogana  |   23 | hassan    | bcom           |    4 | sju  |                  5 |
|    5 | sanju   |   25 | manglore  | bba            |    4 | sju  |                  2 |
+------+---------+------+-----------+----------------+------+------+--------------------+
5 rows in set (0.00 sec)

mysql> insert into student_34 values(6,"rekha shree",20,"hydrabad","business analyst",3,"sju",5
);
Query OK, 1 row affected (0.00 sec)

mysql> select * from student_34 where s_name like "%shree";
+------+--------------+------+----------+------------------+------+------+--------------------+
| s_id | s_name       | age  | city     | course           | yr   | clg  | additional_credit  |
+------+--------------+------+----------+------------------+------+------+--------------------+
|    6 | rekha shree  |   20 | hydrabad | business analyst |    3 | sju  |                  5 |
+------+--------------+------+----------+------------------+------+------+--------------------+
1 row in set (0.00 sec)

mysql>
```

Adding a new column country and then display

```
mysql> alter table student_34 add  country varchar(20);
Query OK, 0 rows affected (0.02 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> select * from student_34;
+------+--------------+------+----------+------------------+------+------+--------------------+---------+
| s_id | s_name       | age  | city     | course           | yr   | clg  | additional_credit  | country |
+------+--------------+------+----------+------------------+------+------+--------------------+---------+
|    1 | rekha        |   19 | banglore | data analytics   |    2 | sju  |                  4 | NULL    |
|    2 | rohan        |   20 | mysore   | data analytics   |    2 | sju  |                  4 | NULL    |
|    3 | gagan        |   21 | mandya   | data science     |    1 | sju  |                  3 | NULL    |
|    4 | yogana       |   23 | hassan   | bcom             |    4 | sju  |                  5 | NULL    |
|    5 | sanju        |   25 | manglore | bba              |    4 | sju  |                  2 | NULL    |
|    6 | rekha shree  |   20 | hydrabad | business analyst |    3 | sju  |                  5 | NULL    |
+------+--------------+------+----------+------------------+------+------+--------------------+---------+
6 rows in set (0.00 sec)
```

Display the structure of the table

```
mysql> desc student_34;
+-------------------+-------------+------+-----+---------+-------+
| Field             | Type        | Null | Key | Default | Extra |
+-------------------+-------------+------+-----+---------+-------+
| s_id              | int         | YES  |     | NULL    |       |
| s_name            | varchar(20) | YES  |     | NULL    |       |
| age               | int         | YES  |     | NULL    |       |
| city              | varchar(20) | YES  |     | NULL    |       |
| course            | char(20)    | YES  |     | NULL    |       |
| yr                | int         | YES  |     | NULL    |       |
| clg               | varchar(20) | YES  |     | NULL    |       |
| additional_credit | int         | YES  |     | NULL    |       |
| country           | varchar(20) | YES  |     | NULL    |       |
+-------------------+-------------+------+-----+---------+-------+
9 rows in set (0.00 sec)
```

Update the values for country column to india and display

```
mysql> update student_34 set country ="india";
Query OK, 6 rows affected (0.01 sec)
Rows matched: 6  Changed: 6  Warnings: 0

mysql> select * from student_34;
+------+-------------+------+----------+-----------------+------+------+-------------------+---------+
| s_id | s_name      | age  | city     | course          | yr   | clg  | additional_credit | country |
+------+-------------+------+----------+-----------------+------+------+-------------------+---------+
|    1 | rekha       |   19 | banglore | data analytics  |    2 | sju  |                 4 | india   |
|    2 | rohan       |   20 | mysore   | data analytics  |    2 | sju  |                 4 | india   |
|    3 | gagan       |   21 | mandya   | data science    |    1 | sju  |                 3 | india   |
|    4 | yogana      |   23 | hassan   | bcom            |    4 | sju  |                 5 | india   |
|    5 | sanju       |   25 | manglore | bba             |    4 | sju  |                 2 | india   |
|    6 | rekha shree |   20 | hydrabad | business analyst |    3 | sju  |                 5 | india   |
+------+-------------+------+----------+-----------------+------+------+-------------------+---------+
6 rows in set (0.00 sec)
```

Rename a column name

```
mysql> alter table student_34 rename column additional_credit to add_cred;
Query OK, 0 rows affected (0.02 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

Demonstrate in statemant

```
mysql> select * from student_34 where city in ("manglore","hydrabad");
+------+-------------+------+----------+-----------------+------+------+----------+---------+
| s_id | s_name      | age  | city     | course          | yr   | clg  | add_cred | country |
+------+-------------+------+----------+-----------------+------+------+----------+---------+
|    5 | sanju       |   25 | manglore | bba             |    4 | sju  |        2 | india   |
|    6 | rekha shree |   20 | hydrabad | business analyst |    3 | sju  |        5 | india   |
+------+-------------+------+----------+-----------------+------+------+----------+---------+
2 rows in set (0.00 sec)
```

13.Create a table student 1 with the colname of datatype varchar(7),enter a value to it with more than 5 char

```
mysql> create table student_1(name varchar(7));
Query OK, 0 rows affected (0.02 sec)

mysql> insert into student_1 values("rekhashree");
ERROR 1406 (22001): Data too long for column 'name' at row 1
mysql>
```

14. Modify the column and change the datatype to varchar(2)

```
mysql> alter table student_1 modify name varchar(20);
Query OK, 0 rows affected (0.01 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> insert into student_1 values("rekhashree");
Query OK, 1 row affected (0.00 sec)
```

Q1) Show all the databases created by the user.

```
mysql> show databases;
+--------------------+
| Database           |
+--------------------+
| ex                 |
| information_schema |
| lab_1              |
| mysql              |
| performance_schema |
| sys                |
| world              |
+--------------------+
7 rows in set (0.02 sec)
```

Q2) Create new database lab1.

```
mysql> CREATE DATABASE LAB__1;
Query OK, 1 row affected (0.03 sec)
```

Q3) Create table employee_231BCADA58(your reg. no.) with the following attributes.

