DatabaseSchema Documentation

Introduction

This document provides documentation for the database schema consisting of multiple tables used to manage information related to exams, questions, choices, key performance indicators (KPIs), job offers, topics, courses, students, instructors, and departments. Each table is designed to store specific data relevant to its domain. This schema is intended for educational institutions or organizations that need to manage exam-related information, student data, and related entities.

ERD

**A diagram of a network

Description automatically generated**

Mapping

**A screenshot of a computer screen

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IMPLEMENTATION

Creating a database for an examination system typically involves defining tables to store information about the Topic, Course, Instructor, Student, Department, Exam, Graduate, and Feedback. Once we defined the table schema, we populated the tables with data. We used the Bulk Insert command. This command allows for the efficient insertion of large amounts of data into tables from a data file. The data file can be CSV in our system.

A screen shot of a computer program

Description automatically generated A computer screen with text and images

Description automatically generated A screen shot of a computer program

Description automatically generated

**Stored procedures**

**\*\*\*\*\*\*\*\*generate random password\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**CREATE VIEW RANDValue**

**AS**

**SELECT RAND() AS Value**

**Create FUNCTION [dbo].[GenerateRandomPassword]()**

**RETURNS NVARCHAR(100)**

**AS**

**BEGIN**

**DECLARE @char CHAR = '';**

**DECLARE @charI INT = 0;**

**DECLARE @password NVARCHAR(100) = '';**

**DECLARE @len INT = 6;**

**WHILE @len > 0**

**BEGIN**

**SET @charI = ROUND( (SELECT Value FROM RANDValue) \*100, 0);**

**SET @char = CHAR(@charI);**

**IF @charI > 48 AND @charI < 122**

**BEGIN**

**SET @password = @password + @char;**

**SET @len = @len - 1;**

**END**

**END**

**RETURN @password;**

**END**

**Create PROCEDURE [dbo].[InsertUser]**

**@UserEmail NVARCHAR(100)**

**AS**

**BEGIN**

**DECLARE @UserPassword NVARCHAR(100);**

**SET @UserPassword = dbo.GenerateRandomPassword();**

**-- Check if the user with the provided email already exists**

**IF NOT EXISTS (SELECT 1 FROM Users WHERE Email = @UserEmail)**

**BEGIN**

**-- Insert the user with the provided email and random password**

**INSERT INTO Users (Email, Password)**

**VALUES (@UserEmail, @UserPassword);**

**PRINT 'User inserted successfully.';**

**END**

**ELSE**

**BEGIN**

**PRINT 'User with email ' + @UserEmail + ' already exists.';**

**END**

**END**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*select\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create PROCEDURE [dbo].[SelectAllInstructors]**

**AS**

**BEGIN**

**SELECT \* FROM Instructors;**

**END;**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*add instructor\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create PROCEDURE [dbo].[InsertInstructor]**

**@InstructorFirstName NVARCHAR(100),**

**@InstructorLastName NVARCHAR(100),**

**@InstructorAge INT,**

**@InstructorSalary INT,**

**@InstructorAddress NVARCHAR(255)**

**,@InstructorEmail NVARCHAR(255)**

**AS**

**BEGIN**

**INSERT INTO Instructors(FirstName, LastName, Age, Salary, Address, Email)**

**VALUES (@InstructorFirstName, @InstructorLastName, @InstructorAge, @InstructorSalary, @InstructorAddress, @InstructorEmail);**

**END;**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*update instructor\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create PROCEDURE [dbo].[EditInstructorById]**

**@InstructorID INT,**

**@InstructorFirstName NVARCHAR(100),**

**@InstructorLastName NVARCHAR(100),**

**@InstructorAge INT,**

**@InstructorSalary DECIMAL(10, 2),**

**@InstructorAddress NVARCHAR(255)**

**AS**

**BEGIN**

**UPDATE Instructors**

**SET FirstName = @InstructorFirstName,**

**LastName = @InstructorLastName,**

**Age = @InstructorAge,**

**Salary = @InstructorSalary,**

**Address = @InstructorAddress**

**WHERE ID = @InstructorID;**

**END**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*delete instrucor\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create PROCEDURE [dbo].[DeleteInstructorById]**

