

-- Create database

```
CREATE DATABASE StudentDB;
```

-- Use the database

```
USE StudentDB;
```

-- Table to store student information

```
CREATE TABLE Students (  
    StudentID INT AUTO_INCREMENT PRIMARY KEY,  
    FirstName VARCHAR(50) NOT NULL,  
    LastName VARCHAR(50) NOT NULL,  
    DateOfBirth DATE,  
    Email VARCHAR(100) UNIQUE NOT NULL,  
    EnrollmentDate DATE NOT NULL  
);
```

-- Table to store course information

```
CREATE TABLE Courses (  
    CourseID INT AUTO_INCREMENT PRIMARY KEY,  
    CourseName VARCHAR(100) NOT NULL,  
    CourseCode VARCHAR(10) UNIQUE NOT NULL,  
    Credits INT NOT NULL  
);
```

-- Table to store enrollment records

```
CREATE TABLE Enrollments (  
    EnrollmentID INT AUTO_INCREMENT PRIMARY KEY,  
    StudentID INT,  
    CourseID INT,  
    EnrollmentDate DATE,
```

```

FOREIGN KEY (StudentID) REFERENCES Students(StudentID),
FOREIGN KEY (CourseID) REFERENCES Courses(CourseID)
);

-- Example Inserts into Students table
INSERT INTO Students (FirstName, LastName, DateOfBirth, Email, EnrollmentDate) VALUES
('John', 'Doe', '2000-01-15', 'john.doe@example.com', '2024-08-01'),
('Jane', 'Smith', '1999-12-05', 'jane.smith@example.com', '2024-08-02'),
('Alice', 'Johnson', '2001-03-25', 'alice.johnson@example.com', '2024-08-03');

-- Example Inserts into Courses table
INSERT INTO Courses (CourseName, CourseCode, Credits) VALUES
('Introduction to Programming', 'CS101', 4),
('Data Structures', 'CS102', 4),
('Database Systems', 'CS201', 3);

-- Example Inserts into Enrollments table
INSERT INTO Enrollments (StudentID, CourseID, EnrollmentDate) VALUES
(1, 1, '2024-08-10'),
(1, 2, '2024-08-10'),
(2, 1, '2024-08-11'),
(2, 3, '2024-08-11'),
(3, 2, '2024-08-12');

SELECT * FROM Students;
SELECT * FROM Courses;
SELECT e.EnrollmentID, s.FirstName, s.LastName, c.CourseName, e.EnrollmentDate
FROM Enrollments e
JOIN Students s ON e.StudentID = s.StudentID
JOIN Courses c ON e.CourseID = c.CourseID;
SELECT c.CourseName, c.CourseCode

```

```
FROM Enrollments e
JOIN Courses c ON e.CourseID = c.CourseID
WHERE e.StudentID = 1; -- For student with ID 1
SELECT s.FirstName, s.LastName, s.Email
FROM Enrollments e
JOIN Students s ON e.StudentID = s.StudentID
WHERE e.CourseID = 2; -- For course with ID 2
```