Empid varchar(10)	Ename varchar(20)	DOB date	Designation Varchar(30)	Dept Char(20)	Salary Decimal(7,2)	City Varchar(20)	Gender Char(8)

Q4) Insert 10 records.

```
mysql> insert into emp_231bcada34 values("E130", "Jack","1997-01-30","CFO","Accountst",75000,"Davangere","Male");
Query OK, 1 row affected (0.01 sec)

mysql> insert into emp_231bcada34 values("E131", "Peter","1988-01-30","CtO","IT",34000,"Chittur","Male");
Query OK, 1 row affected (0.00 sec)
```

Q5) Display the data.

```
mysql> select*from emp_231bcada34;
+--------+----------+------------+--------------------+-------------+----------+-------------+--------+---------+
| emp_id | name     | dob        | designation        | dept        | salary   | city        | gender | pincode |
+--------+----------+------------+--------------------+-------------+----------+-------------+--------+---------+
| E123   | Rahul    | 1990-01-30 | Manager            | HR          | 80000.00 | Bengaluru   | Male   |      56 |
| E124   | Rohan    | 1991-01-30 | Dept.Manager       | HR          | 70000.00 | Mysore      | Male   |      76 |
| E125   | Ramya    | 1992-01-30 | Vice-president     | Corporation | 72000.00 | Hassan      | Female |      86 |
| E126   | Ananya   | 1993-01-30 | ceo                | C-Suite     | 57000.00 | Chennai     | Female |      26 |
| E127   | Bhavya   | 1994-01-30 | cmo                | Marketing   | 28000.00 | Chitradurga | Female |      23 |
| E128   | Akhil    | 1995-01-30 | Ass.Vice president | corporation | 29000.00 | Manglore    | Male   |      46 |
| E129   | Nishitha | 1996-01-30 | MD                 | Management  | 60000.00 | Udupi       | Female |      26 |
| E130   | Jack     | 1997-01-30 | CFO                | Accountst   | 75000.00 | Davangere   | Male   |      86 |
| E131   | Peter    | 1988-01-30 | CtO                | IT          | 34000.00 | Chittur     | Male   |      46 |
+--------+----------+------------+--------------------+-------------+----------+-------------+--------+---------+
9 rows in set (0.03 sec)
```

Q6) Display the structure of the table.

```
mysql> desc emp_231bcada34;
+-------------+--------------+------+-----+---------+-------+
| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| emp_id      | varchar(10)  | YES  |     | NULL    |       |
| name        | varchar(20)  | YES  |     | NULL    |       |
| dob         | date         | YES  |     | NULL    |       |
| designation | varchar(40)  | YES  |     | NULL    |       |
| dept        | char(20)     | YES  |     | NULL    |       |
| salary      | decimal(7,2) | YES  |     | NULL    |       |
| city        | varchar(20)  | YES  |     | NULL    |       |
| gender      | char(15)     | YES  |     | NULL    |       |
+-------------+--------------+------+-----+---------+-------+
8 rows in set (0.02 sec)
```

Q7) Add a column pincode and insert values in it.

```
mysql> alter table emp_231bcada34 add pincode int;
Query OK, 0 rows affected (0.03 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

```
mysql> update emp_231bcada34 set pincode=case
    -> when city = "bengaluru" then 56
    -> when city = "chennai" then 26
    -> when city = "chitradurga" then 23
    -> when city = "manglore" then 46
    -> when city = "udupi" then 26
    -> when city = "davengere" then 86
    -> when city = "chittur" then 46
    -> end;
Query OK, 3 rows affected (0.01 sec)
Rows matched: 9  Changed: 3  Warnings: 0
```

Q8) Display the different designation.

```
mysql> select distinct designation from emp_231bcada34;
+--------------------+
| designation        |
+--------------------+
| Manager            |
| Dept.Manager       |
| Vice-president     |
| ceo                |
| cmo                |
| Ass.Vice president |
| MD                 |
| CFO                |
| CtO                |
+--------------------+
9 rows in set (0.00 sec)
```

Q9) Arrange data according to empid , descending order.

