

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 Course(cid) ON delete cascade);
```

```
create table Course(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 Course values(55,"MCA",55600),(66,"Civil",44500);
```

```
select * from Course;
```

```
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 Course where courcename="MCA"));
```

```
select * from klm;
```

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

#Qn4

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

#Qn5

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

OUTPUT:-

Student table

Result Grid

Filter Rows:

Filter Rows:

	rollno	name	address	totalmarks
▶	101	Ajil	Ajil villa adoor	56
	102	Don	Madamannil adoor	60
	103	Riya	kkm adoor	15
	104	Binoy	Binoy adoor	40
	105	Arun	aarrk adoor	50
✱	NULL	NULL	NULL	NULL

Student 19

Course table

cid	courcename	fees
55	MCA	55600
66	Civil	44500
NULL	66	NULL

Admission table

Result Grid | Filter Rows:

	rollno	cid	sem
▶	101	55	1
	102	55	2
	102	66	2
	104	66	2
	105	55	2
	105	66	2
	NULL	NULL	NULL

Admission21 x

Output:

QN3:

Result Grid | Filter Rows:

Export: | Wrap Cell Content:

	rollno	name	address	totalmarks
▶	101	Ajil	Ajil villa adoor	56
	102	Don	Madamannil adoor	60
	105	Arun	aarrk adoor	50

QN4:

Result Grid | Filter Rows:

Export: | Wrap Cell Content:

	sum(fees)
▶	100100

QN5:

Result Grid | Filter Rows:

Export: | Wrap Cell Content:

	courcename	count(Admission.rollno)
▶	MCA	3
	Civil	3

Qn Number:2

```
db.createCollection("student");
```

```
{ "ok" : 1 }
```

QN1:

```
db.student.insert({_id:1,Name:"Anjali",Place:"Kollam",Phone:"8582639562",Vaccination_status:"both 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:"both 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:"First 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" }
```