Name: - Shivangi

Roll no: - 21229CMP010.

Q:-1 Connecting database by using a programming Script.

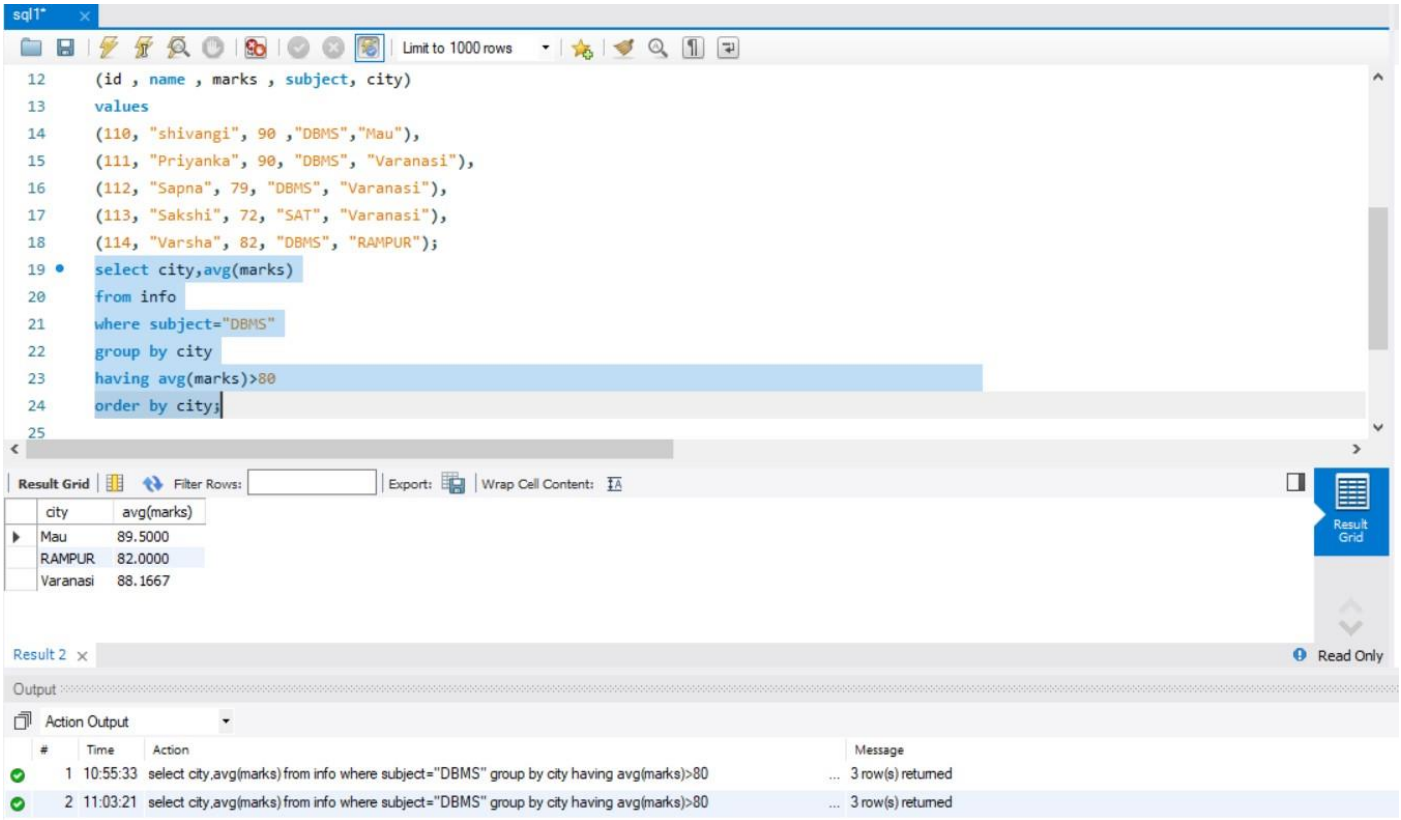
```
import mysql.connector as ms
import random


con=ms.connect(host="localhost",user="root",password="periodic",
charset='utf8',database="student")
cur=con.cursor()
cur.execute('select * from info where name="Shivangi"')
                                                                    ccvcc
rec=cur.fetchall()
records=cur.rowcount
print('TOTAL RECORDS --> ',records)
for i in rec:
    print('\t',i)
# Close the connection
con.close()
```

Output: -

Q:-2 Select query which include Where, Group by, Having and Order by clause. Also includes ‘like’, ‘between’ and ‘In’ operator.