```
mysql> select * from emp_231bcada34 order by emp_id desc;
+--------+----------+------------+--------------------+-------------+----------+-------------+--------+---------+
| emp_id | name     | dob        | designation        | dept        | salary   | city        | gender | pincode |
+--------+----------+------------+--------------------+-------------+----------+-------------+--------+---------+
| E131   | Peter    | 1988-01-30 | CtO                | IT          | 34000.00 | Chittur     | Male   |      46 |
| E130   | Jack     | 1997-01-30 | CFO                | Accountst   | 75000.00 | Davangere   | Male   |      86 |
| E129   | Nishitha | 1996-01-30 | MD                 | Management  | 60000.00 | Udupi       | Female |      26 |
| E128   | Akhil    | 1995-01-30 | Ass.Vice president | corporation | 29000.00 | Manglore    | Male   |      46 |
| E127   | Bhavya   | 1994-01-30 | cmo                | Marketing   | 28000.00 | Chitradurga | Female |      23 |
| E126   | Ananya   | 1993-01-30 | ceo                | C-Suite     | 57000.00 | Chennai     | Female |      26 |
| E125   | Ramya    | 1992-01-30 | Vice-president     | Corporation | 72000.00 | Hassan      | Female |      86 |
| E124   | Rohan    | 1991-01-30 | Dept.Manager       | HR          | 70000.00 | Mysore      | Male   |      76 |
| E123   | Rahul    | 1990-01-30 | Manager            | HR          | 80000.00 | Bengaluru   | Male   |      56 |
+--------+----------+------------+--------------------+-------------+----------+-------------+--------+---------+
9 rows in set (0.01 sec)
```

Q10) Arrange the data according to names of the employee, ascending order.

```
mysql> select * from emp_231bcada34 order by name;
+--------+----------+------------+--------------------+-------------+----------+-------------+--------+---------+
| emp_id | name     | dob        | designation        | dept        | salary   | city        | gender | pincode |
+--------+----------+------------+--------------------+-------------+----------+-------------+--------+---------+
| E128   | Akhil    | 1995-01-30 | Ass.Vice president | corporation | 29000.00 | Manglore    | Male   |      46 |
| E126   | Ananya   | 1993-01-30 | ceo                | C-Suite     | 57000.00 | Chennai     | Female |      26 |
| E127   | Bhavya   | 1994-01-30 | cmo                | Marketing   | 28000.00 | Chitradurga | Female |      23 |
| E130   | Jack     | 1997-01-30 | CFO                | Accountst   | 75000.00 | Davangere   | Male   |      86 |
| E129   | Nishitha | 1996-01-30 | MD                 | Management  | 60000.00 | Udupi       | Female |      26 |
| E131   | Peter    | 1988-01-30 | CtO                | IT          | 34000.00 | Chittur     | Male   |      46 |
| E123   | Rahul    | 1990-01-30 | Manager            | HR          | 80000.00 | Bengaluru   | Male   |      56 |
| E125   | Ramya    | 1992-01-30 | Vice-president     | Corporation | 72000.00 | Hassan      | Female |      86 |
| E124   | Rohan    | 1991-01-30 | Dept.Manager       | HR          | 70000.00 | Mysore      | Male   |      76 |
+--------+----------+------------+--------------------+-------------+----------+-------------+--------+---------+
9 rows in set (0.00 sec)
```

Q11) Display the minimum salary and maximum salary.

```
mysql> select max(salary) from emp_231bcada34;
+-------------+
| max(salary) |
+-------------+
|    80000.00 |
+-------------+
1 row in set (0.01 sec)

mysql> select min(salary) from emp_231bcada34;
+-------------+
| min(salary) |
+-------------+
|    28000.00 |
+-------------+
1 row in set (0.00 sec)
```

Q12) Update salary to 75,000 if the department is accounts and the post is deputy manager.

```
mysql> update emp_231bcada34 set salary= 75000 where dept='Accountst' and designation ='Dept.manager';
Query OK, 0 rows affected (0.00 sec)
Rows matched: 0  Changed: 0  Warnings: 0
```

Q13) Display the information of employee where the salary is less than 30,000.

```
mysql> select *from emp_231bcada34 where salary<30000;
+--------+--------+------------+--------------------+-------------+----------+-------------+--------+---------+
| emp_id | name   | dob        | designation        | dept        | salary   | city        | gender | pincode |
+--------+--------+------------+--------------------+-------------+----------+-------------+--------+---------+
| E127   | Bhavya | 1994-01-30 | cmo                | Marketing   | 28000.00 | Chitradurga | Female |      23 |
| E128   | Akhil  | 1995-01-30 | Ass.Vice president | corporation | 29000.00 | Manglore    | Male   |      46 |
+--------+--------+------------+--------------------+-------------+----------+-------------+--------+---------+
2 rows in set (0.00 sec)
```

Q14) Update the city to Bengaluru and department to marketing if the empid is either 124 or 125.

```
mysql> update emp_231bcada34 set city="Bengaluru", dept = "marketing" where emp_id = "E124" or emp_id ="E125";
Query OK, 2 rows affected (0.01 sec)
Rows matched: 2  Changed: 2  Warnings: 0
```

Q15) Create table employee1 with the same structure and data of employee.