**@InstructorID INT**

**AS**

**BEGIN**

**-- Delete the instructor**

**DELETE FROM Instructors WHERE ID = @InstructorID;**

**END**

**CREATE PROCEDURE [dbo].[DeleteCourseById]**

**@CourseID INT**

**AS**

**BEGIN**

**-- Delete the course**

**DELETE FROM Courses WHERE ID = @CourseID;**

**END**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*InsertExamQuestion\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**Create PROCEDURE [dbo].[InsertExamQuestion]**

**@ExamID INT,**

**@QuestionID INT**

**AS**

**BEGIN**

**INSERT INTO ExamQuestion (ExamsID, QuestionsId)**

**VALUES (@ExamID, @QuestionID)**

**END**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*select student\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create PROCEDURE [dbo].[SelectAllStudents]**

**AS**

**BEGIN**

**SELECT \* FROM Students;**

**END;**

**\*\*\*select student join with department\*\*\***

**CREATE PROCEDURE SelectAllStudentsWithDepartments**

**AS**

**BEGIN**

**SELECT s.\*, d.Name**

**FROM Students s**

**JOIN Departments d ON s.DepartmentId = d.Id;**

**END**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*select student by id \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**alter PROCEDURE [dbo].[SelectStudentById]**

**@StudentId INT**

**AS**

**BEGIN**

**SELECT\* FROM Students**

**WHERE Id=@StudentId;**

**END**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*add student\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**alter PROCEDURE [dbo].[InsertStudent]**

**@StudentFirstName NVARCHAR(100),**

**@StudentLastName NVARCHAR(100),**

**@StudentAge INT,**

**@StudentGender INT,**

**@StudentAddress NVARCHAR(255),**

**@StudentFaculty NVARCHAR(100),**

**@StudentGraduationYear INT,**

**@StudentEmail NVARCHAR(255),**

**@DepartmentId INT**

**AS**

**BEGIN**

**INSERT INTO Students(FirstName, LastName, Age, Gender, Address,Faculty,GraduationYear, Email,DepartmentId)**

**VALUES (@StudentFirstName, @StudentLastName, @StudentAge, @StudentGender, @StudentAddress, @StudentFaculty,@StudentGraduationYear,@StudentEmail,@DepartmentId);**

**END;**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*update student\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create PROCEDURE [dbo].[EditStudentById]**

**@StudentID INT,**

**@StudentFirstName NVARCHAR(100),**

**@StudentLastName NVARCHAR(100),**

**@StudentAge INT,**

**@StudentGender INT,**

**@StudentAddress NVARCHAR(255),**

**@StudentFaculty NVARCHAR(100),**

**@StudentGraduationYear INT**

**AS**

**BEGIN**

**UPDATE Students**

**SET FirstName = @StudentFirstName,**

**LastName = @StudentLastName,**

**Age = @StudentAge,**

**Gender = @StudentGender,**

**Address = @StudentGender,**

**Faculty=@StudentFaculty,**

**GraduationYear=@StudentGraduationYear**

**WHERE ID = @StudentID;**

**END**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*delete student\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create PROCEDURE [dbo].[DeleteStudentById]**

**@StudentID INT**

**AS**

**BEGIN**

**-- Delete the student**

**DELETE FROM Students WHERE ID = @StudentID;**

**END**

**\*\*\*\*\*\*\*\*\*\*\*\*select department by id\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create PROCEDURE [dbo].[SelectDepartmentById]**

