

Smart Village Branch

ITI Examination System

Advanced SQL Project

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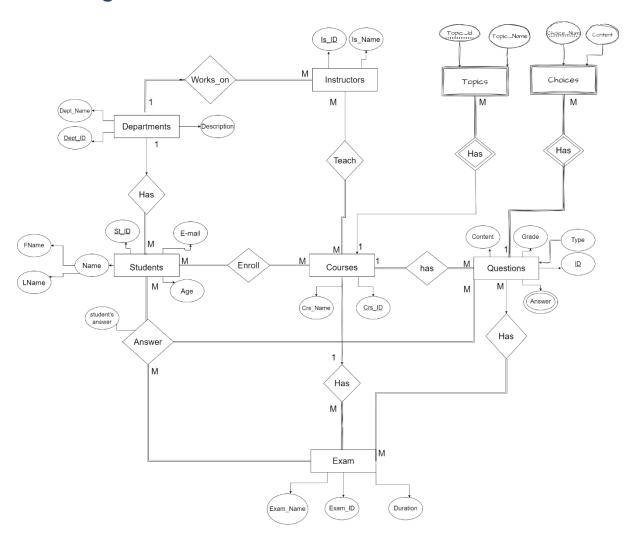
Table of Contents

Table of Contents	2
ERD Diagram	
Mapping Diagram	
(local)\SQLEXPRESS	
User databases	
ExaminationSystemDB Database	
Tables	
[dbo].[Answers]	
[dbo].[Choices]	
[dbo].[Courses]	
[dbo].[Courses_Instructor]	
[dbo].[Departments]	
[dbo].[Exam_Questions]	
[dbo].[Exams]	
[dbo].[Instructors]	24
[dbo].[Questions]	26
[dbo].[Student_Answer_In_Exam]	28
[dbo].[Student_Courses]	30
[dbo].[Students]	32
[dbo].[Topic]	34
Stored Procedures	36
[dbo].[delete_Course]	38
[dbo].[delete_CourseInstructor]	39
[dbo].[delete_CourseInstructor2]	40
[dbo].[delete_Instructor]	41
[dbo].[delete_Topic]	42
[dbo].[DeleteAllChoicesForQuestion]	43
[dbo].[DeleteAnswersForQuestion]	44
[dbo].[DeleteChoiceForQuestion]	45
[dbo].[DeleteDepartment]	
[dbo].[DeleteExam]	47
[dbo].[DeleteQuestion]	
[dbo].[DeleteQuestionFromExam]	49
[dbo].[DeleteStudent]	50
[dbo].[DeleteStudentAnswerOfQuestionInExam]	51
[dbo].[DeleteStudentCourse]	52
[dbo].[Exam_Answers]	
[dbo].[Exam_Correct]	
[dbo].[Exam_Generation]	58
[dho] [EyamQuestions StudentAnswers ModelAnswers]	60

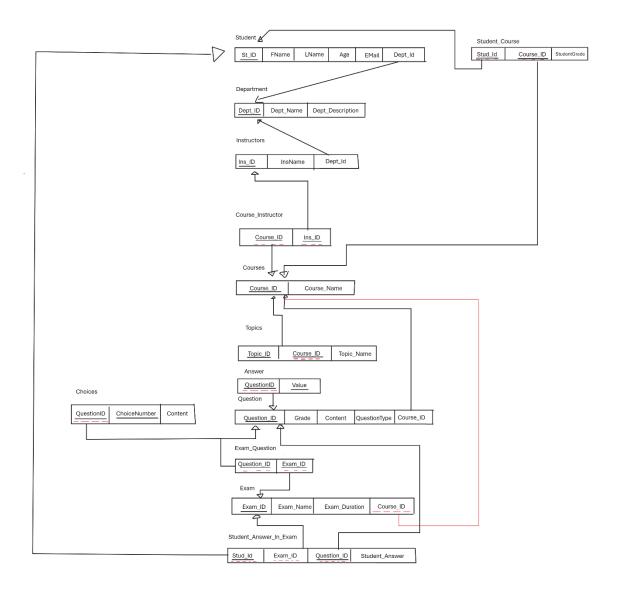
[dbo].[GetCoursesTeachedByInstructor]	62
[dbo].[getExamFromCrsID]	63
[dbo].[GetStudentAnswerAndModelAnswer]	64
[dbo].[GetStudentGradeInAllCourses]	65
[dbo].[GetStudentsInDepartment]	66
[dbo].[GetTopicsOfCourse]	67
[dbo].[insert_Course]	
[dbo].[insert_CourseInstructor]	69
[dbo].[insert_Instructor]	70
[dbo].[insert_Topic]	71
[dbo].[InsertAnswerForQuestion]	72
[dbo].[InsertChoiceForQuestion]	73
[dbo].[InsertDepartment]	74
[dbo].[InsertExam]	75
[dbo].[InsertQuestion]	76
[dbo].[InsertQuestionInExam]	77
[dbo].[InsertStudent]	78
[dbo].[InsertStudentAnswerOfQuestionInExam]	79
[dbo].[InsertStudentCourse]	80
[dbo].[questionsAndChoicesFromExamID]	81
[dbo].[Report6_ExamQuestions_StudnetAnswers]	82
[dbo].[select_Course]	84
[dbo].[select_CourseInstructor]	85
[dbo].[select_CourseInstructor2]	86
[dbo].[select_Instructor]	87
[dbo].[select_Topic]	88
[dbo].[SelectAnswerForQuestion]	89
[dbo].[SelectChoices]	90
[dbo].[SelectDepartment]	91
[dbo].[SelectExam]	92
[dbo].[SelectExamQuestion]	93
[dbo].[SelectQuestion]	94
[dbo].[SelectStudent]	95
[dbo].[SelectStudentAnswerOfQuestionInExam]	96
[dbo].[SelectStudentCourse]	97
[dbo].[update_Course]	98
[dbo].[update_CourseInstructor]	99
[dbo].[update_CourseInstructor2]	100
[dbo].[update_Instructor]	101
[dbo].[update_Topic]	102
[dbo].[UpdateAnswerForQuestion]	103

	[dbo].[UpdateChoiceForQuestion]	104
	[dbo].[UpdateDepartment]	105
	[dbo].[UpdateExam]	106
	[dbo].[UpdateQuestion]	107
	[dbo].[UpdateQuestionInExam]	108
	[dbo].[UpdateStudent]	109
	[dbo].[UpdateStudentAnswerOfQuestionInExam]	110
	[dbo].[UpdateStudentCourse]	111
1	Users	112
	1 dbo	113
	1 guest	114
Q.	Database Roles	115
	db_accessadmin	115
	db_backupoperator	115
	db_datareader	116
	db_datawriter	116
	db_ddladmin	116
	db_denydatareader	116
	db_denydatawriter	117
	db_owner	117
	db_securityadmin	117
	public	117

ERD Diagram



Mapping Diagram



■ (local)\SQLEXPRESS

Databases (1)