```
mysql> create table emp_1 as select *from emp_231bcada34;
Query OK, 9 rows affected (0.06 sec)
Records: 9  Duplicates: 0  Warnings: 0

mysql> select * from emp_1;
+--------+---------+------------+--------------------+-------------+----------+-------------+--------+---------+
| emp_id | name    | dob        | designation        | dept        | salary   | city        | gender | pincode |
+--------+---------+------------+--------------------+-------------+----------+-------------+--------+---------+
| E123   | Rahul   | 1990-01-30 | Manager            | HR          | 80000.00 | Bengaluru   | Male   |      56 |
| E124   | Rohan   | 1991-01-30 | Dept.Manager       | marketing   | 70000.00 | Bengaluru   | Male   |      76 |
| E125   | Ramya   | 1992-01-30 | Vice-president     | marketing   | 72000.00 | Bengaluru   | Female |      86 |
| E126   | Ananya  | 1993-01-30 | ceo                | C-Suite     | 57000.00 | Chennai     | Female |      26 |
| E127   | Bhavya  | 1994-01-30 | cmo                | Marketing   | 28000.00 | Chitradurga | Female |      23 |
| E128   | Akhil   | 1995-01-30 | Ass.Vice president | corporation | 29000.00 | Manglore    | Male   |      46 |
| E129   | Nishitha| 1996-01-30 | MD                 | Management  | 60000.00 | Udupi       | Female |      26 |
| E130   | Jack    | 1997-01-30 | CFO                | Accountst   | 75000.00 | Davangere   | Male   |      86 |
| E131   | Peter   | 1988-01-30 | CtO                | IT          | 34000.00 | Chittur     | Male   |      46 |
+--------+---------+------------+--------------------+-------------+----------+-------------+--------+---------+
9 rows in set (0.00 sec)
```

Q16) Create table employee2 with only structure as employee.

```
mysql> create table emp_2 as select * from emp_231bcada34 where 1=0;
Query OK, 0 rows affected (0.03 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

Q17) Display names of employee where the name starts from a.

```
mysql> select * from  emp_231bcada34 where name like "a%";
+--------+-------+------------+--------------------+-------------+----------+----------+--------+---------+
| emp_id | name  | dob        | designation        | dept        | salary   | city     | gender | pincode |
+--------+-------+------------+--------------------+-------------+----------+----------+--------+---------+
| E126   | Ananya | 1993-01-30 | ceo                | C-Suite     | 57000.00 | Chennai  | Female |      26 |
| E128   | Akhil  | 1995-01-30 | Ass.Vice president | corporation | 29000.00 | Manglore | Male   |      46 |
+--------+-------+------------+--------------------+-------------+----------+----------+--------+---------+
2 rows in set (0.01 sec)
```

Q18) Display empid and ename who belongs to a city mysore, Bengaluru and hassan.

```
mysql> select emp_id ,name from emp_231bcada34 where city in ("mysore","bengaluru","hassan");
+--------+-------+
| emp_id | name  |
+--------+-------+
| E123   | Rahul |
| E124   | Rohan |
| E125   | Ramya |
+--------+-------+
3 rows in set (0.01 sec)
```

Q19) Demonstrate not in clause.

```
mysql> select emp_id ,name from emp_231bcada34 where city not in ("mysore","bengaluru","hassan");
+--------+----------+
| emp_id | name     |
+--------+----------+
| E126   | Ananya   |
| E127   | Bhavya   |
| E128   | Akhil    |
| E129   | Nishitha |
| E130   | Jack     |
| E131   | Peter    |
+--------+----------+
6 rows in set (0.00 sec)
```

Q20) Demonstrate and,or,not .

```
mysql> select * from emp_231bcada34 where city ="bengaluru" and gender ="female";
+--------+-------+------------+----------------+-----------+----------+-----------+--------+---------+
| emp_id | name  | dob        | designation    | dept      | salary   | city      | gender | pincode |
+--------+-------+------------+----------------+-----------+----------+-----------+--------+---------+
| E125   | Ramya | 1992-01-30 | Vice-president | marketing | 72000.00 | Bengaluru | Female |      86 |
+--------+-------+------------+----------------+-----------+----------+-----------+--------+---------+
1 row in set (0.00 sec)

mysql> select * from emp_231bcada34 where city ="bengaluru" or gender ="female";
+--------+----------+------------+----------------+------------+----------+-------------+--------+---------+
| emp_id | name     | dob        | designation    | dept       | salary   | city        | gender | pincode |
+--------+----------+------------+----------------+------------+----------+-------------+--------+---------+
| E123   | Rahul    | 1990-01-30 | Manager        | HR         | 80000.00 | Bengaluru   | Male   |      56 |
| E124   | Rohan    | 1991-01-30 | Dept.Manager   | marketing  | 70000.00 | Bengaluru   | Male   |      76 |
| E125   | Ramya    | 1992-01-30 | Vice-president | marketing  | 72000.00 | Bengaluru   | Female |      86 |
| E126   | Ananya   | 1993-01-30 | ceo            | C-Suite    | 57000.00 | Chennai     | Female |      26 |
| E127   | Bhavya   | 1994-01-30 | cmo            | Marketing  | 28000.00 | Chitradurga | Female |      23 |
| E129   | Nishitha | 1996-01-30 | MD             | Management | 60000.00 | Udupi       | Female |      26 |
+--------+----------+------------+----------------+------------+----------+-------------+--------+---------+
6 rows in set (0.00 sec)

mysql> select * from emp_231bcada34 where name not like"r%";
+--------+----------+------------+--------------------+-------------+----------+-------------+--------+---------+
| emp_id | name     | dob        | designation        | dept        | salary   | city        | gender | pincode |
+--------+----------+------------+--------------------+-------------+----------+-------------+--------+---------+
| E126   | Ananya   | 1993-01-30 | ceo                | C-Suite     | 57000.00 | Chennai     | Female |      26 |
| E127   | Bhavya   | 1994-01-30 | cmo                | Marketing   | 28000.00 | Chitradurga | Female |      23 |
| E128   | Akhil    | 1995-01-30 | Ass.Vice president | corporation | 29000.00 | Manglore    | Male   |      46 |
| E129   | Nishitha | 1996-01-30 | MD                 | Management  | 60000.00 | Udupi       | Female |      26 |
| E130   | Jack     | 1997-01-30 | CFO                | Accountst   | 75000.00 | Davangere   | Male   |      86 |
| E131   | Peter    | 1988-01-30 | CtO                | IT          | 34000.00 | Chittur     | Male   |      46 |
+--------+----------+------------+--------------------+-------------+----------+-------------+--------+---------+
6 rows in set (0.00 sec)
```

