External lab exam

Qn Number:1

```
create database Don;
use Don;
```

#Qn1

create table Student(rollno integer(15) primary key,name varchar(50),address text,totalmarks integer(15));

create table Admission(rollno integer(15),cid integer(15),sem integer(20),primary key(rollno,cid),foreign key(rollno) references Student(rollno) ON delete cascade,foreign key(cid) references Cource(cid) ON delete cascade);

create table Cource(cid integer(15) primary key,courcename varchar(50),fees integer(15));

#Qn2

```
insert into Student values(101,"Ajil","Ajil villa adoor",56),(102,"Don","Madamannil adoor",60),(103,"Riya","kklm adoor",15),(104,"Binoy","Binoy adoor",40),(105,"Arun","aarrk adoor",50); select * from Student; insert into Cource values(55,"MCA",55600),(66,"Civil",44500); select * from Cource; insert into Admission values(101,55,1),(102,55,2),(103,66,2),(104,66,2),(105,55,2); select * from Admission; #insert into Admission values(102,565,5);
```

#Qn3

create view klm As select * from Student where rollno in(select rollno from Admission where cid in (select cid from Cource where courcename="MCA"));

```
select * from klm;
```

insert into Admission values(105,66,2);

#Qn4

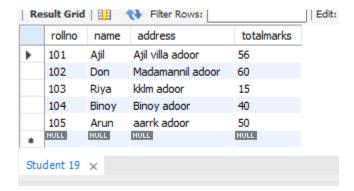
select sum(fees) from Cource where cid in(select cid from Admission where rollno=105);

#Qn5

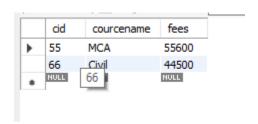
select Cource.courcename,count(Admission.rollno) from Cource join Admission ON Cource.cid=Admission.cid group by Admission.cid;

OUTPUT:-

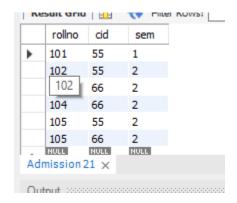
Student table



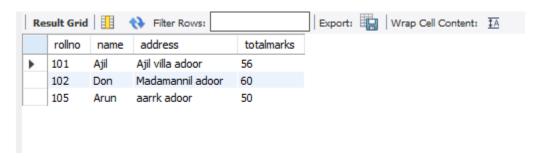
Cource table



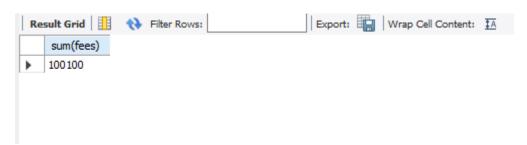
Admission table



QN3:



QN4:



QN5:



Qn Number:2

```
db.createCollection("student");
{ "ok" : 1 }
QN1:
db.student.insert({_id:1,Name:"Anjali",Place:"Kollam",Phone:"8582639562",Vaccination_status:"bot
h vaccinated",RTPCR:"negative",Lab_mark:{internal:30,external:45},Department:"MCA"})
WriteResult({ "nInserted" : 1 })
QN2:
db.student.insert({ id:2,Name:"Anuradha",Place:"Varkala",Phone:"9992639562",Vaccination status:"bo
th vaccinated",RTPCR:"negative",Lab mark:{internal:40,external:45},Department:"Civil"})
WriteResult({ "nInserted" : 1 })
> db.student.insert({_id:3,Name:"Bismiya",Place:"Kollam",Phone:"9446639562",Vaccination_status:"not
vaccinated",RTPCR:"positive",Lab_mark:{internal:50,external:39},Department:"MCA"})
WriteResult({ "nInserted" : 1 })
>
db.student.insert({_id:4,Name:"Vimal",Place:"Eranakulam",Phone:"8582639568",Vaccination_status:"Fi
rst dose only",RTPCR:"positive",Lab_mark:{internal:40,external:42},Department:"Civil"})
WriteResult({ "nInserted" : 1 })
> db.student.insert({_id:5,Name:"Vivek",Place:"Kollam",Phone:"8582639777",Vaccination_status:"Both
vaccinated",RTPCR:"negative",Lab_mark:{internal:50,external:50},Department:"MCA"})
WriteResult({ "nInserted" : 1 })
Qn3:
db.student.find({Vaccination_status:"both vaccinated"},{_id:0,Name:1,Phone:1})
{ "Name" : "Anjali", "Phone" : "8582639562" }
{ "Name" : "Anuradha", "Phone" : "9992639562" }
{ "Name" : "Vivek", "Phone" : "8582639777" }
```

Qn4:

```
db.student.find({Department:"MCA"},{_id:0,Name:1,Phone:1}).sort({"Lab_mark.external":-1}).limit(2).pretty()
{ "Name" : "Vivek", "Phone" : "8582639777" }
{ "Name" : "Anjali", "Phone" : "8582639562" }

Qn5:
db.student.find({Name:{$regex:"^A"}},{Name:1,Department:1}).pretty()

{ "_id" : 1, "Name" : "Anjali", "Department" : "MCA" }
{ "_id" : 2, "Name" : "Anuradha", "Department" : "Civil" }
```