**Using MSSQL 2022**

**Lab 1. Create a Database & Table Using MySQL Command-Line Client.**

**● Create a database with the name StudentManagementSystem.**

**Create a table with named Student with attributes:**

**● StudentID (Primary Key)**

**● FirstName**

**● LastName**

**Solution----**

**1(a)**

CREATE DATABASE StudentManagementSystem;

GO

USE StudentManagementSystem;

GO

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**1(b)**

CREATE TABLE Student (

StudentID INT PRIMARY KEY IDENTITY(1,1), -- Auto-incrementing ID

FirstName VARCHAR(50) NOT NULL,

LastName VARCHAR(50) NOT NULL

);

GO

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**Insert 5 records**

**Solution----**

INSERT INTO Student (FirstName, LastName) VALUES

('John', 'Doe'),

('Emma', 'Smith'),

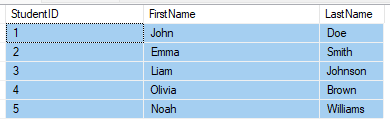
('Liam', 'Johnson'),

('Olivia', 'Brown'),

('Noah', 'Williams');

GO

**Visualization----**



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**Then alter table with following field**

● DateOfBirth

● Gender

● Email

● Phone

**Solution----**

ALTER TABLE Student

ADD

DateOfBirth DATE,

Gender CHAR(1),

Email VARCHAR(100),

Phone VARCHAR(15);

GO

**Update remaining value**

**Solution----**

UPDATE Student

SET DateOfBirth = '2000-05-10', Gender = 'M', Email = 'john.doe@example.com', Phone = '9876543210'

WHERE StudentID = 1;

UPDATE Student

SET DateOfBirth = '2001-08-15', Gender = 'F', Email = 'emma.smith@example.com', Phone = '8765432109'

WHERE StudentID = 2;

UPDATE Student

SET DateOfBirth = '1999-12-20', Gender = 'M', Email = 'liam.johnson@example.com', Phone = '7654321098'

WHERE StudentID = 3;

UPDATE Student

SET DateOfBirth = '2002-03-05', Gender = 'F', Email = 'olivia.brown@example.com', Phone = '6543210987'

WHERE StudentID = 4;

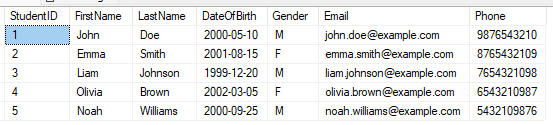
UPDATE Student

SET DateOfBirth = '2000-09-25', Gender = 'M', Email = 'noah.williams@example.com', Phone = '5432109876'

WHERE StudentID = 5;

GO

**Visualization----**

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**Create a table with name Course with attributes:**

● CourseID (Primary Key)

● CourseTitle

● Credits

**Solution----**

CREATE TABLE Course (

CourseID INT PRIMARY KEY IDENTITY(1,1),

CourseTitle VARCHAR(100) NOT NULL,

Credits INT NOT NULL

);

GO

**Visualization----**

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**Create a table with named Instructor with attributes:**

● InstructorID (Primary Key)

● FirstName

● LastName

● Email

**Solution----**

CREATE TABLE Instructor (

InstructorID INT PRIMARY KEY IDENTITY(1,1),

FirstName VARCHAR(50) NOT NULL,

LastName VARCHAR(50) NOT NULL,

Email VARCHAR(100) UNIQUE NOT NULL

);

GO

**Visualization----**

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**Create a table with named Enrollment with attributes:**

● EnrollmentID (Primary Key)

● EnrollmentDate

● StudentID(Foreign key)

● CourseID(Foreign Key)

● InstructorID(Foreign key)

**Solution----**

CREATE TABLE Enrollment (

EnrollmentID INT PRIMARY KEY IDENTITY(1,1),

EnrollmentDate DATE NOT NULL DEFAULT GETDATE(),

StudentID INT,

CourseID INT,

InstructorID INT,

FOREIGN KEY (StudentID) REFERENCES Student(StudentID) ON DELETE CASCADE,

FOREIGN KEY (CourseID) REFERENCES Course(CourseID) ON DELETE CASCADE,

FOREIGN KEY (InstructorID) REFERENCES Instructor(InstructorID) ON DELETE CASCADE

);

GO

**Visualization----**

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**Create a table with named Score with attributes:**

● ScoreID (Primary Key)

● CourseID (Foreign key)

● StudentID (Foreign Key)

● DateOfExam

● CreditObtained

**Solution----**

CREATE TABLE Score (

ScoreID INT PRIMARY KEY IDENTITY(1,1),

CourseID INT,

StudentID INT,

DateOfExam DATE NOT NULL,

CreditObtained DECIMAL(5,2),

FOREIGN KEY (CourseID) REFERENCES Course(CourseID) ON DELETE CASCADE,

FOREIGN KEY (StudentID) REFERENCES Student(StudentID) ON DELETE CASCADE

);

GO

**Visualization----**

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**Create a table with named Feedback with attributes:**

● FeedbackID (Primary Key)

● StudentID (Foreign key)

● Date

● InstructorNa

**Solution----**

CREATE TABLE Feedback (

FeedbackID INT PRIMARY KEY IDENTITY(1,1),

StudentID INT,

Date DATE NOT NULL DEFAULT GETDATE(),

InstructorName VARCHAR(100),

FOREIGN KEY (StudentID) REFERENCES Student(StudentID) ON DELETE CASCADE

);

GO

**Visualization----**

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