Q21) Display the ename where the salary ranges between 50,000 to 75,000.

```
mysql> select name from emp_231bcada34 where salary >=50000 and salary <= 70000;
+----------+
| name     |
+----------+
| Ananya   |
| Nishitha |
+----------+
2 rows in set (0.01 sec)
```

Q22) Delete the data from employee1 where designation is manager.

```
mysql> delete from emp_1 where designation = "manager";
Query OK, 1 row affected (0.01 sec)
```

Q23) Drop the table employee2.

```
mysql> select * from emp_2;
Empty set (0.00 sec)

mysql> drop table emp_2;
Query OK, 0 rows affected (0.05 sec)
```

Q24) Display top 3 salaries along with ename(limit).

```
mysql> select name salary from emp_231bcada34 order by salary limit 3;
+--------+
| salary |
+--------+
| Akhil  |
| Ananya |
| Bhavya |
+--------+
3 rows in set (0.00 sec)
```

Q25) Give the bonus to employee(10% of their salary) where the department is maintenance.

```
mysql> update emp_231bcada34 set salary=salary+(salary*0.10) where dept = "marketing";
Query OK, 3 rows affected (0.01 sec)
Rows matched: 3  Changed: 3  Warnings: 0
```

Q26) Calculate the age of employee.

```
mysql> SELECT     *,     TIMESTAMPDIFF(YEAR, DOB, CURDATE()) AS Age FROM  emp_231bcada34;
+--------+----------+------------+--------------------+-------------+----------+-------------+--------+---------+------+
| emp_id | name     | dob        | designation        | dept        | salary   | city        | gender | pincode | Age  |
+--------+----------+------------+--------------------+-------------+----------+-------------+--------+---------+------+
| E123   | Rahul    | 1990-01-30 | Manager            | HR          | 80000.00 | Bengaluru   | Male   |      56 |   34 |
| E124   | Rohan    | 1991-01-30 | Dept.Manager       | marketing   | 77000.00 | Bengaluru   | Male   |      76 |   33 |
| E125   | Ramya    | 1992-01-30 | Vice-president     | marketing   | 79200.00 | Bengaluru   | Female |      86 |   32 |
| E126   | Ananya   | 1993-01-30 | ceo                | C-Suite     | 57000.00 | Chennai     | Female |      26 |   31 |
| E127   | Bhavya   | 1994-01-30 | cmo                | Marketing   | 30800.00 | Chitradurga | Female |      23 |   30 |
| E128   | Akhil    | 1995-01-30 | Ass.Vice president | corporation | 29000.00 | Manglore    | Male   |      46 |   29 |
| E129   | Nishitha | 1996-01-30 | MD                 | Management  | 60000.00 | Udupi       | Female |      26 |   28 |
| E130   | Jack     | 1997-01-30 | CFO                | Accountst   | 75000.00 | Davangere   | Male   |      86 |   27 |
| E131   | Peter    | 1988-01-30 | CtO                | IT          | 34000.00 | Chittur     | Male   |      46 |   36 |
+--------+----------+------------+--------------------+-------------+----------+-------------+--------+---------+------+
9 rows in set (0.00 sec)
```

Create database

Create table

```
mysql> CREATE DATABASE `231bcada34`;
Query OK, 1 row affected (0.01 sec)

mysql> USE `231bcada34`;  -- Switch to the newly created database
Database changed
mysql>
mysql> CREATE TABLE emp_34 (
    ->     name VARCHAR(100),
    ->     designation VARCHAR(100),
    ->     city VARCHAR(100)
    -> );
Query OK, 0 rows affected (0.02 sec)
```

Insert values

Display table

```
mysql> insert into emp_34 values("tanya", "bus.analyst", "manglore");
Query OK, 1 row affected (0.01 sec)

mysql> insert into emp_34 values("reka", "analyst", "banglore");
Query OK, 1 row affected (0.00 sec)

mysql> insert into emp_34 values("priya", "hr", "mandya");
Query OK, 1 row affected (0.01 sec)

mysql> select * from emp_34;
+-------+-------------+----------+
| name  | designation | city     |
+-------+-------------+----------+
| tanya | bus.analyst | manglore |
| reka  | analyst     | banglore |
| priya | hr          | mandya   |
+-------+-------------+----------+
3 rows in set (0.00 sec)
```

