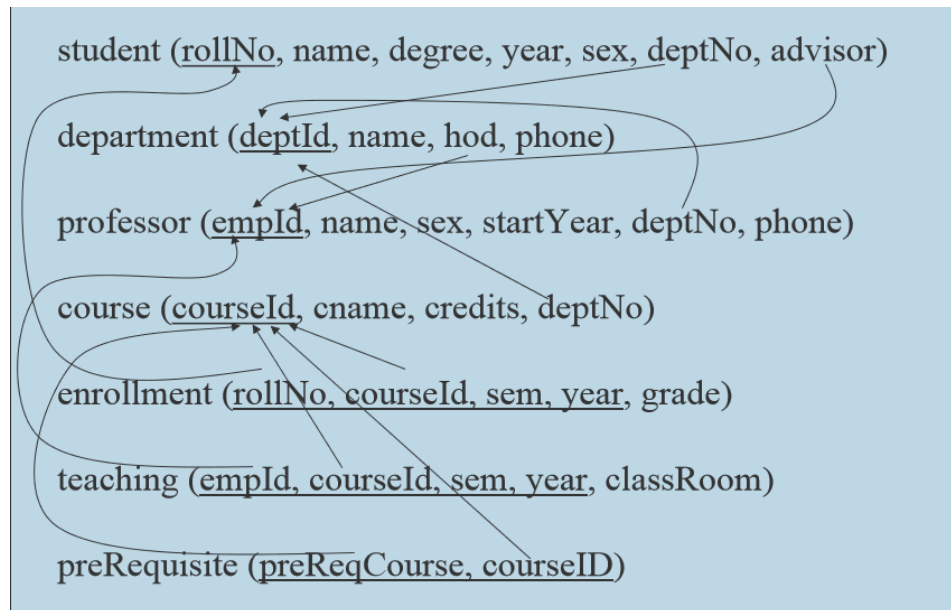


Create database named as university.

Create table structure for the following .

insert data into the tables



### **STUDENT TABLE:-**

	roll_no	degree	Yr	sex	dept_no	advisor_no	s_name
▶	55	BE(e&tc)	3	male	400	1004	aman_kashyap
	57	Automation	1	female	400	1004	ashiya_aloney
	58	BE(CIVIL)	1	female	300	1003	ankita_paul
	59	B.COM	2	female	90	1006	apeksha_patil
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL

### **DEPARTMENT TABLE:-**

	dept_id	dname	phone_no	hod_no
▶	90	MBA	223459	1006
	100	mechanical	225678	1001
	200	IT	213673	1002
	300	civil	245012	1003
	400	EEE	289001	1004
*	NULL	NULL	NULL	NULL

## PROFESSOR TABLE:-

	emp_id	p_name	sex	startYear	phone_no	dept_no
▶	1001	Ashruti_hanskar	female	2012	213450	100
	1002	roshan_paul	male	2011	214320	200
	1003	gazal_mulchandani	female	2013	221133	300
	1004	abhijit_kulkarni	male	2016	251112	400
	1006	shaily_mehta	female	2015	234566	90
*	NULL	NULL	NULL	NULL	NULL	NULL

## COURSE TABLE:-

	c_id	c_name	credits	dept_no
▶	24500	BE(CIVIL)	5/sem=40	300
	24502	CONSTRUCTION.MANGT	5/sem=20	300
	24503	M.COM	5/sem=20	90
	24504	BCA	5/sem=30	200
	24505	MCA	5/sem=30	200
	24506	BE(e&tc)	5/sem=40	400
	24507	Automation	5/sem=20	400
	24508	BE(mech)	5/sem=40	100
	24509	ME(mech)	5/sem=20	100
	24510	B.COM	5/sem=30	90
*	NULL	NULL	NULL	NULL

## ENROLLMENT TABLE:-

	roll_no	c_id	sem	Yr	grade
▶	55	24506	5	3	B
	57	24507	2	1	A+
	58	24500	1	1	A
	59	24510	4	2	B+
*	NULL	NULL	NULL	NULL	NULL

