

## Assignment 1:

Design a database for a university system that will manage student and course information.

- **Students:**
  - Each student has a unique student ID, name, email address, and date of birth.
  - Each student can be associated with at most one advisor.
  - Each student can be associated with multiple courses.
- **Advisors:**
  - Each advisor has a unique advisor ID, name, email address, and specialization.
  - An advisor may be assigned to advise multiple students.
- **Courses:**
  - Each course has a unique course code, title, description, and instructor.
  - Each course can have multiple enrolled students.

```
use universitydb;
```

```
create table Students(  
    student_id int primary key,  
    name varchar(30),  
    email varchar(200) unique,  
    date_of_birth date,  
    advisor_id int  
);
```

```
create table Advisors(  
    advisor_id int primary key,  
    name varchar(30),  
    email varchar(200) unique,  
    specialization varchar(50)  
);
```

```
create table Courses(  
    course_code varchar(20) primary key,  
    course_title varchar(50),  
    description varchar(200),
```

```
instructor varchar(50)  
);
```

```
alter table Students add FOREIGN KEY(advisor_id) references Advisors(advisor_id) on delete set  
null;
```

```
create table Student_course_map(  
    student_id INT,  
    course_code varchar(20),  
    primary key(student_id,course_code),  
    FOREIGN KEY(student_id) references Students(student_id) on delete cascade,  
    FOREIGN KEY(course_code) references Courses(course_code) on delete cascade  
);
```