• **ExaminationSystemDB**

Server Settings

Property	Value
Default data file path	C:\Program Files\Microsoft SQL Server\MSSQL16.SQLEXPRESS\MSSQL\DATA\
Default backup file path	C:\Program Files\Microsoft SQL Server\MSSQL16.SQLEXPRESS\MSSQL\Backup
Default log file path	C:\Program Files\Microsoft SQL Server\MSSQL16.SQLEXPRESS\MSSQL\DATA\
Recovery Interval (minutes)	0
Default index fill factor	0
Default backup media retention	0

Advanced Server Settings

Property	Value
Locks	0
Nested triggers enabled	True
Allow triggers to fire others	True
Default language	English
Network packet size	4096
Default fulltext language LCID	1033
Two-digit year cutoff	2049
Remote login timeout	10
Cursor threshold	-1
Max text replication size	65536
Parallelism cost threshold	5
Max degree of parallelism	0
Min server memory	16
Max server memory	2147483647
Scan for startup procs	False
Transform noise words	False
CLR enabled	False
Blocked process threshold	0
Filestream access level	False
Optimize for ad hoc workloads	False
CLR strict security	True

☐ User databases	
Databases (1)	

• ExaminationSystemDB

Files

Name	Туре	Size	Maxsize	Autogrowth	File Name
Examination- SystemDB	Data	72.00 MB	unlimited	64.00 MB	C:\Program Files\Microsoft SQL Server\MSSQL16.SQLEXPRESS\MSSQL\DATA\Examination- SystemDB.mdf
Examination- SystemDB_log	Log	72.00 MB	2048.00 GB	64.00 MB	C:\Program Files\Microsoft SQL Server\MSSQL16.SQLEXPRESS\MSSQL\DATA\Examination- SystemDB_log.ldf

■ Tables

Objects

Name
dbo.Answers
dbo.Choices
dbo.Courses
dbo.Courses_Instructor
dbo.Departments
dbo.Exam_Questions
dbo.Exams
dbo.Instructors
dbo.Questions
dbo.Student_Answer_In_Exam
dbo.Student_Courses
dbo.Students
dbo.Topic

[dbo].[Answers]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	60
Created	2:36:11 PM Thursday, January 25, 2024
Last Modified	11:09:00 PM Sunday, February 11, 2024

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability
PKPFKP C	Question_ld	int	4	NOT NULL
P/C	Value	varchar(50)	50	NOT NULL

Indexes

Key	Name	Key Columns	Unique
PKP C	PK_Answers	Question_ld, Value	True

Foreign Keys

Name	Update	Delete	Columns
FK_Answers_Questions	Cascade	Cascade	Question_ld->[dbo].[Questions].[Question_ld]

SQL Script

```
CREATE TABLE [dbo].[Answers]

(
[Question_Id] [int] NOT NULL,

[Value] [varchar] (50) COLLATE SQL_Latin1_General_CP1_CI_AS NOT NULL

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Answers] ADD CONSTRAINT [PK_Answers] PRIMARY KEY CLUSTERED ([Question_Id], [Value]) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Answers] ADD CONSTRAINT [FK_Answers_Questions] FOREIGN KEY ([Question_Id]) REFERENCES [dbo].[Questions] ([Question_Id]) ON DELETE CASCADE ON UPDATE CASCADE

GO
```

Uses

[dbo].[Questions]

Used By

[dbo].[DeleteAnswersForQuestion]

[dbo].[Exam_Correct]

[dbo].[ExamQuestions_StudentAnswers_ModelAnswers]

[dbo].[GetStudentAnswerAndModelAnswer]

[dbo].[InsertAnswerForQuestion]

[dbo].[SelectAnswerForQuestion]

[dbo].[UpdateAnswerForQuestion]

[dbo].[Choices]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	180
Created	11:07:52 PM Sunday, February 11, 2024
Last Modified	11:09:00 PM Sunday, February 11, 2024

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability
PKPFKP C	Question_ld	int	4	NOT NULL
P <mark>/</mark> C	Choice_Number	varchar(50)	50	NOT NULL
	Content	varchar(500)	500	NOT NULL

Indexes

Key	Name	Key Columns	Unique
PKP C	PK_Choices	Question_Id, Choice_Number	True

Foreign Keys

Name	Update	Delete	Columns
FK_Choices_Questions	Cascade	Cascade	Question_ld->[dbo].[Questions].[Question_ld]

```
CREATE TABLE [dbo].[Choices]

(
[Question_Id] [int] NOT NULL,
[Choice_Number] [varchar] (50) COLLATE SQL_Latin1_General_CP1_CI_AS NOT NULL,
[Content] [varchar] (500) COLLATE SQL_Latin1_General_CP1_CI_AS NOT NULL
) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Choices] ADD CONSTRAINT [PK_Choices] PRIMARY KEY CLUSTERED ([Question_Id],
[Choice_Number]) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Choices] ADD CONSTRAINT [FK_Choices_Questions] FOREIGN KEY ([Question_Id])

REFERENCES [dbo].[Questions] ([Question_Id]) ON DELETE CASCADE ON UPDATE CASCADE

GO
```

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Tables > dbo.Choices

Uses

[dbo].[Questions]

Used By

[dbo].[DeleteAllChoicesForQuestion]

[dbo].[DeleteChoiceForQuestion]

[dbo].[ExamQuestions_StudentAnswers_ModelAnswers]

[dbo].[GetStudentAnswerAndModelAnswer]

[dbo].[InsertChoiceForQuestion]

[dbo].[questionsAndChoicesFromExamID]

 $[dbo]. [Report6_ExamQuestions_StudnetAnswers]$

[dbo].[SelectChoices]

[dbo].[UpdateChoiceForQuestion]

[dbo].[Courses]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	4
Created	9:52:37 PM Saturday, February 3, 2024
Last Modified	11:09:00 PM Sunday, February 11, 2024

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PKP C	Course_ld	int	4	NOT NULL	1 - 1
	Course_Name	varchar(50)	50	NULL allowed	

Indexes

Key	Name	Key Columns	Unique
PKP C	PK_Courses	Course_Id	True

SQL Script

```
CREATE TABLE [dbo].[Courses]

(
[Course_Id] [int] NOT NULL IDENTITY(1, 1),

[Course_Name] [varchar] (50) COLLATE SQL_Latin1_General_CP1_CI_AS NULL

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Courses] ADD CONSTRAINT [PK_Courses] PRIMARY KEY CLUSTERED ([Course_Id]) ON [PRIMARY]

GO
```

Used By

 $[dbo]. [Courses_Instructor] \\$

[dbo].[Exams]

[dbo].[Questions]

[dbo].[Student_Courses]

[dbo].[Topic]

[dbo].[delete_Course]

 $[dbo]. [Exam_Generation] \\$

[dbo]. [Get Courses Teached By Instructor]

[dbo].[GetStudentGradeInAllCourses]

[dbo]. [GetTopicsOfCourse]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Tables > dbo.Courses

[dbo].[insert_Course] [dbo].[select_Course] [dbo].[update_Course]

[dbo].[Courses_Instructor]

