

STUDENT INFORMATION SYSTEM

Task 1:

ER Diagram:

```
1) CREATE DATABASE SIS_DB;  
   USE SIS_DB;
```

2) **Students Table:**

```
CREATE TABLE Students (  
    student_id INT PRIMARY KEY,  
    first_name VARCHAR(50),  
    last_name VARCHAR(50),  
    date_of_birth DATE,  
    email VARCHAR(100) UNIQUE,  
    phone_number VARCHAR(15)  
);
```

Courses Table:

```
CREATE TABLE Courses (  
    course_id INT PRIMARY KEY,  
    course_name VARCHAR(100),  
    credits INT,  
    teacher_id INT,  
    FOREIGN KEY (teacher_id) REFERENCES Teacher(teacher_id)  
);
```

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 (course_id) REFERENCES Courses(course_id)  
);
```

Teacher Table:

```
CREATE TABLE Teacher (  
    teacher_id INT PRIMARY KEY,  
    first_name VARCHAR(50),  
    last_name VARCHAR(50),  
    email VARCHAR(100)  
);
```

Payments Table:

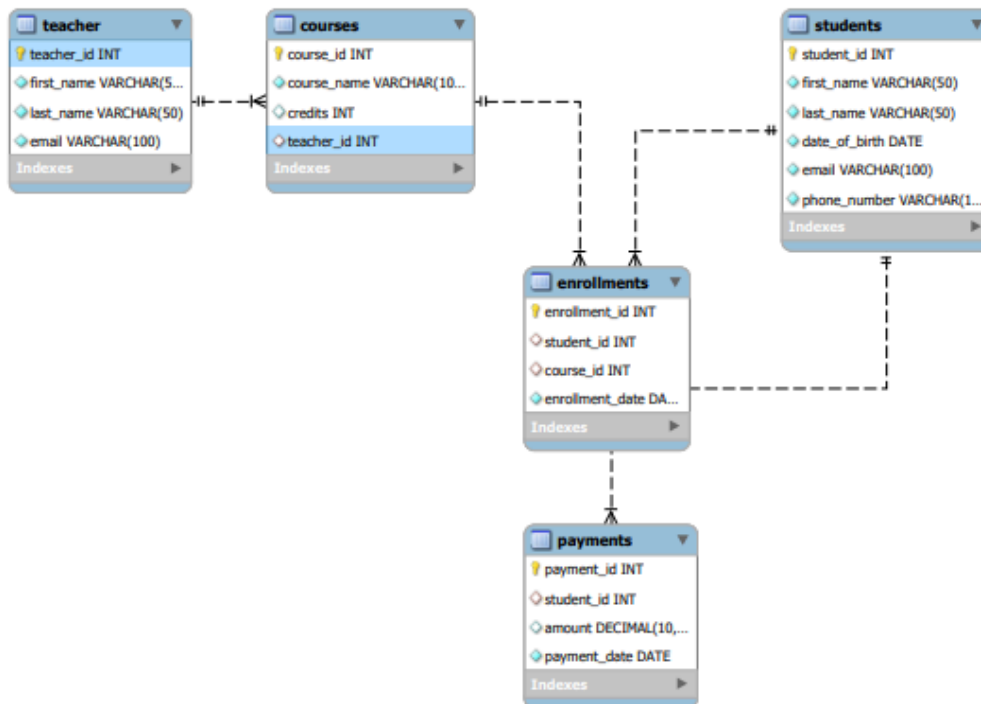
```
CREATE TABLE Payments (  
    payment_id INT PRIMARY KEY,
```

```

student_id INT,
amount DECIMAL(10,2),
payment_date DATE,
FOREIGN KEY (student_id) REFERENCES Students(student_id)
);

```

3)



5)

```

INSERT INTO Students (student_id, first_name, last_name, date_of_birth, email,
phone_number)
VALUES (1, 'Amit', 'Sharma', '2000-07-10', 'amit.sharma@g.com', '9876543210');

```

```

INSERT INTO Teacher (teacher_id, first_name, last_name, email)
VALUES (1, 'Priya', 'Iyer', 'priya.iyer@g.com');

```

```

INSERT INTO Courses (course_id, course_name, credits, teacher_id)
VALUES (101, 'Mathematics', 4, 1);

```

```

INSERT INTO Enrollments (enrollment_id, student_id, course_id, enrollment_date)
VALUES (1, 1, 101, '2024-01-15');

```

```
INSERT INTO Payments (payment_id, student_id, amount, payment_date)
VALUES (1, 1, 5000, '2024-02-01');
```

Output				
Action Output				
#	Time	Action	Message	Duration / Fetch
✓ 1	08:54:46	CREATE DATABASE SIS_DB	1 row(s) affected	0.031 sec
✓ 2	08:54:46	USE SIS_DB	0 row(s) affected	0.000 sec
✓ 3	08:55:26	CREATE TABLE Students (student_id INT AUTO_INCREMENT PRIMA...	0 row(s) affected	0.172 sec
✓ 4	08:56:07	CREATE TABLE Teacher (teacher_id INT AUTO_INCREMENT PRIMA...	0 row(s) affected	0.078 sec
✓ 5	08:56:20	CREATE TABLE Courses (course_id INT AUTO_INCREMENT PRIMAR...	0 row(s) affected	0.109 sec
✓ 6	08:56:28	CREATE TABLE Enrollments (enrollment_id INT AUTO_INCREMENT PR...	0 row(s) affected	0.141 sec
✓ 7	08:59:03	CREATE TABLE Payments (payment_id INT AUTO_INCREMENT PRIM...	0 row(s) affected	0.141 sec
✓ 8	09:03:48	INSERT INTO Students (first_name, last_name, date_of_birth, email, phone_...	10 row(s) affected Records: 10 Duplicates: 0 Warnings: 0	0.047 sec
✓ 9	09:03:48	INSERT INTO Teacher (first_name, last_name, email) VALUES ('Arav', 'Moh...	10 row(s) affected Records: 10 Duplicates: 0 Warnings: 0	0.000 sec
✓ 10	09:03:48	INSERT INTO Courses (course_name, credits, teacher_id) VALUES ('Maths'...	10 row(s) affected Records: 10 Duplicates: 0 Warnings: 0	0.000 sec
✓ 11	09:03:48	INSERT INTO Enrollments (student_id, course_id, enrollment_date) VALUES...	10 row(s) affected Records: 10 Duplicates: 0 Warnings: 0	0.000 sec
✓ 12	09:03:48	INSERT INTO Payments (student_id, amount, payment_date) VALUES (1, 5...	10 row(s) affected Records: 10 Duplicates: 0 Warnings: 0	0.015 sec

Task 2:

- 1) INSERT INTO Students
VALUES ('John', 'Doe', '1995-08-15', 'john.doe@example.com', '1234567890');
- 2) INSERT INTO Enrollments VALUES (1, 7, '2024-03-20');
- 3) UPDATE Teacher
SET email = 'gokul@yahoo.com'
WHERE teacher_id = 3;
- 4) DELETE FROM Enrollments
WHERE student_id = 1 AND course_id = 3;
- 5) UPDATE Courses
SET teacher_id = 2
WHERE course_id = 3
- 6) ALTER TABLE enrollments
ADD CONSTRAINT fk_enrollments_student
FOREIGN KEY (student_id)
REFERENCES students(student_id)
ON DELETE CASCADE;

7) UPDATE Payments
SET amount = 7500
WHERE payment_id = 9