**@DepartmentId INT**

**AS**

**BEGIN**

**SELECT \* FROM Departments WHERE Id = @DepartmentId;**

**END;**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*course and topic\*\*\*\*\*\*\*\*\*\*\***

**CREATE PROCEDURE [dbo].[DeleteTopicById]**

**@TopicID INT**

**AS**

**BEGIN**

**-- Delete the course**

**DELETE FROM Topics WHERE ID = @TopicID;**

**END**

**create PROCEDURE [dbo].[SelectAllCourses]**

**AS**

**BEGIN**

**SELECT \* FROM Courses;**

**END;**

**create PROCEDURE [dbo].[SelectCourseById]**

**@CourseId INT**

**AS**

**BEGIN**

**SELECT \* FROM Courses WHERE Id = @CourseId;**

**END;**

**create PROCEDURE [dbo].[InsertCourse]**

**@CourseName NVARCHAR(100),**

**@CourseGrade INT**

**AS**

**BEGIN**

**INSERT INTO Courses(Name, Grade)**

**VALUES (@CourseName, @CourseGrade);**

**END;**

**create PROCEDURE [dbo].[EditCourseById]**

**@CourseID INT,**

**@CourseName NVARCHAR(100),**

**@CourseGrade INT**

**AS**

**BEGIN**

**UPDATE Courses**

**SET Name = @CourseName,**

**Grade = @CourseGrade**

**WHERE ID = @CourseID;**

**END**

**CREATE PROCEDURE [dbo].[SelectCourseById]**

**@CourseId INT**

**AS**

**BEGIN**

**SELECT \* FROM Courses WHERE Id = @CourseId;**

**END;**

**CREATE PROCEDURE [dbo].[DeleteCourseById]**

**@CourseID INT**

**AS**

**BEGIN**

**-- Delete the course**

**DELETE FROM Courses WHERE ID = @CourseID;**

**END**

**-- Topic**

**create PROCEDURE [dbo].[SelectAllTopics]**

**AS**

**BEGIN**

**SELECT \* FROM Topics;**

**END;**

**create PROCEDURE [dbo].[SelectAllCourseTopics]**

**@CourseId INT**

**AS**

**BEGIN**

**SELECT \* FROM Topics WHERE CourseId = @CourseId;**

**END;**

**create PROCEDURE [dbo].[InsertTopic]**

**@TopicName NVARCHAR(100),**

**@CourseId INT**

**AS**

**BEGIN**

**INSERT INTO Topics(Name, CourseId)**

**VALUES (@TopicName, @CourseId);**

**END;**

**create PROCEDURE [dbo].[EditTopicById]**

**@TopicID INT,**

**@TopicName NVARCHAR(100),**

**@CourseId INT**

**AS**

**BEGIN**

**UPDATE Topics**

**SET Name = @TopicName,**

**CourseId = @CourseId**

**WHERE ID = @TopicID;**

**END**

**create PROCEDURE [dbo].[DeleteTopicById]**

**@TopicID INT**

**AS**

**BEGIN**

**-- Delete the course**

**DELETE FROM Topics WHERE ID = @TopicID;**

**END**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*SelectAllDepartments\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create PROCEDURE [dbo].[SelectAllDepartments]**

**AS**

**BEGIN**

**SELECT \* FROM Departments;**

**END;**

**create PROCEDURE [dbo].[InsertDepartment]**

**@DepartmentName NVARCHAR(100),**

**@DepartmentBranch NVARCHAR(100),**

**@DepartmentSP INT**

**AS**

**BEGIN**

**INSERT INTO Departments(Name, Branch,SP)**

**VALUES (@DepartmentName, @DepartmentBranch,@DepartmentSP);**

**END;**

**create PROCEDURE [dbo].[EditDepartmentById]**

**@DepartmentId INT ,**

**@DepartmentName NVARCHAR(100),**

**@DepartmentBranch NVARCHAR(100)**

**AS**

**BEGIN**

**UPDATE Departments**

**SET Name = @DepartmentName,**

**Branch = @DepartmentBranch**

**WHERE ID = @DepartmentId;**

**END**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*DeleteDepartmentById\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create PROCEDURE [dbo].[DeleteDepartmentById]**

**@DepartmentId INT**

**AS**

**BEGIN**

**DECLARE @StudentCount INT;**

**SELECT @StudentCount = COUNT(\*)**

**FROM Students**

**WHERE DepartmentId = @DepartmentId;**

**IF @StudentCount = 0**

**BEGIN**

**DELETE FROM CourseDepartment WHERE DepartmentsId=@DepartmentId;**

**DELETE FROM Departments WHERE Id = @DepartmentId;**

**END**

**END**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*amr proc\*\*\*\*\*\*\*\*\*\*\*\*\***

**use ExaminationDB**

**go**

**create proc GetAllChoices**

**as**

**select\* from Choices**

**--GetAllChoices**

**------------------------------------------------------------------**

**go**

**create proc GetAllChoicesInQuestion @QId int**

**as**

**select\* from Choices where Id=@QId**

**--GetAllChoicesInQuestion 1**

**----------------------------------------------------------------**

**go**

**create proc AddChoice @text nvarchar(450) , @Qid int**

**as**

**insert into Choices values(@text, @Qid)**

**--AddChoice 'kkk',2**

**----------------------------------------------------------------**

**create proc [dbo].[DeleteChoice] @Qid int**

**as**

**delete from Choices where Id=@Qid**

**--DeleteChoice 'kkk',2**

**----------------------------------------------------------------**

**go**

**create proc UpdateChoice @textOld nvarchar(450), @textNew nvarchar(450) , @Qid int**

**as**

**update Choices**

**set Text = @textNew**

**where Id = @Qid and Text = @textOld**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*courseInstructor\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create proc SelectAllCourseInstructor**