Properties

Property	Value
Row Count (~)	5
Created	2:29:36 PM Thursday, January 25, 2024
Last Modified	9:52:37 PM Saturday, February 3, 2024

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability
PKPFKP C	Course_ld	int	4	NOT NULL
PKPFKP C	Ins_Id	int	4	NOT NULL

Indexes

Key	Name	Key Columns	Unique
PKP C	PK_Courses_Instructor	Course_ld, Ins_ld	True

Foreign Keys

Name	Columns
FK_Courses_Instructor_Courses	Course_ld->[dbo].[Courses].[Course_ld]
FK_Courses_Instructor_Instructors	Ins_Id->[dbo].[Instructors].[Instructor_Id]

```
CREATE TABLE [dbo].[Courses_Instructor]

(
[Course_Id] [int] NOT NULL,
[Ins_Id] [int] NOT NULL

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Courses_Instructor] ADD CONSTRAINT [PK_Courses_Instructor] PRIMARY KEY

CLUSTERED ([Course_Id], [Ins_Id]) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Courses_Instructor] ADD CONSTRAINT [FK_Courses_Instructor_Courses] FOREIGN

KEY ([Course_Id]) REFERENCES [dbo].[Courses] ([Course_Id])

GO

ALTER TABLE [dbo].[Courses_Instructor] ADD CONSTRAINT [FK_Courses_Instructor_Instructors]

FOREIGN KEY ([Ins_Id]) REFERENCES [dbo].[Instructors] ([Instructor_Id])

GO
```

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Tables > dbo.Courses_Instructor

Uses

[dbo].[Courses] [dbo].[Instructors]

Used By

[dbo].[delete_CourseInstructor]

[dbo].[delete_CourseInstructor2]

[dbo].[GetCoursesTeachedByInstructor]

[dbo].[insert_CourseInstructor]

[dbo].[select_CourseInstructor]

[dbo].[select_CourseInstructor2]

[dbo].[update_CourseInstructor]

[dbo].[update_CourseInstructor2]

[dbo].[Departments]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	2
Created	7:55:22 PM Tuesday, January 30, 2024
Last Modified	7:55:22 PM Tuesday, January 30, 2024

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PK	Department_ID	int	4	NOT NULL	1 - 1
	Department_Name	varchar(50)	50	NULL allowed	
	Dept_Description	varchar(200)	200	NULL allowed	

Indexes

Key	Name	Key Columns	Unique
PKP C	PK_Departments	Department_ID	True

SQL Script

```
CREATE TABLE [dbo].[Departments]

(
[Department_ID] [int] NOT NULL IDENTITY(1, 1),
[Department_Name] [varchar] (50) COLLATE SQL_Latin1_General_CP1_CI_AS NULL,
[Dept_Description] [varchar] (200) COLLATE SQL_Latin1_General_CP1_CI_AS NULL
) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Departments] ADD CONSTRAINT [PK_Departments] PRIMARY KEY CLUSTERED
([Department_ID]) ON [PRIMARY]

GO
```

Used By

[dbo].[Instructors]

[dbo].[Students]

[dbo].[DeleteDepartment]

[dbo].[GetStudentsInDepartment]

[dbo].[InsertDepartment]

[dbo].[SelectDepartment]

[dbo].[UpdateDepartment]

[dbo].[Exam_Questions]

Properties

Property	Value
Row Count (~)	250
Created	9:54:49 PM Saturday, January 27, 2024
Last Modified	11:09:00 PM Sunday, February 11, 2024

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability
PKPFKP C	Question_ld	int	4	NOT NULL
PKPFKP C	Exam_ID	int	4	NOT NULL

Indexes

Key	Name	Key Columns	Unique
PKP C	PK_Exam_Questions	Question_Id, Exam_ID	True

Foreign Keys

Name	Delete	Columns
FK_Exam_Questions_Exams	Cascade	Exam_ID->[dbo].[Exams].[Exam_Id]
FK_Exam_Questions_Questions	Cascade	Question_ld->[dbo].[Questions].[Question_ld]

```
CREATE TABLE [dbo].[Exam_Questions]

(
[Question_Id] [int] NOT NULL,

[Exam_ID] [int] NOT NULL

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Exam_Questions] ADD CONSTRAINT [PK_Exam_Questions] PRIMARY KEY CLUSTERED

([Question_Id], [Exam_ID]) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Exam_Questions] ADD CONSTRAINT [FK_Exam_Questions_Exams] FOREIGN KEY

([Exam_ID]) REFERENCES [dbo].[Exams] ([Exam_Id]) ON DELETE CASCADE

GO

ALTER TABLE [dbo].[Exam_Questions] ADD CONSTRAINT [FK_Exam_Questions_Questions] FOREIGN KEY

([Question_Id]) REFERENCES [dbo].[Questions] ([Question_Id]) ON DELETE CASCADE

GO
```

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Tables > dbo.Exam_Questions

Uses

[dbo].[Exams] [dbo].[Questions]

Used By

[dbo].[DeleteQuestionFromExam]

[dbo].[Exam_Answers]

[dbo].[Exam_Generation]

[dbo].[InsertQuestionInExam]

[dbo]. [questions And Choices From Exam ID]

[dbo].[SelectExamQuestion]

[dbo].[UpdateQuestionInExam]

[dbo].[Exams]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	32
Created	10:58:34 PM Sunday, February 11, 2024
Last Modified	11:09:25 PM Sunday, February 11, 2024

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PKC	Exam_ld	int	4	NOT NULL	1 - 1
	Exam_Name	varchar(50)	50	NULL allowed	
	Exam_Duration	varchar(50)	50	NOT NULL	
FK	Course_Id	int	4	NOT NULL	

Indexes

Key	Name	Key Columns	Unique
PKP C	PK_Exams	Exam_ld	True

Foreign Keys

Name	Columns	
FK_Exams_Courses	Course_ld->[dbo].[Courses].[Course_ld]	

```
CREATE TABLE [dbo].[Exams]

(
[Exam_Id] [int] NOT NULL IDENTITY(1, 1),

[Exam_Name] [varchar] (50) COLLATE SQL_Latin1_General_CP1_CI_AS NULL,

[Exam_Duration] [varchar] (50) COLLATE SQL_Latin1_General_CP1_CI_AS NOT NULL,

[Course_Id] [int] NOT NULL

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Exams] ADD CONSTRAINT [PK_Exams] PRIMARY KEY CLUSTERED ([Exam_Id]) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Exams] ADD CONSTRAINT [FK_Exams_Courses] FOREIGN KEY ([Course_Id]) REFERENCES [dbo].[Courses] ([Course_Id])

GO
```

Uses

[dbo].[Courses]

Used By

[dbo].[Exam_Questions]

[dbo].[Student_Answer_In_Exam]

[dbo].[DeleteExam]

[dbo].[DeleteQuestionFromExam]

[dbo].[Exam_Answers]

[dbo].[Exam_Correct]

[dbo].[Exam_Generation]

 $[dbo]. [ExamQuestions_StudentAnswers_ModelAnswers] \\$

[dbo].[getExamFromCrsID]

[dbo].[GetStudentAnswerAndModelAnswer]

