## VAIBHAVI PATIL 1BM19CS217 CSE SEC 'A'

## STUDENT FACULTY DATABASE SOURCE CODE

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create database stdfacultydb;
use stdfacultydb;
create table student (
snum int,
sname varchar(20),
major varchar(20),
lvl varchar(10),
age int,
primary key(snum)
create table faculty(
fid int,
fname varchar(20),
deptid int,
primary key(fid)
);
create table class(
cname varchar(10),
meetsat datetime,
room varchar(10),
fid int,
primary key(cname),
foreign key(fid) references faculty(fid)
);
create table enrolled(
snum int,
cname varchar(10),
primary key(snum,cname),
foreign key(snum) references student(snum),
foreign key(cname) references class(cname)
);
insert into student values("1","jhon","CS","Sr","19"),
("2", "Smith", "CS", "Jr", "20"),
("3","Jacob","CV","Sr","20"),
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("4","Tom","CS","Jr","20"),
("5","Rahul","CS","Jr","20"),
("6","Rita","CS","Sr","21");
select * from student;
insert into faculty values("11","Harish","1000"),
("12","MV","1000"),
("13","Mira","1001"),
("14", "Shiva", "1002"),
("15","Nupur","1000");
select * from faculty;
insert into class values ("Class1","12/11/15/ 10:15:16.00000","R1","14"),
("Class10","12/11/15/ 10:15:16.00000","R128","14"),
("Class2","12/11/15/ 10:15:20.000000","R2","12"),
("Class3","12/11/15/ 10:15:25.000000","R3","11"),
("Class4","12/11/15/ 20:15:20.000000","R4","14"),
("Class5","12/11/15/ 20:15:20.000000","R3","15"),
("Class6","12/11/15/ 13:20:20.000000","R2","14"),
("Class7","12/11/15/ 10:10:10.000000","R3","14");
select * from class;
insert into enrolled values ("1","class1"),
("2", "class1"),
("3","class3"),
("4","class3"),
("5", "class4"),
("1","class10");
select * from enrolled;
select s.sname from STUDENT s, CLASS c, ENROLLED e where s.snum=e.snum and c.cname
= e.cname and c.fid =(select fid from FACULTY where fname = "Shiva") and s.lvl ="Jr";
SELECT C.cname FROM Class C
WHERE C.room = "R128"
Or C.cname IN (SELECT E.cname FROM Enrolled E GROUP BY E.cname HAVING
count(E.snum) >= 5);
select distinct s.sname 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 e1.cname != e2.cname and e1.cname = c1.cname
and e2.cname = c2.cname and c1.meetsat = c2.meetsat);
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select f.fname,c.fid from faculty f,class c where f.fid=c.fid group by c.fid having count(c.fid)=(select count(distinct room)from class);

select distinct f.fname from faculty f where 5>(select COUNT(e.snum) from Class c, enrolled e where c.cname = e.cname and c.fid = f.fid);

select distinct s.sname from student s where s.snum not in(select e.snum from enrolled e);

select s.age ,s.lvl from student s group by s.age having s.lvl in (select s1.lvl from student s1 where s1.age = s.age group by s1.age having count(\*)>= all(select s2.lvl from student s2 where s2.age = s1.age group by s2.age));