**Assignment 2: Student Information System**

**Code :**

CREATE DATABASE SISDB;

USE SISDB;

CREATE TABLE Students (

student\_id INT AUTO\_INCREMENT,

first\_name VARCHAR(20) NOT NULL,

last\_name VARCHAR(20) NOT NULL,

date\_of\_birth DATE,

email VARCHAR(50) NOT NULL,

phone\_number VARCHAR(15) NOT NULL,

CONSTRAINT Students\_studentid\_pk PRIMARY KEY (student\_id),

CONSTRAINT Students\_email\_uk UNIQUE (email),

CONSTRAINT Students\_phoneno\_uk UNIQUE (phone\_number)

);

CREATE TABLE Teacher (

teacher\_id INT AUTO\_INCREMENT,

first\_name VARCHAR(20) NOT NULL,

last\_name VARCHAR(20) NOT NULL,

email VARCHAR(50) NOT NULL,

CONSTRAINT Teacher\_teacherid\_pk PRIMARY KEY (teacher\_id),

CONSTRAINT Teacher\_email\_uk UNIQUE (email)

);

CREATE TABLE Courses (

course\_id INT AUTO\_INCREMENT,

course\_name VARCHAR(20) NOT NULL,

credits INT DEFAULT 0,

teacher\_id INT,

CONSTRAINT Courses\_courseid\_pk PRIMARY KEY (course\_id),

CONSTRAINT Courses\_teacherid\_fk FOREIGN KEY (teacher\_id)

REFERENCES Teacher (teacher\_id) ON DELETE SET NULL,

CHECK (credits > 0)

);

CREATE TABLE Enrollments(

enrollment\_id INT AUTO\_INCREMENT,

student\_id INT,

course\_id INT,

enrollment\_date DATE DEFAULT (CURRENT\_DATE),

CONSTRAINT Enrollments\_enrollmentid\_pk PRIMARY KEY(enrollment\_id),

CONSTRAINT Enrollments\_studentid\_fk FOREIGN KEY(student\_id)

REFERENCES Students(student\_id) ON DELETE CASCADE,

CONSTRAINT Enrollments\_courseid\_fk FOREIGN KEY(course\_id)

REFERENCES Courses(course\_id) ON DELETE CASCADE

);

CREATE TABLE Payments(

payment\_id INT AUTO\_INCREMENT,

student\_id INT,

amount DECIMAL(10,2) DEFAULT 0,

payment\_date DATE DEFAULT (CURRENT\_DATE-1),

CONSTRAINT Payments\_paymentid\_pk PRIMARY KEY(payment\_id),

CONSTRAINT Payments\_studentid\_fk FOREIGN KEY(student\_id)

REFERENCES Students(student\_id) ON DELETE CASCADE,

CHECK (amount>0)

);