**as**

**begin**

**select \***

**from CourseInstructor;**

**end;**

**create proc SelectCourseInstructorById**

**@CourseId int,@InstructorId int**

**as**

**begin**

**select \***

**from CourseInstructor**

**where CoursesId=@CourseId and InstructorsID=@InstructorId**

**end;**

**create proc InsertCourseInstructor @Cid int,@Iid int**

**as**

**begin**

**insert into CourseInstructor (CoursesId,InstructorsID)**

**values (@Cid,@Iid)**

**end;**

**create proc EditCourseInstructor**

**@OldCourseId int,**

**@OldInstructorId int,**

**@NewCourseId int,**

**@NewInstructorId int**

**as**

**begin**

**update CourseInstructor**

**set CoursesId=@NewCourseId,**

**InstructorsID=@NewInstructorId**

**where CoursesId=@OldCourseId and InstructorsID=@OldInstructorId**

**end**

**--\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*DeleteCourseInstructor\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create proc DeleteCourseInstructor**

**@CourseId int,@InstructorId int**

**as**

**begin**

**delete from CourseInstructor**

**where CoursesId=@CourseId and InstructorsID=@InstructorId**

**end**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*StudentCourses\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create proc SelectAllStudentCourses**

**as**

**begin**

**select \***

**from StudentCourses**

**end;**

**create proc SelectStudentCoursesById**

**@CourseId int,@StudentId int**

**as**

**begin**

**select \***

**from StudentCourses**

**where CourseId=@CourseId and StudentId=@StudentId**

**end;**

**create proc InsertStudentCourses @CourseId int,@StudentId int,@Grade int**

**as**

**begin**

**insert into StudentCourses (CourseId,StudentId,Grade)**

**values (@CourseId,@StudentId,@Grade)**

**end;**

**create proc EditStudentCourses**

**@OldCourseId int,**

**@OldStudentId int,**

**@NewCourseId int,**

**@NewStudentId int,**

**@Grade int**

**as**

**begin**

**update StudentCourses**

**set CourseId=@NewCourseId,**

**StudentId=@NewStudentId,**

**Grade=@Grade**

**where CourseId=@OldCourseId and StudentId=@OldStudentId**

**end**

**create proc DeleteStudentCourses**

**@CourseId int,@StudentId int**

**as**

**begin**

**delete from StudentCourses**

**where CourseId=@CourseId and StudentId=@StudentId**

**end**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*CourseDepartment\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create proc SelectAllCourseDepartment**