Update city from Bangalore to Bengaluru

```
mysql> update emp_34 set city= "bengaluru" where city =" banglore";
Query OK, 0 rows affected (0.00 sec)
Rows matched: 0  Changed: 0  Warnings: 0

mysql> select * from emp_34;
+-------+-------------+----------+
| name  | designation | city     |
+-------+-------------+----------+
| tanya | bus.analyst | manglore |
| reka  | analyst     | banglore |
| priya | hr          | mandya   |
+-------+-------------+----------+
3 rows in set (0.00 sec)
```

Add a column salary

```
mysql> ALTER TABLE emp_34
    -> ADD COLUMN salary DECIMAL(10, 2);
Query OK, 0 rows affected (0.02 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

Insert values into salary column

```
mysql> update emp_34 set salary= case
    -> when designation= "bus.analyst" then 50000
    -> when designation= "analyst" then 80000
    -> when designation= "hr" then 40000
    -> end;
Query OK, 3 rows affected (0.00 sec)
Rows matched: 3  Changed: 3  Warnings: 0

mysql>
```

Rename a column from design to designation

```
mysql> alter table emp_34 rename column designation to desi;
Query OK, 0 rows affected (0.02 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> select * from emp_34;
+-------+-------------+----------+----------+
| name  | desi        | city     | salary   |
+-------+-------------+----------+----------+
| tanya | bus.analyst | manglore | 50000.00 |
| reka  | analyst     | banglore | 80000.00 |
| priya | hr          | mandya   | 40000.00 |
+-------+-------------+----------+----------+
3 rows in set (0.00 sec)
```

Modify datatype of designation to char

```
mysql> alter table emp_34 modify desi char(20);
Query OK, 3 rows affected (0.05 sec)
Records: 3  Duplicates: 0  Warnings: 0
```

Drop country column

```
mysql> alter table emp_34 drop city;
Query OK, 0 rows affected (0.01 sec)
```

Aggregate functions and group by.

Display maximun value.

```
mysql> select max(salary) "maximum salary" from employees;
+----------------+
| maximum salary |
+----------------+
|       80000.00 |
+----------------+
1 row in set (0.00 sec)
```

Display minimum value with column name as “minimum salary”

```
mysql> select min(salary) "minimum salary" from employees;
+----------------+
| minimum salary |
+----------------+
|       30000.00 |
+----------------+
1 row in set (0.00 sec)
```

Display total amount of salary

```
mysql> select sum(salary) "sum of salary" from employees;
+---------------+
| sum of salary |
+---------------+
|     360000.00 |
+---------------+
1 row in set (0.00 sec)
```

Display average salary

```
mysql> select avg(salary) "average salary" from employees;
+----------------+
| average salary |
+----------------+
|   60000.000000 |
+----------------+
1 row in set (0.00 sec)
```

Display no. of employes

```
mysql> select count(salary) " no. of salary" from employees;
+---------------+
| no. of salary |
+---------------+
|             6 |
+---------------+
1 row in set, 1 warning (0.00 sec)
```

```
mysql> select count(*) " no. of emp" from employees;
+-------------+
| no. of emp |
+-------------+
|           6 |
+-------------+
1 row in set, 1 warning (0.00 sec)
```

Display dept and total salary in each dept

```
mysql> select designation,sum(salary) from employees group by designatio
n;
+-------------+-------------+
| designation | sum(salary) |
+-------------+-------------+
| manager     |    80000.00 |
| dept manager |    70000.00 |
| marketing   |    70000.00 |
| team leader |    90000.00 |
| DOP         |    50000.00 |
+-------------+-------------+
5 rows in set (0.00 sec)
```

Display the count of dept grouped by dept

```
mysql> select count(designation) from employees group by designation;
+--------------------+
| count(designation) |
+--------------------+
|                  1 |
|                  1 |
|                  1 |
|                  2 |
|                  1 |
+--------------------+
5 rows in set (0.00 sec)
```

Account Master

Create table account master

```
mysql> create table Account_Master (acc_no int ,acc_type varchar (20), balance float, cust_name varchar(30), da
te_acc_created date,cust_id int);
Query OK, 0 rows affected (0.02 sec)
```

Insert 5 values

```
mysql> insert into account_master values(20,"current",300000,"rekhashree
", "2018-04-11",001);
Query OK, 1 row affected (0.01 sec)

mysql> insert into account_master values(21,"savings ",5400000,"padma",
"2019-06-13",002);
Query OK, 1 row affected (0.00 sec)

mysql> insert into account_master values(22,"savings ",234000,"ramesh",
"2020-10-23",003);
Query OK, 1 row affected (0.00 sec)

mysql> insert into account_master values(23,"current ",2340,"bindu", "20
21-12-2",004);
Query OK, 1 row affected (0.00 sec)

mysql> insert into account_master values(24,"savings",25000,"monisha", "
2022-2-24",005);
Query OK, 1 row affected (0.00 sec)
```

Show all tables

```
mysql> show tables;
+------------------------+
| Tables_in_employee_34  |
+------------------------+
| employee_231bcada34    |
+------------------------+
1 row in set (0.01 sec)
```

Describe table