[dbo].[InsertExam]

[dbo].[InsertQuestionInExam]

[dbo].[questionsAndChoicesFromExamID]

 $[dbo]. [Report6_ExamQuestions_StudnetAnswers]$

[dbo].[SelectExam]

[dbo].[SelectExamQuestion]

[dbo].[UpdateExam]

[dbo].[Instructors]

Properties

Property	Value
Collation	SQL_Latin1_General_CP1_CI_AS
Row Count (~)	5
Created	7:55:02 PM Tuesday, January 30, 2024
Last Modified	7:55:22 PM Tuesday, January 30, 2024

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PKC	Instructor_Id	int	4	NOT NULL	1 - 1
	Instructor_Name	varchar(50)	50	NULL allowed	
FK	Dept_ld	int	4	NULL allowed	

Indexes

Key	Name	Key Columns	Unique
PKP C	PK_Instructors	Instructor_ld	True

Foreign Keys

Name	Columns	
FK_Instructors_Departments	Dept_Id->[dbo].[Departments].[Department_ID]	

```
CREATE TABLE [dbo].[Instructors]

(
[Instructor_Id] [int] NOT NULL IDENTITY(1, 1),

[Instructor_Name] [varchar] (50) COLLATE SQL_Latin1_General_CP1_CI_AS NULL,

[Dept_Id] [int] NULL

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Instructors] ADD CONSTRAINT [PK_Instructors] PRIMARY KEY CLUSTERED

([Instructor_Id]) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Instructors] ADD CONSTRAINT [FK_Instructors_Departments] FOREIGN KEY

([Dept_Id]) REFERENCES [dbo].[Departments] ([Department_ID])

GO
```

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Tables > dbo.Instructors

Uses

[dbo].[Departments]

Used By

[dbo].[Courses_Instructor]
[dbo].[delete_Instructor]
[dbo].[GetCoursesTeachedByInstructor]
[dbo].[insert_Instructor]
[dbo].[select_Instructor]
[dbo].[update_Instructor]

[dbo].[Questions]

Properties

Property	Value
Collation SQL_Latin1_General_CP1_CI_AS	
Row Count (~)	71
Created 11:08:59 PM Sunday, February 11, 2024	
Last Modified	9:09:15 PM Wednesday, February 28, 2024

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PKP C	Question_ld	int	4	NOT NULL	1 - 1
	Grade	int	4	NOT NULL	
	Content	varchar(400)	400	NOT NULL	
	Question_Type	varchar(100)	100	NOT NULL	
FK	Course_ld	int	4	NOT NULL	

Indexes

Key	Name	Key Columns	Unique
PKP C	PK_Questions	Question_ld	True

Foreign Keys

Name	No Check	Columns
FK_Questions_Courses	True	Course_ld->[dbo].[Courses].[Course_ld]

```
CREATE TABLE [dbo].[Questions]

(
[Question_Id] [int] NOT NULL IDENTITY(1, 1),
[Grade] [int] NOT NULL,
[Content] [varchar] (400) COLLATE SQL_Latin1_General_CP1_CI_AS NOT NULL,
[Question_Type] [varchar] (100) COLLATE SQL_Latin1_General_CP1_CI_AS NOT NULL,
[Course_Id] [int] NOT NULL
) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Questions] ADD CONSTRAINT [PK_Questions] PRIMARY KEY CLUSTERED ([Question_-Id]) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Questions] WITH NOCHECK ADD CONSTRAINT [FK_Questions_Courses] FOREIGN KEY
```

```
([Course_Id]) REFERENCES [dbo].[Courses] ([Course_Id])
GO
```

Uses

[dbo].[Courses]

Used By

[dbo].[Answers]

[dbo].[Choices]

[dbo].[Exam_Questions]

[dbo].[Student_Answer_In_Exam]

[dbo].[DeleteQuestion]

[dbo].[Exam_Correct]

[dbo].[Exam_Generation]

 $[dbo]. [ExamQuestions_StudentAnswers_ModelAnswers] \\$

[dbo].[GetStudentAnswerAndModelAnswer]

[dbo].[InsertQuestion]

[dbo]. [questions And Choices From Exam ID]

[dbo].[Report6_ExamQuestions_StudnetAnswers]

[dbo].[SelectChoices]

[dbo].[SelectExamQuestion]

[dbo].[SelectQuestion]

[dbo].[UpdateQuestion]

[dbo].[Student_Answer_In_Exam]

Properties

Property	Value
Collation SQL_Latin1_General_CP1_CI_AS	
Row Count (~)	95
Created	11:09:25 PM Sunday, February 11, 2024
Last Modified	11:09:25 PM Sunday, February 11, 2024

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability
PKPFKP C	Student_Id	int	4	NOT NULL
F	Exam_ld	int	4	NOT NULL
PKPFKP C	Question_ld	int	4	NOT NULL
	Student_Answer	varchar(200)	200	NOT NULL

Indexes

Key	Name	Key Columns	Unique
PKP C	PK_Student_Answer_In_Exam	Student_Id, Question_Id	True

Foreign Keys

Name	Delete	Columns
FK_Student_Answer_In_Exam_Exams	Cascade	Exam_ld->[dbo].[Exams].[Exam_ld]
FK_Student_Answer_In_Exam_Questions		Question_ld->[dbo].[Questions].[Question_ld]
FK_Student_Answer_In_Exam_Students		Student_Id->[dbo].[Students].[Student_Id]

```
CREATE TABLE [dbo].[Student_Answer_In_Exam]

(
[Student_Id] [int] NOT NULL,

[Exam_Id] [int] NOT NULL,

[Question_Id] [int] NOT NULL,

[Student_Answer] [varchar] (200) COLLATE SQL_Latin1_General_CP1_CI_AS NOT NULL

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Student_Answer_In_Exam] ADD CONSTRAINT [PK_Student_Answer_In_Exam] PRIMARY KEY CLUSTERED ([Student_Id], [Question_Id]) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Student_Answer_In_Exam] ADD CONSTRAINT [FK_Student_Answer_In_Exam_Exam_S]
```

```
FOREIGN KEY ([Exam_Id]) REFERENCES [dbo].[Exams] ([Exam_Id]) ON DELETE CASCADE

GO

ALTER TABLE [dbo].[Student_Answer_In_Exam] ADD CONSTRAINT [FK_Student_Answer_In_Exam_-
Questions] FOREIGN KEY ([Question_Id]) REFERENCES [dbo].[Questions] ([Question_Id])

GO

ALTER TABLE [dbo].[Student_Answer_In_Exam] ADD CONSTRAINT [FK_Student_Answer_In_Exam_Students]

FOREIGN KEY ([Student_Id]) REFERENCES [dbo].[Students] ([Student_Id])

GO
```

Uses

[dbo].[Exams]

[dbo].[Questions]

[dbo].[Students]

Used By

[dbo]. [Delete Student Answer Of Question In Exam]

[dbo].[Exam_Correct]

[dbo].[ExamQuestions_StudentAnswers_ModelAnswers]

[dbo].[getExamFromCrsID]