**as**

**begin**

**select \***

**from CourseDepartment;**

**end;**

**create proc SelectCourseDepartmentById**

**@CoursesId int,@DepartmentsId int**

**as**

**begin**

**select \***

**from CourseDepartment**

**where CoursesId=@CoursesId and DepartmentsId=@DepartmentsId**

**end;**

**create proc InsertCourseDepartment @CourseId int,@DepartmentId int**

**as**

**begin**

**insert into CourseDepartment (CoursesId,DepartmentsId)**

**values (@CourseId,@DepartmentId)**

**end;**

**create proc EditCourseDepartment**

**@OldCourseId int,**

**@OldDepartmentId int,**

**@NewCourseId int,**

**@NewDepartmentId int**

**as**

**begin**

**update CourseDepartment**

**set CoursesId=@NewCourseId,**

**DepartmentsId=@NewDepartmentId**

**where CoursesId=@OldCourseId and DepartmentsId=@OldDepartmentId**

**end**

**create proc DeleteCourseDepartment**

**@CourseId int,@DepartmentId int**

**as**

**begin**

**delete from CourseDepartment**

**where CoursesId=@CourseId and DepartmentsId=@DepartmentId**

**end**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**\*\* ExamQuestion \*\***

**create PROCEDURE [dbo].[SelectAllExamQuestions]**

**AS**

**BEGIN**

**SELECT \* FROM ExamQuestion;**

**END;**

**create PROCEDURE [dbo].[SelectExamQuestionById]**

**@ExamId INT,**

**@QuestionId INT**

**AS**

**BEGIN**

**SELECT \* FROM ExamQuestion WHERE ExamsID = @ExamId AND @QuestionId = QuestionsId;**

**END;**

**create PROCEDURE [dbo].[EditExamQuestionById]**

**@OldExamId INT,**

**@OldQuestionId INT,**

**@NewExamId INT,**

**@NewQuestionId INT**

**AS**

**BEGIN**

**UPDATE ExamQuestion**

**SET ExamsID = @NewExamId,**

**QuestionsId = @NewQuestionId**

**WHERE ExamsID = @OldExamId AND QuestionsId = @OldQuestionId;**

**END**

**create PROCEDURE [dbo].[DeleteExamQuestionById]**

**@ExamId INT,**

**@QuestionId INT**

**AS**

**BEGIN**

**DELETE FROM ExamQuestion WHERE ExamsID = @ExamId AND @QuestionId = QuestionsId;**

**END**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* StudentExamQuestion \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create PROCEDURE [dbo].[SelectAllStudentExamQuestions]**

**AS**

**BEGIN**

**SELECT \* FROM StudentExamQuestions;**

**END;**

**create PROCEDURE [dbo].[SelectStudentExamQuestionById]**

**@StudentId INT,**

**@ExamId INT,**

**@QuestionId INT**

**AS**

**BEGIN**

**SELECT \* FROM StudentExamQuestions WHERE StudentId = @StudentId AND ExamID = @ExamId AND QuestionId = @QuestionId;**

**END;**

**create PROCEDURE [dbo].[InsertStudentExamQuestion]**

**@StudentId INT,**

**@ExamId INT,**

**@QuestionId INT,**

**@Answer NVARCHAR(100)**

**AS**

**BEGIN**

**INSERT INTO StudentExamQuestions (StudentId, ExamId, QuestionId, Answer)**

**VALUES (@StudentId, @ExamId, @QuestionId, @Answer);**

**END;**

**create PROCEDURE [dbo].[EditStudentExamQuestionById]**

**@OldStudentId INT,**

**@OldExamId INT,**

**@OldQuestionId INT,**

**@NewStudentId INT,**

**@NewExamId INT,**

**@NewQuestionId INT,**

**@Answer NVARCHAR(100)**

**AS**

**BEGIN**

**UPDATE StudentExamQuestions**

**SET StudentId = @NewStudentId,**

**ExamID = @NewExamId,**

**QuestionId = @NewQuestionId**

**WHERE StudentId = @OldStudentId AND ExamID = @OldExamId AND QuestionId = @OldQuestionId;**

**END**

**create PROCEDURE [dbo].[DeleteStudentExamQuestionById]**

**@StudentId INT,**

**@ExamId INT,**

**@QuestionId INT**

**AS**

**BEGIN**

**DELETE FROM StudentExamQuestions WHERE StudentId = @StudentId AND ExamID = @ExamId AND QuestionId = @QuestionId;**

**END**

**\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*RoleUser \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create PROCEDURE [dbo].[SelectAllRoleUsers]**

**AS**

**BEGIN**

**SELECT \* FROM RoleUser;**

**END;**

**create PROCEDURE [dbo].[SelectRoleUserById]**

**@RolesId INT,**

**@UsersEmail NVARCHAR(100)**

**AS**

**BEGIN**

**SELECT \* FROM RoleUser WHERE RolesId = @RolesId AND UsersEmail = @UsersEmail;**

**END;**

**create PROCEDURE [dbo].[InsertRoleUser]**

**@RolesId INT,**

**@UsersEmail NVARCHAR(100)**

**AS**

**BEGIN**

**INSERT INTO RoleUser(RolesId, UsersEmail)**

**VALUES (@RolesId, @UsersEmail);**

**END;**

**create PROCEDURE [dbo].[EditRoleUserById]**

**@OldRolesId INT,**

**@OldUsersEmail NVARCHAR(100),**

**@NewRolesId INT,**

**@NewUsersEmail NVARCHAR(100)**

**AS**

**BEGIN**

**UPDATE RoleUser**

**SET RolesId = @NewRolesId,**

**UsersEmail = @NewUsersEmail**

**WHERE RolesId = @OldRolesId AND UsersEmail = @OldUsersEmail;**

**END**

**create PROCEDURE [dbo].[DeleteRoleUserById]**

**@RolesId INT,**

**@UsersEmail NVARCHAR(100)**

**AS**

**BEGIN**

**DELETE FROM RoleUser WHERE RolesId = @RolesId AND UsersEmail = @UsersEmail;**

**END**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*Role\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create PROCEDURE [dbo].[SelectAllRoles]**