```
mysql> describe account_master;
+------------------+-------------+------+-----+---------+-------+
| Field            | Type        | Null | Key | Default | Extra |
+------------------+-------------+------+-----+---------+-------+
| acc_no           | int         | YES  |     | NULL    |       |
| acc_type         | varchar(20) | YES  |     | NULL    |       |
| balance          | float       | YES  |     | NULL    |       |
| cust_name        | varchar(30) | YES  |     | NULL    |       |
| date_acc_created | date        | YES  |     | NULL    |       |
| cust_id          | int         | YES  |     | NULL    |       |
+------------------+-------------+------+-----+---------+-------+
6 rows in set (0.00 sec)
```

Create table acc_1 that contains acc_no and cust_name with no records

```
mysql> create table acc_1 select acc_no,cust_name from account_master;
Query OK, 5 rows affected (0.02 sec)
Records: 5  Duplicates: 0  Warnings: 0
```

Retrive all the info from acc master where acc_no. is 24 and acc_type is sb

```
mysql> select * from account_master where acc_no =24 and acc_type = "sav
ings";
+--------+----------+---------+-----------+------------------+---------+
| acc_no | acc_type | balance | cust_name | date_acc_created | cust_id |
+--------+----------+---------+-----------+------------------+---------+
|     24 | savings  |   25000 | monisha   | 2022-02-24       |       5 |
+--------+----------+---------+-----------+------------------+---------+
1 row in set (0.00 sec)
```

Show diiferny acc_types

```
mysql> select distinct acc_type from account_master;
+----------+
| acc_type |
+----------+
| current  |
| savings  |
| current  |
| savings  |
+----------+
4 rows in set (0.00 sec)
```

Display details of cust whose name is 6 char long and starts with r

```
mysql> select *  from account_master where cust_name like "r_____";
+--------+----------+---------+-----------+------------------+---------+
| acc_no | acc_type | balance | cust_name | date_acc_created | cust_id |
+--------+----------+---------+-----------+------------------+---------+
|     22 | savings  |  234000 | ramesh    | 2020-10-23       |       3 |
+--------+----------+---------+-----------+------------------+---------+
1 row in set (0.00 sec)
```

Arrange data in desc order of acc_no

```
mysql> select * from account_master order by acc_no desc;
+--------+----------+---------+------------+------------------+---------
+
| acc_no | acc_type | balance | cust_name  | date_acc_created | cust_id
|
+--------+----------+---------+------------+------------------+---------
+
|     24 | savings  |   25000 | monisha    | 2022-02-24       |       5
|
|     23 | current  |    2340 | bindu      | 2021-12-02       |       4
|
|     22 | savings  |  234000 | ramesh     | 2020-10-23       |       3
|
|     21 | savings  | 5400000 | padma      | 2019-06-13       |       2
|
|     20 | current  |  300000 | rekhashree | 2018-04-11       |       1
|
+--------+----------+---------+------------+------------------+---------
+
5 rows in set (0.00 sec)
```

Find the total no. of acc created by each user

```
mysql> select cust_name, count(*) from account_master  group by cust_nam
e;
+------------+----------+
| cust_name  | count(*) |
+------------+----------+
| rekhashree |        2 |
| padma      |        1 |
| ramesh     |        1 |
| bindu      |        2 |
| monisha    |        1 |
+------------+----------+
5 rows in set (0.00 sec)
```

Find out the cust who is having more than 1acc

```
mysql> select cust_name, count(*) from account_master group by cust_name
 having count(*)>1;
+------------+----------+
| cust_name  | count(*) |
+------------+----------+
| rekhashree |        2 |
| bindu      |        2 |
+------------+----------+
2 rows in set (0.00 sec)
```

Findout the no, of acc created after 3rd jan 2020

```
mysql> select count(*) from account_master where date_acc_created>"2020-
01-03";
+----------+
| count(*) |
+----------+
|        5 |
+----------+
1 row in set (0.00 sec)
```

Demonstrate aggregate functions

```
mysql> select count(*) from account_master
    -> ;
+----------+
| count(*) |
+----------+
|        7 |
+----------+
1 row in set (0.00 sec)

mysql> select min(balance) from account_master
    -> ;
+--------------+
| min(balance) |
+--------------+
|         2340 |
+--------------+
1 row in set (0.00 sec)

mysql> select max(balance) from account_master ;
+--------------+
| max(balance) |
+--------------+
|      5400000 |
+--------------+
1 row in set (0.00 sec)

mysql> select avg(balance) from account_master ;
+--------------------+
| avg(balance)       |
+--------------------+
| 857334.2857142857 |
+--------------------+
1 row in set (0.00 sec)

mysql> select sum(balance) from account_master ;
+--------------+
| sum(balance) |
+--------------+
|      6001340 |
+--------------+
1 row in set (0.00 sec)
```

Research scholar

Create table research scholar and project (such that many scholars can work on same project but no scholar can work in multiple projects)

```
mysql> create table project (p_id int primary key, p_name varchar(20) not null);
Query OK, 0 rows affected (0.02 sec)
```

```
mysql> create table research_scholar(r_name varchar(20) not null, r_id  int primary key, dep
t varchar(20) default "data science",p_id int , foreign key (p_id) references project(p_id),
 r_head varchar(20), clg varchar(10) default "sju");
Query OK, 0 rows affected (0.05 sec)
```

Insert values