[dbo].[GetStudentAnswerAndModelAnswer]

[dbo].[InsertStudentAnswerOfQuestionInExam]

 $[dbo]. [Report6_ExamQuestions_StudnetAnswers]$

[dbo]. [SelectStudentAnswerOfQuestionInExam]

[dbo]. [UpdateStudentAnswerOfQuestionInExam]

[dbo].[Student_Courses]

Properties

Property	Value
Row Count (~)	16
Created	2:20:56 PM Thursday, January 25, 2024
Last Modified	10:30:47 PM Monday, February 12, 2024

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability
PKPFKP C	Student_Id	int	4	NOT NULL
PKPFKP C	Course_ld	int	4	NOT NULL
	StudentGrade	decimal(18,2)	9	NULL allowed

Indexes

Key	Name	Key Columns	Unique
PKP C	PK_Student_Courses	Student_Id, Course_Id	True

Foreign Keys

Name Columns		
FK_Student_Courses_Courses	Course_ld->[dbo].[Courses].[Course_ld]	
_Student_Courses_Students Student_Id->[dbo].[Students].[Student_Id]		

```
CREATE TABLE [dbo].[Student_Courses]

(
[Student_Id] [int] NOT NULL,
[Course_Id] [int] NOT NULL,
[StudentGrade] [decimal] (18, 2) NULL

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Student_Courses] ADD CONSTRAINT [PK_Student_Courses] PRIMARY KEY CLUSTERED

([Student_Id], [Course_Id]) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Student_Courses] ADD CONSTRAINT [FK_Student_Courses_Courses] FOREIGN KEY

([Course_Id]) REFERENCES [dbo].[Courses] ([Course_Id])

GO

ALTER TABLE [dbo].[Student_Courses] ADD CONSTRAINT [FK_Student_Courses_Students] FOREIGN KEY

([Student_Id]) REFERENCES [dbo].[Students] ([Student_Id])

GO
```

Uses

[dbo].[Courses] [dbo].[Students]

Used By

[dbo].[DeleteStudentCourse]

[dbo].[Exam_Answers]

[dbo].[Exam_Correct]

[dbo].[GetCoursesTeachedByInstructor]

[dbo].[getExamFromCrsID]

[dbo].[GetStudentAnswerAndModelAnswer]

[dbo].[GetStudentGradeInAllCourses]

[dbo].[InsertStudentCourse]

[dbo].[SelectStudentCourse]

[dbo].[UpdateStudentCourse]

[dbo].[Students]

Properties

Property	Value	
Collation SQL_Latin1_General_CP1_CI_AS		
Row Count (~)	8	
Created 7:53:48 PM Tuesday, January 30, 2024		
Last Modified	11:09:25 PM Sunday, February 11, 2024	

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PKP C	Student_Id	int	4	NOT NULL	1 - 1
	Fname	varchar(10)	10	NULL allowed	
	LName	varchar(10)	10	NULL allowed	
	Age	int	4	NULL allowed	
	Email	varchar(50)	50	NULL allowed	
FK	Dept_Id	int	4	NULL allowed	

Indexes

Key	Name	Key Columns	Unique
PKP C	PK_Students	Student_Id	True

Foreign Keys

Name	Columns
FK_Students_Departments	Dept_Id->[dbo].[Departments].[Department_ID]

```
CREATE TABLE [dbo].[Students]

(
[Student_Id] [int] NOT NULL IDENTITY(1, 1),
[Fname] [varchar] (10) COLLATE SQL_Latin1_General_CP1_CI_AS NULL,
[LName] [varchar] (10) COLLATE SQL_Latin1_General_CP1_CI_AS NULL,
[Age] [int] NULL,
[Email] [varchar] (50) COLLATE SQL_Latin1_General_CP1_CI_AS NULL,
[Dept_Id] [int] NULL
) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Students] ADD CONSTRAINT [PK_Students] PRIMARY KEY CLUSTERED ([Student_Id])
ON [PRIMARY]
```

```
GO
ALTER TABLE [dbo].[Students] ADD CONSTRAINT [FK_Students_Departments] FOREIGN KEY ([Dept_Id])
REFERENCES [dbo].[Departments] ([Department_ID])
GO
```

Uses

[dbo].[Departments]

Used By

[dbo].[Student_Answer_In_Exam]

[dbo].[Student_Courses]

[dbo].[DeleteStudent]

[dbo].[Exam_Answers]

[dbo].[Exam_Correct]

[dbo].[ExamQuestions_StudentAnswers_ModelAnswers]

[dbo].[GetStudentsInDepartment]

[dbo].[InsertStudent]

 $[dbo]. [Report6_ExamQuestions_StudnetAnswers]$

[dbo].[SelectStudent]

[dbo].[UpdateStudent]

[dbo].[Topic]

Properties

Property Value	
Collation SQL_Latin1_General_CP1_CI_AS	
Row Count (~)	6
Created 7:54:18 PM Tuesday, January 30, 2024	
Last Modified	9:52:37 PM Saturday, February 3, 2024

Columns

Key	Name	Data Type	Max Length (Bytes)	Nullability	Identity
PKP C	Topic_ld	int	4	NOT NULL	1 - 1
PKPFKP C	Course_Id	int	4	NOT NULL	
	Topic_Name	varchar(50)	50	NULL allowed	

Indexes

Key	Name	Key Columns	Unique	
PK2 C	PK_Topic	Topic_Id, Course_Id	True	

Foreign Keys

Name	Columns
FK_Topic_Courses	Course_ld->[dbo].[Courses].[Course_ld]

```
CREATE TABLE [dbo].[Topic]

(
[Topic_Id] [int] NOT NULL IDENTITY(1, 1),

[Course_Id] [int] NOT NULL,

[Topic_Name] [varchar] (50) COLLATE SQL_Latin1_General_CP1_CI_AS NULL

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Topic] ADD CONSTRAINT [PK_Topic] PRIMARY KEY CLUSTERED ([Topic_Id],

[Course_Id]) ON [PRIMARY]

GO

ALTER TABLE [dbo].[Topic] ADD CONSTRAINT [FK_Topic_Courses] FOREIGN KEY ([Course_Id])

REFERENCES [dbo].[Courses] ([Course_Id])

GO
```

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Tables > dbo.Topic

Uses

[dbo].[Courses]

Used By

[dbo].[delete_Topic]
[dbo].[GetTopicsOfCourse]
[dbo].[insert_Topic]
[dbo].[select_Topic]
[dbo].[update_Topic]