**AS**

**BEGIN**

**SELECT \* FROM Roles;**

**END;**

**create PROCEDURE [dbo].[SelectRoleById]**

**@RoleId int**

**AS**

**BEGIN**

**SELECT \* FROM Roles**

**where Id=@RoleId**

**END;**

**create PROCEDURE [dbo].[InsertRole]**

**@RoleId INT,**

**@Description int**

**AS**

**BEGIN**

**INSERT INTO Roles(Id, Description)**

**VALUES (@RoleId, @Description);**

**END;**

**create proc [dbo].[EditRole]**

**@RoleId INT,**

**@Description int**

**AS**

**BEGIN**

**update Roles**

**set**

**Description=@Description**

**where Id=@RoleId**

**END;**

**alter proc [dbo].[DeleteRole]**

**@RoleId INT**

**AS**

**BEGIN**

**delete from RoleUser where RolesId=@RoleId;**

**delete from Roles where Id=@RoleId;**

**END;**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*user\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create PROCEDURE [dbo].[SelectAllUsers]**

**AS**

**BEGIN**

**SELECT \* FROM Users;**

**END;**

**create PROCEDURE [dbo].[SelectUserById]**

**@UserEmail NVARCHAR(100)**

**AS**

**BEGIN**

**SELECT \* FROM Users WHERE Email = @UserEmail;**

**END;**

**create PROCEDURE [dbo].[EditUserById]**

**@OldUserEmail NVARCHAR(100),**

**@NewUserEmail NVARCHAR(100),**

**@NewPassword NVARCHAR(100)**

**AS**

**BEGIN**

**UPDATE Users**

**SET Email = @NewUserEmail,**

**Password = @NewPassword**

**WHERE Email = @OldUserEmail;**

**END**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create PROCEDURE [dbo].[DeleteUserById]**

**@UserEmail NVARCHAR(100)**

**AS**

**BEGIN**

**DECLARE @StudentCount int,@AdminCount int,@Instructor int**

**SELECT @StudentCount = COUNT(\*)**

**FROM Students**

**WHERE Email = @UserEmail;**

**SELECT @AdminCount = COUNT(\*)**

**FROM Admins**

**WHERE Email = @UserEmail;**

**SELECT @Instructor = COUNT(\*)**

**FROM Instructors**

**WHERE Email = @UserEmail;**

**IF @StudentCount = 0 and @AdminCount=0 and @Instructor=0**

**BEGIN**

**DELETE FROM RoleUser WHERE UsersEmail=@UserEmail**

**DELETE FROM Users WHERE Email = @UserEmail;**

**END**

**END**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*DeleteQuestionById\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create PROCEDURE [dbo].[DeleteQuestionById]**

**@QuestionID INT**

**AS**

**BEGIN**

**EXEC DeleteChoice @QuestionID;**

**DELETE FROM StudentExamQuestions WHERE QuestionId = @QuestionID;**

**DELETE FROM ExamQuestion WHERE QuestionsId = @QuestionID;**

**DELETE FROM Questions WHERE Id = @QuestionID;**

**END**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*DeleteExamById\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create PROCEDURE [dbo].[DeleteExamById]**

**@ExamID INT**

**AS**

**BEGIN**

**DELETE FROM StudentExamQuestions WHERE ExamId = @ExamID;**

**DELETE FROM ExamQuestion WHERE ExamsID = @ExamID;**

**DELETE FROM Exams WHERE Id = @ExamID;**

**END**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*DeleteCourseById\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create PROCEDURE [dbo].[DeleteCourseById]**

