-- Created by DBMS TEAM -- Date: [16 August 2025] -- Description: SQL script to create a simple university course management system database, -- including the creation, alteration, and deletion of tables. -- Step 1: Create a new database CREATE DATABASE db_lab; -- Step 2: Use the newly created database USE db_lab; -- output -- 23:16:06 USE db_lab 0 row(s) affected 0.000 sec -- Step 3: Create the Students table CREATE TABLE Students (StudentID INT PRIMARY KEY, -- Unique identifier for each student FirstName VARCHAR(50), -- First name of the student LastName VARCHAR(50), -- Last name of the student Email VARCHAR(100) UNIQUE, -- Email of the student, must be unique DateOfBirth DATE -- Date of birth of the student); -- Step 4: Create the Courses table CREATE TABLE Courses (CourseID INT PRIMARY KEY, -- Unique identifier for each course CourseName VARCHAR(100), -- Name of the course Credits INT -- Number of credits for the course); -- output -- 23:16:50 CREATE TABLE Courses (CourseID INT PRIMARY KEY, -- Unique identifier for each course CourseName VARCHAR(100), -- Name of the course Credits INT -- Number of credits for the course) 0 row(s) affected 0.031 sec -- Step 5: Create the Enrollments table CREATE TABLE Enrollments (EnrollmentID INT PRIMARY KEY, -- Unique identifier for each enrollment StudentID INT, -- Foreign key referencing Students(StudentID) CourseID INT, -- Foreign key referencing Courses(CourseID) EnrollmentDate DATE, -- Date when the student enrolled in the course FOREIGN KEY (StudentID) REFERENCES Students(StudentID), FOREIGN KEY (CourseID) REFERENCES Courses(CourseID)); -- output -- 23:17:24 CREATE TABLE Enrollments (EnrollmentID INT PRIMARY KEY, -- Unique identifier for each enrollment StudentID INT, -- Foreign key referencing Students(StudentID) CourseID INT, -- Foreign key referencing Courses(CourseID) EnrollmentDate DATE, -- Date when the student enrolled in the course FOREIGN KEY (StudentID) REFERENCES Students(StudentID), FOREIGN KEY (CourseID) REFERENCES Courses(CourseID)) 0 row(s) affected 0.047 sec -- Step 6: Select all records from the Enrollments table SELECT * FROM Enrollments; -- output -- 23:18:07 SELECT * FROM Enrollments LIMIT 0, 1000 0 row(s) returned 0.015 sec / 0.000 sec -- Step 7: Select all records from the Students table SELECT * FROM Students; -- output -- 23:18:35 SELECT * FROM Students LIMIT 0, 1000 0 row(s) returned 0.000 sec / 0.000 sec -- Step 8: Select all records from the Courses table SELECT * FROM Courses; -- output -- 23:19:07 SELECT * FROM Courses LIMIT 0, 1000 0 row(s) returned 0.000 sec / 0.000 sec -- Step 9: Alter the Students table to add a PhoneNumber column ALTER TABLE Students ADD PhoneNumber VARCHAR(15); -- Add a new column for storing phone numbers -- Step 10: Alter the Courses table to modify the Credits column ALTER TABLE Courses MODIFY Credits DECIMAL(3, 1); -- Modify the Credits column to allow decimal values -- output -- 23:20:28 ALTER TABLE Courses MODIFY Credits DECIMAL(3, 1) 0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0 0.078 sec -- Step 11: Alter the Enrollments table to add a unique constraint ALTER TABLE Enrollments ADD CONSTRAINT UC_StudentCourse UNIQUE (StudentID, CourseID); -- Ensure unique student-course combinations -- output -- 23:20:55 ALTER TABLE Enrollments ADD CONSTRAINT UC_StudentCourse UNIQUE (StudentID, CourseID) 0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0 0.031 sec -- Step 12: Drop the Enrollments table DROP TABLE Enrollments; -- Delete the Enrollments table -- output -- 23:21:53 DROP TABLE Enrollments 0 row(s) affected 0.016 sec -- Step 13: Drop the Courses table DROP TABLE Courses; -- Delete the Courses table -- output -- 23:22:20 DROP TABLE Courses 0 row(s) affected 0.031 sec