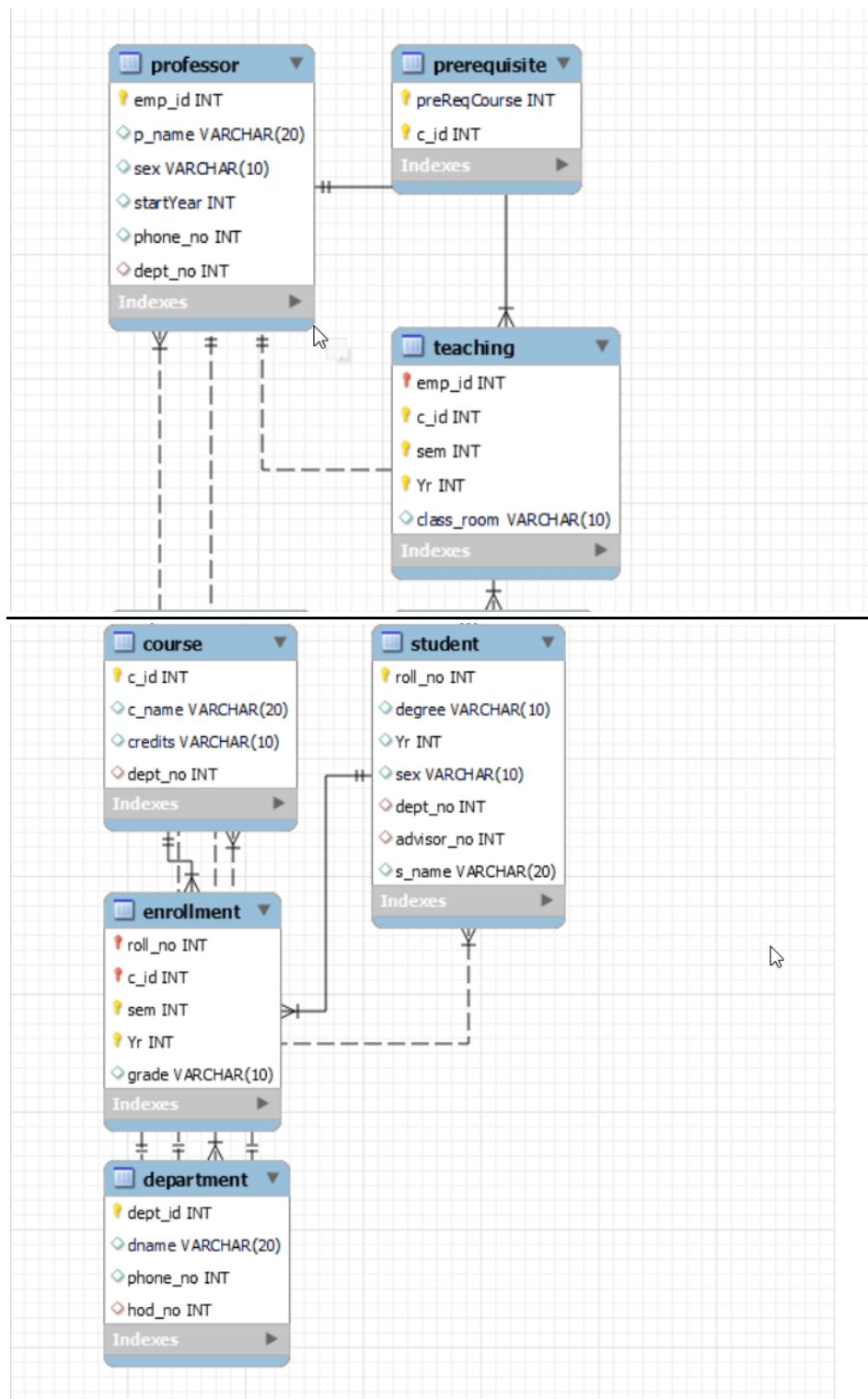
## TEACHING TABLE:-

	emp_id	c_id	sem	Yr	class_room
▶	1002	24504	3	2	CR-4
	1003	24500	6	3	CR_21
	1004	24506	2	1	CR-5
	1006	24510	1	1	CR-9
*	NULL	NULL	NULL	NULL	NULL