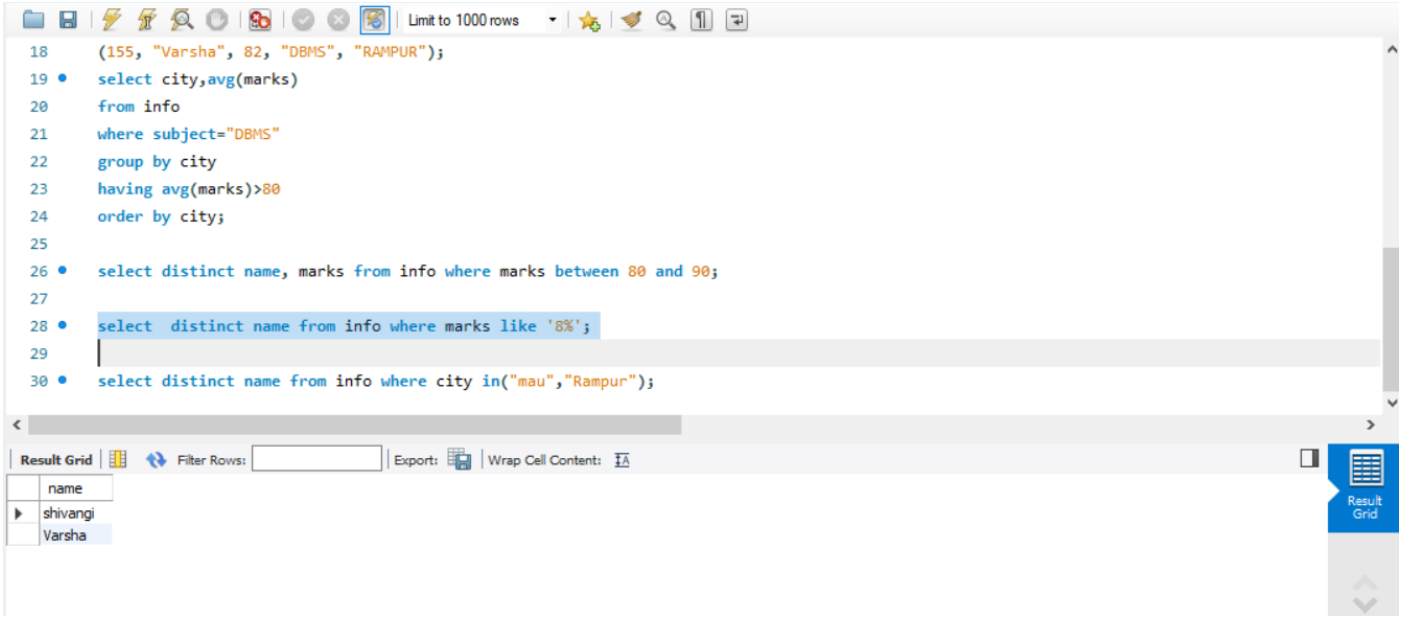
```
create database student;
use student;
create table info
(
id int primary key,
name varchar(49),
marks int,
subject varchar(20),
city varchar(20)
);
insert into info
(id , name , marks , subject, city)
values
(110, "shivangi", 89 ,"DBMS","Mau"),
(111, "Priyanka", 90, "DBMS", "Varanasi"),
(112, "Sapna", 79, "DBMS", "Varanasi"),
```

```
(113, "Sakshi", 72, "SAT", "Varanasi"),
(114, "Varsha", 82, "DBMS", "RAMPUR");
select city,avg(marks)
from info
where subject="DBMS"
group by city
having avg(marks)>80
order by city;

select name,marks from info where marks between 80 and 90;

select name from info where marks like '8%';

select distinct name from info where city in("mau","Rampur");
```



‘Between’ operator

LIKE’ operator



```
18    (155, "Varsha", 82, "DBMS", "RAMPUR");
19 •  select city,avg(marks)
20    from info
21    where subject="DBMS"
22    group by city
23    having avg(marks)>80
24    order by city;
25
26 •  select distinct name, marks from info where marks between 80 and 90;
27
28 •  select  distinct name from info where marks like '8%';
29
30 •  select distinct name from info where city in("mau","Rampur");
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

name
shivangi
Varsha

‘IN’ operator

```
18    (155, "Varsha", 82, "DBMS", "RAMPUR");
19 •  select city,avg(marks)
20    from info
21    where subject="DBMS"
22    group by city
23    having avg(marks)>80
24    order by city;
25
26 •  select  distinct name, marks from info where marks between 80 and 89;
27
28 •  select  distinct name from info where marks like '8%';
29
30 •  select distinct name from info where city in("mau","Rampur");
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content:

name
shivangi
Varsha