Page No.:
Date:

DBMS LAB - 4

-> Query 1

```
create database Student faculty;
use studentfaculty;

create table student (
snum int,
sname varchar (30)
Major varchar (20)
dut varchar (2),
age int,
Primary key (snum));

create table faculty (
fid int,
fname varchar (30),
dept id int,
primary key (fid));

create table char (
cname varchar (30),
meetsat times lamp
room varchar (10)
fid int,
```

Page No.:
Date:
YOUVA

primary key (cname),
foreign key (fid) references faculty (fid));

Create table enrolled (
snum int,
cname varchar (30),
primary key (snum, cname),
foreign key (snum) references student (snum)
foreign key (cname) references class (cname));

Query 2

use Student faculty;
insert into student values (1, 'John', 'cs', 'sr', 19)
insert into student values (2, 'smith', 'cs', 'jr', 20);
insert into student values (3, 'Jacob', 'IT', 'sr', 20);
insert into student values (4, 'Tom', 'IT', 'jr', 20);
insert into student values (5, 'Rahul', 'cs', 'jr', 20);
insert into student values (6, 'Rita', 'cs', 'sr', 24);
select * from student;

insert into faculty values (4, 'Harish', 1000);
insert into faculty values (12, 'MV', 1000);
insert into faculty values (13, 'Mira', 1001);

insert into enrolled values (1, 'class 1');
insert into enrolled values (2, 'class 1');
insert into enrolled values (3, 'class 3');
insert into enrolled values (4, 'class B');
insert into enrolled values (5, 'class 4');
insert into enrolled values (1, 'class 5');
insert into enrolled values (2, 'class 5');
insert into enrolled values (3, 'class 5');
insert into enrolled values (6, 'class 5');
insert into enrolled values (6, 'class 5');
select * from enrolled;

→ Query 3.

use Student faculty

select distinct s.sname from student s, class c, enrolled e, faculty f
where s.snum = e.snum
and e.cname = c.cnam
and c.fid = f.fid
and f.fname = 'Harish' and s.level = 'Jr'

Page No.:
Date:

```
select C.name from class C
where C.room = 'R128'
or C.cname in (
  Select E.cname from enrolled E
  group by E.cname
  having COUNT (*) >= 5);

select distinct S.name from student S
where S.snum in (
  Select E1.snum from enrolled E1, enrolled E2
  class C1, class C2
where E1.snum = E2.snum
and E2.name = C1.cname
and C1.meet sat = C2.meetsat);

select F.fname, F.fid from faculty F
where F.fid in (
Select fid from class
group by fid having COUNT(*) = (
select COUNT (Distinct room) from class));
```

```
select S.age, s.lvl from student S
group by S.age, s.lvl
having s.lvl in (
select S1.lvl from student S1
where S1.age = S.age
having count(*) >= all (select count(*)
from student S2
where S1.age = S2.age
group by S2.lvl, S2.age ));
```