## PREREQUISITE TABLE:-

	preReqCourse	c_id
▶	24500	24502
	24504	24505
	24506	24507
	24508	24509
	24510	24503
*	NULL	NULL

## ENTITY-RELATIONSHIP DIAGRAM:-



### **QUERIES:-**

```
create database university;
```

```
use university;
```

```
create table department(dept_id int primary key,  
dname varchar(20),  
phone_no int unique);
```

```
create table professor(emp_id int primary key,  
p_name varchar(20),  
sex varchar(10),  
startYear int,  
phone_no int unique);
```

```
create table student(roll_no int primary key,  
degree varchar(10),  
Yr int,  
sex varchar(10),  
dept_no int,
```

```
advisor_no int,  
constraint cStudent1 foreign key(dept_no) references department(dept_id),  
constraint cStudent2 foreign key(advisor_no) references professor(emp_id)  
);
```

```
create table course(c_id int primary key,  
c_name varchar(20),  
credits varchar(10),  
dept_no int,  
constraint cCourse1 foreign key(dept_no) references department(dept_id)  
);
```

```
create table enrollment( roll_no int,  
c_id int,  
sem int,  
Yr int,  
grade varchar(10),  
constraint cEnrollment1 primary key(roll_no,c_id,sem,Yr),  
constraint cEnrollment2 foreign key(roll_no) references student(roll_no),  
constraint cEnrollment3 foreign key(c_id) references course(c_id)  
);  
  
create table teaching(emp_id int,c_id int,sem int,Yr int,class_room varchar(10),  
constraint cTeaching1 primary key(emp_id,c_id,sem,Yr),
```

```
constraint cTeaching2 foreign key(emp_id) references professor(emp_id)
);

create table PreRequisite(preReqCourse int,
c_id int,
constraint cPR primary key(preReqCourse,c_id)
);

Alter table department add hod_no int;

Alter table professor add dept_no int;

Alter table department add constraint cDept1 foreign key(hod_no) references
professor(emp_id);

Alter table professor add constraint cProf1 foreign key(dept_no) references
department(dept_id);

desc Student;

desc department;

desc professor;

desc course;

desc enrollment;

desc teaching;

desc PreRequisite;

insert into department(dept_id,dname,phone_no) values
(100,"mechanical",225678);

select * from department;

insert into department(dept_id,dname,phone_no) values (90,"physics",223459);
```

```
insert into department(dept_id,dname,phone_no) values (200,"IT",213673);
insert into department(dept_id,dname,phone_no) values (300,"civil",245012);
insert into department(dept_id,dname,phone_no) values (400,"EXTC",289001);
select * from department;

insert into professor(emp_id,p_name,sex,startYear,phone_no) values
(1001,"Ashruti_hanskar","female",2012,213450);
update professor set dept_no=100 where emp_id=1001;
select * from professor;

select * from department;

insert into professor(emp_id,p_name,sex,startYear,phone_no,dept_no) values
(1006,"shaily_mehta","female",2015,234566,90);

insert into professor(emp_id,p_name,sex,startYear,phone_no,dept_no) values
(1002,"roshan_paul","male",2011,214320,200);

insert into professor(emp_id,p_name,sex,startYear,phone_no,dept_no) values
(1004,"abhijit_kulkarni","male",2016,251112,400);

insert into professor(emp_id,p_name,sex,startYear,phone_no,dept_no) values
(1003,"gazal_mulchandani","female",2013,221133,300);

select * from professor;

Alter table student add column s_name varchar(20);

desc student;

select * from professor;

select * from department;

update department set dname="EEE" where dept_id=400;
```



```
delete from department where dept_id=90;

select * from department;

update department set dname="MBA" where dept_id=90;

select * from department;

select * from department;

delete from department where dname="mechanical";

select * from department;

select * from course;

