CREATE TABLE Students (

StudentID INT PRIMARY KEY,

FirstName VARCHAR(50),

LastName VARCHAR(50),

ClassID INT,

BirthDate DATE,

FOREIGN KEY (ClassID) REFERENCES Classes(ClassID)

);

CREATE TABLE Classes (

ClassID INT PRIMARY KEY,

ClassName VARCHAR(50),

TeacherID INT,

FOREIGN KEY (TeacherID) REFERENCES Teachers(TeacherID)

);

CREATE TABLE Teachers (

TeacherID INT PRIMARY KEY,

FirstName VARCHAR(50),

LastName VARCHAR(50),

Subject VARCHAR(50)

);

INSERT INTO Classes (ClassID, ClassName, TeacherID) VALUES

(1, 'Mathematics', 1),

(2, 'Science', 2),

(3, 'History', 3),

(4, 'English', 4),

(5, 'Computer Science', 5);

INSERT INTO Students (StudentID, FirstName, LastName, ClassID, BirthDate) VALUES

(1, 'Alice', 'Smith', 1, '2005-05-19'),

(2, 'Bob', 'Johnson', 2, '2004-04-02'),

(3, 'Charlie', 'Brown', 3, '2003-12-20'),

(4, 'David', 'Lee', 4, '2002-06-22'),

(5, 'Emma', 'Davis', 5, '2001-02-02'),

(6, 'Frank', 'Wilson', 1, '2000-11-06'),

(7, 'Grace', 'Taylor', 2, '1999-01-13'),

(8, 'Hannah', 'Martinez', 3, '1998-03-12'),

(9, 'Isaac', 'Anderson', 4, '1997-10-27'),

(10, 'Jack', 'Thomas', 5, '1996-09-18');

INSERT INTO Teachers (TeacherID, FirstName, LastName, Subject) VALUES

(1, 'John', 'Doe', 'Mathematics'),

(2, 'Emily', 'Johnson', 'Science'),

(3, 'Michael', 'Williams', 'History'),

(4, 'Sarah', 'Brown', 'English'),

(5, 'Andrew', 'Taylor', 'Computer Science');

SELECT s.FirstName, s.LastName, c.ClassName, t.FirstName AS TeacherFirstName, t.LastName AS TeacherLastName

FROM Students s

JOIN Classes c ON s.ClassID = c.ClassID

JOIN Teachers t ON c.TeacherID = t.TeacherID;

SELECT \* FROM Students WHERE YEAR(BirthDate) >= 2000;

SELECT s.FirstName, s.LastName, c.ClassName, t.FirstName AS TeacherFirstName, t.LastName AS TeacherLastName

FROM Students s

JOIN Classes c ON s.ClassID = c.ClassID

JOIN Teachers t ON c.TeacherID = t.TeacherID

ORDER BY s.FirstName, s.LastName;

UPDATE Students SET FirstName = 'John', LastName = 'Doe' WHERE StudentID = 3;

DELETE FROM Students WHERE StudentID = 7;

CREATE PROCEDURE GetStudentsByClassAndSubject(IN classIDParam INT, IN subjectParam VARCHAR(50))

BEGIN

SELECT s.FirstName, s.LastName

FROM Students s

JOIN Classes c ON s.ClassID = c.ClassID

JOIN Teachers t ON c.TeacherID = t.TeacherID

WHERE c.ClassID = classIDParam AND t.Subject = subjectParam;

END;

DELIMITER;

CREATE VIEW StudentsWithClassAndTeacher AS

SELECT s.FirstName, s.LastName, c.ClassName, t.FirstName AS TeacherFirstName, t.LastName AS TeacherLastName

FROM Students s

JOIN Classes c ON s.ClassID = c.ClassID

JOIN Teachers t ON c.TeacherID = t.TeacherID;