Stored Procedures

Objects

Name dbo.delete_CourseInstructor dbo.delete_CourseInstructor2 dbo.delete_Toupic dbo.delete_Toupic dbo.delete_Topic dbo.DeleteAnswersForQuestion dbo.DeleteAnswersForQuestion dbo.DeleteCourseInstructor3 dbo.DeleteCourseInstructor3 dbo.DeleteCourseInstructor4 dbo.DeleteCourseInstructor4 dbo.DeleteCourseInstructor4 dbo.DeleteCourseInstructor5 dbo.DeleteCourseInstructor4 dbo.DeleteCourseInstructor5 dbo.DeleteCourseInstructor5 dbo.DeleteCourseInstructor5 dbo.DeleteCourseInstructor5 dbo.DeleteCourseInstructor5 dbo.DeleteCourseInstructor5 dbo.DeleteStudentAnswerOfQuestionInExam5 dbo.DeleteStudentAnswerOfQuestionInExam6 dbo.DeleteStudentCourse6 dbo.Exam_Answers dbo.Exam_Answers dbo.Exam_Generation dbo.Exam_Generation dbo.Exam_Questions_StudentAnswers_ModelAnswers dbo.GetCoursesTeachedByinstructor6 dbo.GetCoursesTeachedByinstructor6 dbo.GetStudentGradeInAliCourses6 dbo.GetStudentGradeInAliCourses6 dbo.GetStudentGradeInAliCourses6 dbo.GetStudentGradeInAliCourses6 dbo.Insert_CourseInstructor6 dbo.Insert_CourseInstructor6 dbo.Insert_CourseInstructor6 dbo.Insert_CourseInstructor7 dbo.Insert_LourseInstructor7 dbo.Insert_LourseInstructor8 dbo.In	
dbo.delete_Courseinstructor dbo.delete_Instructor dbo.delete_Instructor dbo.delete_Instructor dbo.delete_Instructor dbo.DeleteAnswersForQuestion dbo.DeleteAnswersForQuestion dbo.DeleteChoiceForQuestion dbo.DeleteChoiceForQuestion dbo.DeleteExam dbo.DeleteExam dbo.DeleteQuestionFormExam dbo.DeleteStudentConiceswersForQuestion dbo.DeleteStudentAnswerofQuestionInExam dbo.DeleteStudentAnswerofQuestionInExam dbo.DeleteStudentAnswerofQuestionInExam dbo.DeleteStudentCourse dbo.Exam_Correct dbo.Exam_Correct dbo.Exam_Correct dbo.Exam_Correct dbo.Exam_Correct dbo.Exam_Correct dbo.GetStudentAnswers_ModelAnswers dbo.GetCoursesTeachedByInstructor dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentSinDepartment dbo.GetStudentSinDepartment dbo.GetStudentSinDepartment dbo.GetStudentSinDepartment dbo.Insert_Course	Name
dbo.delete_Courseinstructor2 dbo.delete_Instructor dbo.delete_Topic dbo.DeleteAllChoicesForQuestion dbo.DeleteChoicesForQuestion dbo.DeleteChoicesForQuestion dbo.DeleteChoicesForQuestion dbo.DeleteDepartment dbo.DeleteExam dbo.DeleteExam dbo.DeleteStudentAnswerSmExam dbo.DeleteStudentAnswerOfQuestionInExam dbo.DeleteStudentCourse dbo.DeleteStudentCourse dbo.Exam_Answers dbo.Exam_Answers dbo.Exam_Correct dbo.Exam_Generation dbo.Exam_Generation dbo.GetCourses TeachedByInstructor dbo.GetStudentAnswerAndModelAnswers dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentGradelnAllCourses dbo.insert_Course dbo.insert_Dourse dbo.inser	dbo.delete_Course
dbo.delete_Instructor dbo.DeleteAliChoicesForQuestion dbo.DeleteChoiceForQuestion dbo.DeleteChoiceForQuestion dbo.DeleteEpartment dbo.DeleteEpartment dbo.DeleteEstam dbo.DeleteStudent dbo.DeleteStudent dbo.DeleteStudent dbo.DeleteStudent dbo.DeleteStudent dbo.DeleteStudentAnswerOQuestionnExam dbo.DeleteStudentAnswerOQuestionnExam dbo.DeleteStudentAnswerOQuestionnExam dbo.DeleteStudentAnswerOQuestionnExam dbo.DeleteStudentAnswerOQuestionnExam dbo.DeleteStudentAnswerS dbo.Exam_Answers dbo.Exam_Correct dbo.Exam_Correct dbo.Exam_Generation dbo.Exam_Generation dbo.Exam_Generation dbo.GetStudentAnswers_ModelAnswers dbo.GetStudentAnswerAndModelAnswers dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentGradeInAliCourses dbo.GetStudentGradeInAliCourses dbo.inserLourse dbo.ins	dbo.delete_CourseInstructor
dbo. DeleteAllChoiceSForQuestion dbo. DeleteAnswersForQuestion dbo. DeleteChoiceForQuestion dbo. DeleteChoiceForQuestion dbo. DeleteExam dbo. DeleteExam dbo. DeleteCuestion dbo. DeleteCuestion dbo. DeleteCuestion dbo. DeleteCuestion dbo. DeleteStudent dbo. DeleteStudent dbo. DeleteStudent dbo. DeleteStudentCourse dbo. Exam_Answers dbo. DeleteStudentCourse dbo. Exam_Answers dbo. Exam_Answers dbo. Exam_Answers dbo. Exam_Generation dbo. Exam_Generation dbo. GetStudentAnswerAndModelAnswers dbo. GetStudentAnswerAndModelAnswers dbo. GetStudentGradethAllCourses dbo. GetStudentStudentCourse dbo. insert_Course dbo.insert_Course dbo.insert_Course dbo.insert_Course dbo.insert_Course dbo.insert_Course dbo.insert_Department dbo.InsertDepartment dbo.InsertDepartment dbo.InsertDepartment dbo.InsertDepartment dbo.InsertDepartment dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestionIExam dbo.InsertStudent	dbo.delete_CourseInstructor2
dbo.DeleteAllChoicesForQuestion dbo.DeleteChoiceForQuestion dbo.DeleteChoiceForQuestion dbo.DeleteDepartment dbo.DeleteDepartment dbo.DeleteDeustion dbo.DeleteQuestion dbo.DeleteQuestion dbo.DeleteStudent dbo.DeleteStudent dbo.DeleteStudent dbo.DeleteStudentCourse dbo.DeleteStudentCourse dbo.Exam_Answers dbo.Exam_Answers dbo.Exam_Answers dbo.Exam_Correct dbo.Exam_Correct dbo.Exam_Generation dbo.DeleteStudentAnswer_ModelAnswers dbo.Exam_Costroct dbo.GetCoursesTeachedByInstructor dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentGradeInAllCourses dbo.GetStudentGradeInAll	dbo.delete_Instructor
dbo.DeleteChoiceForQuestion dbo.DeleteDepartment dbo.DeleteExam dbo.DeleteQuestionFormExam dbo.DeleteStudentFormExam dbo.DeleteStudentAnswerOfQuestionInExam dbo.DeleteStudentAnswerOfQuestionInExam dbo.DeleteStudentAnswerOfQuestionInExam dbo.DeleteStudentCourse dbo.Exam_Answers dbo.Exam_Correct dbo.Exam_Generation dbo.ExamQuestions_StudentAnswers_ModelAnswers dbo.GetCourseSTeachedByInstructor dbo.getStudentAnswerAndModelAnswer dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentSinDepartment dbo.GetStudentSinDepartment dbo.GetStudentSinDepartment dbo.insert_Course dbo.insert_Topic dbo.insert_Topic dbo.insertAnswerForQuestion dbo.InsertChoiceForQuestion dbo.InsertQuestionInExam dbo.InsertQuestionInExam	dbo.delete_Topic
