**Create Students table**

CREATE TABLE Students (

student\_id INT PRIMARY KEY,

fname VARCHAR(50),

date\_of\_birth DATE,

address VARCHAR(200),

contact\_information VARCHAR(200),

);

**Create Courses table**

CREATE TABLE Courses (

course\_id INT PRIMARY KEY,

course\_name VARCHAR(100),

description TEXT,

credit\_hours INT

);

**Create Professors table**

CREATE TABLE Professors (

professor\_id INT PRIMARY KEY,

fname VARCHAR(50),

specialization VARCHAR(100),

contact\_information VARCHAR(100),

);

**Create Departments table**

CREATE TABLE Departments (

department\_id INT PRIMARY KEY,

department\_name VARCHAR(100),

location VARCHAR(100),

contact\_information VARCHAR(100),

);

**Create Enrollments table**

CREATE TABLE Enrollments (

enrollment\_id INT PRIMARY KEY,

student\_id INT,

course\_id INT,

enrollment\_date DATE,

FOREIGN KEY (student\_id) REFERENCES Students(student\_id),

FOREIGN KEY (courses\_id) REFERENCES Courses(courses \_id)

);

INSERT INTO Students (student\_id, fname, date\_of\_birth, address, contact\_information) VALUES

(201, 'Nasser','2001-02-05', '123 sur St', 'Nasser@gmail.com'),

(202, 'Tomy', '1999-05-20', '456 sohar St', 'Tomy@gmail.com');

INSERT INTO Courses (course\_id, course\_name, description, credit\_hours) VALUES

(301, 'Introduction to AI', 'An introduction to artificial intelligence concepts.', 201),

(302, 'Digital Electronics', 'Study of digital electronic circuits.', 202);

INSERT INTO Professors (professor\_id, f\_name, specialization, contact\_information,) VALUES

(101, 'Rahaf', 'Artificial Intelligence', 'rahaf@gmail.com'),

(102, 'Hamed', 'Digital Circuits', 'hamed@gmail.com');

INSERT INTO Departments (department\_id, department\_name, location, contact\_information) VALUES

(1, 'Computer Science', 'Building A', 'dept1@gmail.com'),

(2, 'Electrical Engineering', 'Building B', 'dept2@gmail.com');

INSERT INTO Enrollments (enrollment\_id, course\_id, enrollment\_date, student\_id, course\_id) VALUES

(401, 301, '2023-01-15' ,201,301),

(402, 302, '2023-01-20', 202,302),

SELECT Students.fname

FROM Students

JOIN Enrollments ON Students.student\_id = Enrollments.student\_id

WHERE Enrollments.course\_id = 302;

SELECT Courses.course\_name, COUNT(Enrollments.student\_id) AS num\_students

FROM Courses

LEFT JOIN Enrollments ON Courses.course\_id = Enrollments.course\_id

GROUP BY Courses.course\_name;

SELECT Courses.name  
FROM Courses  
JOIN Departments ON Courses.department\_id = Departments.department\_id  
WHERE Departments.name = 'Math Department';