**@CourseID INT**

**AS**

**BEGIN**

**DELETE FROM CourseInstructor WHERE CoursesId = @CourseID;**

**DELETE FROM StudentCourses WHERE CourseId = @CourseID;**

**DELETE FROM CourseDepartment WHERE CoursesId = @CourseID;**

**DELETE FROM Questions WHERE CourseId = @CourseID;**

**DELETE FROM Exams WHERE CourseID = @CourseID;**

**DELETE FROM Topics WHERE CourseId = @CourseID;**

**DELETE FROM Courses WHERE Id = @CourseID;**

**END**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**alter PROCEDURE [dbo].[DeleteInstructorById]**

**@InstructorID INT**

**AS**

**BEGIN**

**DECLARE @SupervisorCount INT;**

**SELECT @SupervisorCount = COUNT(\*)**

**FROM Departments**

**WHERE SP = @InstructorID;**

**IF @SupervisorCount = 0**

**BEGIN**

**DELETE FROM CourseInstructor WHERE InstructorsID = @InstructorID;**

**DELETE FROM Instructors WHERE Id = @InstructorID;**

**END**

**END**

**alter PROCEDURE [dbo].[DeleteStudentById]**

**@StudentID INT**

**AS**

**BEGIN**

**DELETE FROM StudentExamQuestions WHERE StudentId = @StudentID;**

**DELETE FROM StudentCourses WHERE StudentId = @StudentID;**

**DELETE FROM Students WHERE Id = @StudentID;**

**END**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**@ChoiceText nvarchar(450),**

**Text=@ChoiceText and**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*select choices by id \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create proc [dbo].[GetChoicesById]**

**@ChoiceId int**

**as**

**select\* from Choices**

**where Id=@ChoiceId**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*EditExamById\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create PROCEDURE [dbo].[EditExamById]**

**@ExamID int,**

**@EDuration int,**

**--@EDate dateTime,**

**@EQCount int,**

**@ETotalMarks int**

**AS**

**BEGIN**

**UPDATE Exams**

**SET Duration = @EDuration,**

**--Date = @EDate,**

**QCount=@EQCount,**

**TotalMarks=@ETotalMarks**

**WHERE ID = @ExamID;**

**END**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*EditQuestionById\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create PROCEDURE [dbo].[EditQuestionsById]**

**@QuestionID int,**

**@QuestionType int,**

**@QuestionTitle nvarchar(max),**

**@QuestionCorrectAnswer nvarchar(max)**

**AS**

**BEGIN**

**UPDATE Questions**

**SET Type=@QuestionType,**

**Title=@QuestionTitle,**

**CorrectAnswer=@QuestionCorrectAnswer**

**WHERE Id = @QuestionID;**

**END**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**create PROCEDURE [dbo].[DeleteQuestionById]**

**@QuestionID INT**

**AS**

**BEGIN**

**DELETE FROM Choices WHERE Id = @QuestionID;**

**DELETE FROM StudentExamQuestions WHERE QuestionId = @QuestionID;**

**DELETE FROM ExamQuestion WHERE QuestionsId = @QuestionID;**

**DELETE FROM Questions WHERE Id = @QuestionID;**

**END**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**alter PROCEDURE [dbo].[InsertRole]**

**@Description int**

**AS**

**BEGIN**

**INSERT INTO Roles(Description)**

**VALUES (@Description);**

**END;**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**alter PROCEDURE [dbo].[EditStudentById]**

**@StudentID INT,**

**@StudentFirstName NVARCHAR(100),**

**@StudentLastName NVARCHAR(100),**

**@StudentAge INT,**

**@StudentGender INT,**

**@StudentAddress NVARCHAR(255),**

**@StudentFaculty NVARCHAR(100),**

**@StudentGraduationYear INT,**

**@StudentDepartmentID INT**

**AS**

**BEGIN**

**UPDATE Students**

**SET FirstName = @StudentFirstName,**

**LastName = @StudentLastName,**

**Age = @StudentAge,**

**Gender = @StudentGender,**

**Address = @StudentAddress,**

**Faculty=@StudentFaculty,**

**GraduationYear=@StudentGraduationYear,**

**DepartmentId = @StudentDepartmentID**

**WHERE ID = @StudentID;**

**END**

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

**CREATE proc [dbo].[InsertStudentCoursesByDepartmentId]**

**@StudentID int,**

**@DepartmentId int**

**as**

**begin**

**INSERT INTO studentcourses (courseid, studentid)**

**SELECT c.ID AS CourseID, @StudentID AS StudentID**

**FROM courses AS c**

**JOIN CourseDepartment AS dc ON c.ID = dc.CoursesId**

**WHERE dc.DepartmentsId = @DepartmentID;**

**end;**