dbo.DeleteChoiceForQuestion dbo.DeleteExam dbo.DeleteQuestion dbo.DeleteQuestionFromExam dbo.DeleteStudent dbo.DeleteStudent dbo.DeleteStudentAmswerOfQuestionInExam dbo.DeleteStudentCourse dbo.Exam_Answers dbo.Exam_Correct dbo.Exam_Generation dbo.ExamGeneration dbo.SedtCourseSTeachedByInstructor dbo.GetCoursesTeachedByInstructor dbo.GetStudentAnswerAndModelAnswers dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentSinDepartment dbo.GetTopicsOfCourse dbo.insert_CourseInstructor dbo.insert_Topic dbo.insert_ForQuestion dbo.InsertObioeForQuestion dbo.InsertDepartment dbo.InsertQuestion	dbo.DeleteAllChoicesForQuestion
dbo.DeleteDepartment dbo.DeleteXam dbo.DeleteQuestion dbo.DeleteQuestionFromExam dbo.DeleteStudent dbo.DeleteStudent dbo.DeleteStudentAnswerOfQuestionInExam dbo.DeleteStudentCourse dbo.Exam_Answers dbo.Exam_Correct dbo.Exam_Generation dbo.Exam@uestions_StudentAnswers_ModelAnswers dbo.Exam_Generation dbo.GetCoursesTeachedByInstructor dbo.getExamFromCrsID dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentSinDepartment dbo.GetStudentSinDepartment dbo.insert_Course dbo.insert_Course dbo.insert_Courselon dbo.insert_Ourselon dbo.insert_Ourselor	dbo.DeleteAnswersForQuestion
dbo.DeleteXam dbo.DeleteQuestionFromExam dbo.DeleteStudent dbo.DeleteStudent dbo.DeleteStudentAnswerOfQuestionInExam dbo.DeleteStudentAnswerOfQuestionInExam dbo.DeleteStudentCourse dbo.Exam_Answers dbo.Exam_Answers dbo.Exam_Correct dbo.Exam_Generation dbo.ExamQuestions_StudentAnswers_ModelAnswers dbo.GetCoursesTeachedByInstructor dbo.getExamFromCrsID dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentGradelnAllCourses dbo.GetStudentSnobexerAndModelAnswer dbo.GetStudentSnobexerAndModelAnswer dbo.GetStudentSnobexerAndModelAnswer dbo.GetStudentsInDepartment dbo.GetTopicsOfCourse dbo.insert_Course dbo.insert_Course dbo.insert_CourseInstructor dbo.insert_CourseInstructor dbo.insert_Topic dbo.InsertAnswerForQuestion dbo.InsertAnswerForQuestion dbo.InsertChoiceForQuestion dbo.InsertDepartment dbo.InsertChoiceForQuestion dbo.InsertChoiceForQuestion dbo.InsertChoiceForQuestion dbo.InsertChoiceForQuestion dbo.InsertQuestionInExam dbo.InsertQuestionInExam	dbo.DeleteChoiceForQuestion
dbo.DeleteQuestionFromExam dbo.DeleteStudent dbo.DeleteStudentAnswerOfQuestionInExam dbo.DeleteStudentAnswerOfQuestionInExam dbo.DeleteStudentCourse dbo.Exam_Answers dbo.Exam_Correct dbo.Exam_Generation dbo.ExamQuestions_StudentAnswers_ModelAnswers dbo.GetCoursesTeachedByInstructor dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentSinDepartment dbo.GetStudentsInDepartment dbo.insert_Course dbo.insert_Course dbo.insert_Courselnstructor dbo.insert_Topic dbo.insert_Topic dbo.insert_Topic dbo.insertAnswerForQuestion dbo.InsertDepartment dbo.InsertDepartment dbo.InsertDepartment dbo.InsertDepartment dbo.InsertDepartment dbo.InsertCourseListinder dbo.InsertStudent	dbo.DeleteDepartment
dbo.DeleteStudent dbo.DeleteStudentAnswerOfQuestionInExam dbo.DeleteStudentAnswerOfQuestionInExam dbo.DeleteStudentCourse dbo.Exam_Answers dbo.Exam_Correct dbo.Exam_Generation dbo.ExamQuestions_StudentAnswers_ModelAnswers dbo.GetCoursesTeachedByInstructor dbo.getExamFromCrsID dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentGradeInAllCourses dbo.GetStudentSinDepartment dbo.GetStudentSinDepartment dbo.GetStudentSinDepartment dbo.insert_Course dbo.insert_Course dbo.insert_Topic dbo.insert_Topic dbo.InsertAnswerForQuestion dbo.InsertDepartment dbo.InsertDepartment dbo.InsertChoiceForQuestion dbo.InsertDepartment dbo.InsertChoiceForQuestion dbo.InsertChuestion dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestionInExam dbo.InsertQuestionInExam	dbo.DeleteExam
dbo.DeleteStudentAnswerOfQuestionInExam dbo.DeleteStudentCourse dbo.Exam_Answers dbo.Exam_Correct dbo.Exam_Generation dbo.ExamCourseStudentAnswers_ModelAnswers dbo.GetCourseSTeachedByInstructor dbo.getExamFromCrsID dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentGradeInAllCourses dbo.GetStudentSnDepartment dbo.GetStudentSnDepartment dbo.insert_Course dbo.insert_CourseInstructor dbo.insert_Topic dbo.insert_Topic dbo.InsertAnswerForQuestion dbo.InsertExam dbo.InsertExam dbo.InsertExam dbo.InsertQuestion dbo.InsertQuestionInExam	dbo.DeleteQuestion
dbo.DeleteStudentCourse dbo.Exam_Answers dbo.Exam_Correct dbo.Exam_Generation dbo.ExamQuestions_StudentAnswers_ModelAnswers dbo.GetCoursesTeachedByInstructor dbo.getExamFromCrsID dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentGradeInAllCourses dbo.GetStudentSinDepartment dbo.GetStudentSinDepartment dbo.insert_Course dbo.insert_Topic dbo.insert_Topic dbo.insert_Topic dbo.insert_AnswerForQuestion dbo.InsertChoiceForQuestion dbo.InsertExam dbo.InsertExam dbo.InsertExam dbo.InsertExam dbo.InsertQuestionIExam dbo.InsertQuestionIExam dbo.InsertQuestionIExam	dbo.DeleteQuestionFromExam
dbo.Exam_Answers dbo.Exam_Correct dbo.Exam_Generation dbo.ExamQuestions_StudentAnswers_ModelAnswers dbo.GetCoursesTeachedByInstructor dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentGradeInAllCourses dbo.GetStudentInDepartment dbo.GetStudentsInDepartment dbo.insert_Course dbo.insert_Topic dbo.insert_Topic dbo.InsertAnswerForQuestion dbo.InsertChoiceForQuestion dbo.InsertDepartment	dbo.DeleteStudent
