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
١	1	Antony Doss	antony@xyz.com
	2	Harold Doss	harold@xyz.com
	3	Leo Doss	leo@xyz.com
	NULL	NULL	NULL

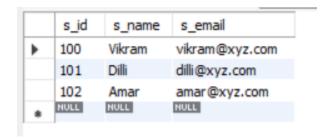
Create table student

(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');



-- 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