```
mysql> insert into project values(03,"marketing");
Query OK, 1 row affected (0.00 sec)

mysql> insert into project values(04,"service");
Query OK, 1 row affected (0.00 sec)

mysql> select * from project;
+------+-----------+
| p_id | p_name    |
+------+-----------+
|    1 | medical   |
|    2 | stocks    |
|    3 | marketing |
|    4 | service   |
+------+-----------+
4 rows in set (0.00 sec)
```

```
mysql> select* from research_scholar;
+--------+------+--------------+------+---------+------+
| r_name | r_id | dept         | p_id | r_head  | clg  |
+--------+------+--------------+------+---------+------+
| anitha |    4 | data science |    2 | jeshma  | sju  |
| swathi |    6 | data science |    3 | aaron   | sju  |
| rohan  |   31 | data science |    4 | jeshma  | sju  |
| rekha  |   34 | data science |    1 | aaron   | sju  |
+--------+------+--------------+------+---------+------+
4 rows in set (0.00 sec)

mysql>
```

Join 2 tables

```
mysql> select * from research_scholar r,project p where r.p_id=p.p_id;
+--------+------+--------------+------+---------+------+------+-----------+
| r_name | r_id | dept         | p_id | r_head  | clg  | p_id | p_name    |
+--------+------+--------------+------+---------+------+------+-----------+
| anitha |    4 | data science |    2 | jeshma  | sju  |    2 | stocks    |
| swathi |    6 | data science |    3 | aaron   | sju  |    3 | marketing |
| rohan  |   31 | data science |    4 | jeshma  | sju  |    4 | service   |
| rekha  |   34 | data science |    1 | aaron   | sju  |    1 | medical   |
+--------+------+--------------+------+---------+------+------+-----------+
4 rows in set (0.00 sec)
```

Association member

Create table member and associaction

```
mysql> create  table association ( a_id int primary key, a_name varchar(20) not null,a_head varchar(20) not null, president varchar(20) ,clg varchar
(20) default "sju");
Query OK, 0 rows affected (0.03 sec)

mysql> insert into association(a_id,a_name,a_head,president)values(01,"analytica","asha","adrian");
Query OK, 1 row affected (0.01 sec)

mysql> insert into association(a_id,a_name,a_head,president)values(02,"data gram","jeshma","ajay");
Query OK, 1 row affected (0.00 sec)

mysql> insert into association(a_id,a_name,a_head,president)values(03,"cybernitics","francis","krishna");
Query OK, 1 row affected (0.00 sec)

mysql> select * from association;
+------+-------------+---------+-----------+------+
| a_id | a_name      | a_head  | president | clg  |
+------+-------------+---------+-----------+------+
|    1 | analytica   | asha    | adrian    | sju  |
|    2 | data gram   | jeshma  | ajay      | sju  |
|    3 | cybernitics | francis | krishna   | sju  |
+------+-------------+---------+-----------+------+
3 rows in set (0.00 sec)
```

```
mysql> create table members (id int , name varchar(20) not null, dept varchar(20),a_id int, foreign key(a_id) references association(a_id));
Query OK, 0 rows affected (0.04 sec)

mysql> insert into members values(34,"reka","data analytics",01);
Query OK, 1 row affected (0.01 sec)

mysql> insert into members values(31,"rohan","data analytics",01);
Query OK, 1 row affected (0.00 sec)

mysql> insert into members values(23,"kiran","data science",02);
Query OK, 1 row affected (0.00 sec)

mysql> insert into members values(45,"danu","developer",03);
Query OK, 1 row affected (0.00 sec)

mysql> select * from members;
+------+-------+----------------+------+
| id   | name  | dept           | a_id |
+------+-------+----------------+------+
|   34 | reka  | data analytics |    1 |
|   31 | rohan | data analytics |    1 |
|   23 | kiran | data science   |    2 |
|   45 | danu  | developer      |    3 |
+------+-------+----------------+------+
4 rows in set (0.00 sec)
```

Display details of members along with their association details

```
mysql> select * from members m,association a where m.a_id=a.a_id;
+------+-------+----------------+------+------+-------------+---------+-----------+------+
| id   | name  | dept           | a_id | a_id | a_name      | a_head  | president | clg  |
+------+-------+----------------+------+------+-------------+---------+-----------+------+
|   34 | reka  | data analytics |    1 |    1 | analytica   | asha    | adrian    | sju  |
|   31 | rohan | data analytics |    1 |    1 | analytica   | asha    | adrian    | sju  |
|   23 | kiran | data science   |    2 |    2 | data gram   | jeshma  | ajay      | sju  |
|   45 | danu  | developer      |    3 |    3 | cybernitics | francis | krishna   | sju  |
+------+-------+----------------+------+------+-------------+---------+-----------+------+
4 rows in set (0.00 sec)
```

Check constraints

Create table employee such that employees should only belong to Bengaluru or mysore or manglore.

```
mysql> create table employee( emp_id int primary key, emp_name varchar(20) not null
 , location varchar(20), check (location in ("bengaluru","mysore"
,"mangaluru")));
Query OK, 0 rows affected (0.02 sec)
```

Create table employee such that employees name must start with a

```
mysql> create table empl(e_id int primary key, em_name varchar(20) not null,check
(em_name like "a_____"));
Query OK, 0 rows affected (0.02 sec)
```