CREATE DATABASE StudentManagement;

USE StudentManagement;

CREATE TABLE Students (

student\_id INT PRIMARY KEY AUTO\_INCREMENT,

first\_name VARCHAR(50) NOT NULL,

last\_name VARCHAR(50) NOT NULL,

date\_of\_birth DATE NOT NULL,

gender ENUM('Male', 'Female', 'Other') NOT NULL,

email VARCHAR(100) UNIQUE NOT NULL,

phone\_number VARCHAR(15) UNIQUE,

address TEXT

);

CREATE TABLE Courses (

course\_id INT PRIMARY KEY AUTO\_INCREMENT,

course\_name VARCHAR(100) NOT NULL,

course\_description TEXT,

credit\_hours INT NOT NULL

);

CREATE TABLE Enrollment (

enrollment\_id INT PRIMARY KEY AUTO\_INCREMENT,

student\_id INT NOT NULL,

course\_id INT NOT NULL,

enrollment\_date DATE NOT NULL,

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

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

);

CREATE TABLE Instructors (

instructor\_id INT PRIMARY KEY AUTO\_INCREMENT,

first\_name VARCHAR(50) NOT NULL,

last\_name VARCHAR(50) NOT NULL,

email VARCHAR(100) UNIQUE NOT NULL,

phone\_number VARCHAR(15) UNIQUE

);

CREATE TABLE CourseAssignments (

assignment\_id INT PRIMARY KEY AUTO\_INCREMENT,

course\_id INT NOT NULL,

instructor\_id INT NOT NULL,

FOREIGN KEY (course\_id) REFERENCES Courses(course\_id),

FOREIGN KEY (instructor\_id) REFERENCES Instructors(instructor\_id)

);

INSERT INTO Students (first\_name, last\_name, date\_of\_birth, gender, email, phone\_number, address) VALUES

('John', 'Doe', '2024-05-15', 'Male', 'johndoe@example.com', null, '123 Main St'),

('Jane', 'Smith', '2024-11-25', 'Female', 'janesmith@example.com', '2345678901', '456 Oak St'),

('Michael', 'Johnson', '2024-07-09', 'Male', 'michael.johnson@example.com', '3456789012', '789 Pine St'),

('Emily', 'Davis', '2024-02-13', 'Female', 'emily.davis@example.com', '4567890123', '321 Maple St'),

('David', 'Brown', '2024-08-22', 'Male', 'david.brown@example.com', null, '654 Cedar St'),

('Sarah', 'Wilson', '2024-12-03', 'Female', 'sarah.wilson@example.com', '6789012345', '987 Birch St'),

('Robert', 'Taylor', '2024-03-18', 'Male', 'robert.taylor@example.com', '7890123456', '159 Elm St'),

('Laura', 'Anderson', '2024-06-29', 'Female', 'laura.anderson@example.com', '8901234567', '357 Spruce St'),

('James', 'Thomas', '2024-09-14', 'Male', 'james.thomas@example.com', null, '753 Poplar St'),

('Linda', 'Martinez', '2024-04-01', 'Female', 'linda.martinez@example.com', '1234567890', '951 Walnut St');

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

('Full Stack', 'Design and develop both front-end and back-end web apllication', 4),

('Front End Developer', 'Design and build the interface for website and web application', 5),

('Salesforce', 'Salesforce is a cloud-based platform that provides businesses with the tools', 6),

('Devops', 'using traditional software development and infrastructure management processes.', 3),

('Web technology', 'it includes technologies like HTML, CSS, JavaScript, web servers, and internet protocols', 4);

INSERT INTO Instructors (first\_name, last\_name, email, phone\_number) VALUES

('Alice', 'Walker', 'alice.walker@example.com', '1231231234'),

('Brian', 'Johnson', 'brian.johnson@example.com', '2342342345'),

('Catherine', 'Lee', 'catherine.lee@example.com', '3453453456'),

('Isabella', 'Garcia', 'isabella.garcia@example.com', '9019019012'),

('James', 'Anderson', 'james.anderson@example.com', '0120120123');

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

(1, 2, '2024-01-10'),

(2, 3, '2024-02-11'),

(3, 4, '2024-03-12'),

(4, 5, '2024-04-13'),

(5, 3, '2024-05-14'),

(6, 2, '2024-06-15'),

(7, 5, '2024-07-16'),

(8, 2, '2024-08-17'),

(9, 4, '2024-09-18'),

(10, 1, '2024-10-19');

INSERT INTO CourseAssignments (course\_id, instructor\_id) VALUES

(4, 5),

(2, 1),

(1, 3),

(2, 1),

(3, 2),

(5, 4),

(1, 3),

(3, 2),

(2, 1),

(1, 3);























