Guvi Zen Class

Requirements:

- Guvi Zen class is a online learning platform which offers course
- The platform hs multiple courses
- Each course has title,desc,duration and instructor
- It has multiple students
- Each student has name, email and phone number
- Students can enroll multiple course
- Each course can have multiple students
- A instructor can take multiple class
- Instructor has name, course

Entities:

- Course
- Instructor
- Student

Attributes:

- Course - id, title, time, desc, instructor, instructor_id
- Instructor - id, name, email, course mentored
- Student - id, name , email, course taken

Relationship:

- Student - a student can take multiple course
- Instructor - a instructor can take multiple course
- Course - a course can have multiple students

Create Table:

```
create table course
(course_id int, title varchar(20), description varchar(50), time time not null, ins_id int );

alter table course add s_id int;

INSERT INTO course (course_id, title, description, time, ins_id, s_id)
VALUES
    (1, 'React', 'react course', '09:00:00', 1, 100),
    (2, 'Java', 'java course', '09:00:00', 1, 100),
    (3, 'Dot Net', 'dotnet course', '09:00:00', 2, 101),
    (4, 'Python', 'python course', '09:00:00', 2, 102),
    (5, 'Angular', 'angular course', '09:00:00', 3, 102);
```

course_id	title	description	time	ins_id	s_id
1	React	react course	09:00:00	1	100
2	Java	java course	09:00:00	1	100
3	Dot Net	dotnet course	09:00:00	2	101
4	Python	python course	09:00:00	2	102
5	Angular	angular course	09:00:00	3	102
NULL	NULL	NULL	NULL	NULL	NULL

```
Create table instructor
(ins_id int, ins_name varchar(50), ins_email varchar(20));

INSERT INTO instructor (ins_id, ins_name,ins_email) VALUES
(1, 'Antony Doss', 'antony@xyz.com'),
(2, 'Harold Doss','harold@xyz.com'),
(3, 'Leo Doss','leo@xyz.com');
```

	ins_id	ins_name	ins_email
▶	1	Antony Doss	antony@xyz.com
	2	Harold Doss	harold@xyz.com
	3	Leo Doss	leo@xyz.com
*	NULL	NULL	NULL

Create table student
(s_id int, s_name varchar(20), s_email varchar(20));
desc student;

INSERT INTO student (s_id, s_name, s_email) VALUES
(100, 'Vikram', 'vikram@xyz.com'),
(101, 'Dilli', 'dilli@xyz.com'),
(102, 'Amar', 'amar@xyz.com');

	s_id	s_name	s_email
▶	100	Vikram	vikram@xyz.com
	101	Dilli	dilli@xyz.com
	102	Amar	amar@xyz.com
*	NULL	NULL	NULL

-- adding constriants
ALTER TABLE course ADD PRIMARY KEY (course_id);
ALTER TABLE instructor ADD PRIMARY KEY (ins_id);
ALTER TABLE student ADD PRIMARY KEY (s_id);
alter table course add constraint fk_course_instructor
foreign key (ins_id) references instructor(ins_id);
alter table course add constraint fk_course_student
foreign key (s_id) references student(s_id);

Question:

Find which student studying which course:

```
select c.course_id, c.title, c.time, s.s_name
from course as c
join student as s
on c.s_id = s.s_id;
```

course_id	title	time	s_name
1	React	09:00:00	Vikram
2	Java	09:00:00	Vikram
3	Dot Net	09:00:00	Dilli
4	Python	09:00:00	Amar
5	Angular	09:00:00	Amar

Find which instructor taking which class:

```
select c.course_id, c.title, c.time, i.ins_name
from course as c
join instructor as i
on c.ins_id = i.ins_id;
```

course_id	title	time	ins_name
1	React	09:00:00	Antony Doss
2	Java	09:00:00	Antony Doss
3	Dot Net	09:00:00	Harold Doss
4	Python	09:00:00	Harold Doss
5	Angular	09:00:00	Leo Doss