insert into course(c_id,c_name,credits,dept_no) values
(24500,"BE(CIVIL)","5/sem=40",300);

insert into course(c_id,c_name,credits,dept_no) values
(24502,"CONSTRUCTION.MANGT","5/sem=20",300);

insert into course(c_id,c_name,credits,dept_no) values
(24501,"B.COM","5/sem=30",90);

insert into course(c_id,c_name,credits,dept_no) values
(24503,"M.COM","5/sem=20",90);

insert into course(c_id,c_name,credits,dept_no) values
(24504,"BCA","5/sem=30",200);

insert into course(c_id,c_name,credits,dept_no) values
(24505,"MCA","5/sem=30",200);

insert into course(c_id,c_name,credits,dept_no) values
(24506,"BE(e&tc)","5/sem=40",400);

insert into course(c_id,c_name,credits,dept_no) values
(24507,"Automation","5/sem=20",400);
```

```
insert into course(c_id,c_name,credits,dept_no) values  
(24508,"BE(mech)","5/sem=40",100);
```

```
insert into course(c_id,c_name,credits,dept_no) values  
(24509,"ME(mech)","5/sem=20",100);
```

```
select * from course;
```

```
insert into course(c_id,c_name,credits,dept_no) values  
(24510,"B.COM","5/sem=30",90);
```

```
select * from course;
```

```
select * from professor;
```

```
select * from student;
```

```
insert into student(roll_no,degree,Yr,sex,dept_no,advisor_no,s_name) values  
(59,"B.COM",2,"female",90,1006,"apeksha_patil");
```

```
select * from student;
```

```
insert into student(roll_no,degree,Yr,sex,dept_no,advisor_no,s_name) values  
(58,"BE(CIVIL)",1,"female",300,1003,"ankita_paul");
```

```
insert into student(roll_no,degree,Yr,sex,dept_no,advisor_no,s_name) values  
(55,"BE(e&tc)",3,"male",400,1004,"aman_kashyap");
```

```
insert into student(roll_no,degree,Yr,sex,dept_no,advisor_no,s_name) values  
(57,"Automation",1,"female",400,1004,"ashiya_aloney");
```

```
update department set hod_no=1006 where dname="MBA";
```

```
update department set hod_no=1002 where dname="IT";
```

```
select * from department;
```

```
update department set hod_no=1001 where dname="mechanical";
```

```
update department set hod_no=1003 where dname="civil";
```

```
update department set hod_no=1004 where dname="EEE";
```

```
select * from department;
```

```
select * from student;
```

```
insert into enrollment(roll_no,c_id,sem,Yr,grade) values (57,24507,2,1,"A+");
```

```
select * from student;
```

```
insert into enrollment(roll_no,c_id,sem,Yr,grade) values (58,24500,1,1,"A");
```

```
select * from student;
```

```
insert into enrollment(roll_no,c_id,sem,Yr,grade) values (55,24506,5,3,"B");
```

```
insert into enrollment(roll_no,c_id,sem,Yr,grade) values (59,24510,4,2,"B+");
```

```
select * from enrollment;
```

```
desc teaching;
```

```
insert into teaching(emp_id,c_id,sem,Yr,class_room) values (1001,24508,2,3,"CR-2");
```

```
insert into teaching(emp_id,c_id,sem,Yr,class_room) values (1002,24504,3,2,"CR-4");
```

```
insert into teaching(emp_id,c_id,sem,Yr,class_room) values  
(1003,24500,6,3,"CR_21");
```

```
insert into teaching(emp_id,c_id,sem,Yr,class_room) values (1004,24506,2,1,"CR-5");
```

```
insert into teaching(emp_id,c_id,sem,Yr,class_room) values (1006,24510,1,1,"CR-9");
```

```
select * from teaching;
```

```
desc PreRequisite;

insert into PreRequisite(preReqCourse,c_id) values (24500,24502);
insert into PreRequisite(preReqCourse,c_id) values (24510,24503);
insert into PreRequisite(preReqCourse,c_id) values (24504,24505);
insert into PreRequisite(preReqCourse,c_id) values (24506,24507);
insert into PreRequisite(preReqCourse,c_id) values (24508,24509);

select * from PreRequisite;

select * from student;

SELECT * FROM department;

select * from professor;

select * from course;

select * from enrollment;

select * from teaching;

select * from PreRequisite;
```