dbo.Exam_Answers dbo.Exam_Correct dbo.Exam_Generation dbo.Exam_Questions_StudentAnswers_ModelAnswers dbo.GetCoursesTeachedByInstructor dbo.getExamFromCrsID dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentGradeInAllCourses dbo.GetStudentInDepartment dbo.GetStudentInDepartment dbo.insert_Course dbo.insert_Course dbo.insert_Topic dbo.insert_Topic dbo.InsertAnswerForQuestion dbo.InsertDepartment dbo.InsertDepartment dbo.InsertDepartment dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestionInExam dbo.InsertQuestionInExam	dbo.DeleteStudentAnswerOfQuestionInExam
dbo.Exam_Correct dbo.Exam_Generation dbo.ExamQuestions_StudentAnswers_ModelAnswers dbo.GetCoursesTeachedByInstructor dbo.getExamFromCrsID dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentGradeInAllCourses dbo.GetStudentInDepartment dbo.GetStudentInDepartment dbo.GetTopicsOfCourse dbo.insert_Course dbo.insert_Course dbo.insert_Topic dbo.insert_Topic dbo.InsertAnswerForQuestion dbo.InsertDepartment dbo.InsertDepartment dbo.InsertExam dbo.InsertQuestionIExam dbo.InsertQuestionIExam	dbo.DeleteStudentCourse
dbo.Exam_Generation dbo.ExamQuestions_StudentAnswers_ModelAnswers dbo.GetCoursesTeachedByInstructor dbo.getExamFromCrsID dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentGradeInAllCourses dbo.GetStudentsInDepartment dbo.GetTopicsOfCourse dbo.insert_Course dbo.insert_CourseInstructor dbo.insert_Instructor dbo.insert_Topic dbo.InsertAnswerForQuestion dbo.InsertChoiceForQuestion dbo.InsertDepartment dbo.InsertDepartment dbo.InsertDepartment dbo.InsertChoiceForQuestion dbo.InsertChoiceForQuestion dbo.InsertChoiceForQuestion dbo.InsertChoiceForQuestion dbo.InsertChoiceForQuestion dbo.InsertChoiceForQuestion dbo.InsertChoiceForQuestion	dbo.Exam_Answers
dbo.ExamQuestions_StudentAnswers_ModelAnswers dbo.GetCoursesTeachedByInstructor dbo.getExamFromCrsID dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentGradeInAllCourses dbo.GetStudentsInDepartment dbo.GetTopicsOfCourse dbo.insert_Course dbo.insert_CourseInstructor dbo.insert_Instructor dbo.insert_Topic dbo.InsertAnswerForQuestion dbo.InsertChoiceForQuestion dbo.InsertDepartment dbo.InsertDepartment dbo.InsertDepartment dbo.InsertDepartment dbo.InsertDepartment dbo.InsertDepartment dbo.InsertDepartment dbo.InsertDepartment dbo.InsertDepartment dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestionInExam	dbo.Exam_Correct
dbo.GetCoursesTeachedByInstructor dbo.getExamFromCrsID dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentGradeInAllCourses dbo.GetStudentsInDepartment dbo.GetTopicsOfCourse dbo.insert_Course dbo.insert_CourseInstructor dbo.insert_Instructor dbo.insert_Topic dbo.InsertAnswerForQuestion dbo.InsertChoiceForQuestion dbo.InsertDepartment dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion	dbo.Exam_Generation
dbo.getExamFromCrsID dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentGradeInAllCourses dbo.GetStudentsInDepartment dbo.GetTopicsOfCourse dbo.insert_Course dbo.insert_CourseInstructor dbo.insert_Topic dbo.insert_Topic dbo.InsertAnswerForQuestion dbo.InsertChoiceForQuestion dbo.InsertExam dbo.InsertExam dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion dbo.InsertStudent	dbo.ExamQuestions_StudentAnswers_ModelAnswers
dbo.GetStudentAnswerAndModelAnswer dbo.GetStudentGradeInAllCourses dbo.GetStudentsInDepartment dbo.GetTopicsOfCourse dbo.insert_Course dbo.insert_CourseInstructor dbo.insert_Instructor dbo.insert_Topic dbo.InsertAnswerForQuestion dbo.InsertChoiceForQuestion dbo.InsertDepartment dbo.InsertExam dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion	dbo.GetCoursesTeachedByInstructor
dbo.GetStudentGradeInAllCourses dbo.GetStudentsInDepartment dbo.GetTopicsOfCourse dbo.insert_Course dbo.insert_Course dbo.insert_Instructor dbo.insert_Topic dbo.insert_Topic dbo.InsertAnswerForQuestion dbo.InsertChoiceForQuestion dbo.InsertDepartment dbo.InsertExam dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion	dbo.getExamFromCrsID
dbo.GetStudentsInDepartment dbo.GetTopicsOfCourse dbo.insert_Course dbo.insert_CourseInstructor dbo.insert_Instructor dbo.insert_Topic dbo.InsertAnswerForQuestion dbo.InsertChoiceForQuestion dbo.InsertDepartment dbo.InsertExam dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion	dbo.GetStudentAnswerAndModelAnswer
dbo.Insert_Course dbo.insert_CourseInstructor dbo.insert_Instructor dbo.insert_Topic dbo.InsertAnswerForQuestion dbo.InsertChoiceForQuestion dbo.InsertDepartment dbo.InsertExam dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion dbo.InsertStudent	dbo.GetStudentGradeInAllCourses
dbo.insert_Course dbo.insert_CourseInstructor dbo.insert_Instructor dbo.insert_Topic dbo.InsertAnswerForQuestion dbo.InsertChoiceForQuestion dbo.InsertDepartment dbo.InsertExam dbo.InsertQuestion dbo.InsertQuestion dbo.InsertStudent	dbo.GetStudentsInDepartment
dbo.insert_CourseInstructor dbo.insert_Instructor dbo.insert_Topic dbo.InsertAnswerForQuestion dbo.InsertChoiceForQuestion dbo.InsertDepartment dbo.InsertExam dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion	dbo.GetTopicsOfCourse
dbo.insert_Instructor dbo.insert_Topic dbo.InsertAnswerForQuestion dbo.InsertChoiceForQuestion dbo.InsertDepartment dbo.InsertExam dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion	dbo.insert_Course
dbo.InsertAnswerForQuestion dbo.InsertChoiceForQuestion dbo.InsertDepartment dbo.InsertExam dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestion	dbo.insert_CourseInstructor
dbo.InsertAnswerForQuestion dbo.InsertChoiceForQuestion dbo.InsertDepartment dbo.InsertExam dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestionInExam	dbo.insert_Instructor
dbo.InsertChoiceForQuestion dbo.InsertDepartment dbo.InsertExam dbo.InsertQuestion dbo.InsertQuestion dbo.InsertQuestionInExam	dbo.insert_Topic
dbo.InsertDepartment dbo.InsertExam dbo.InsertQuestion dbo.InsertQuestionInExam dbo.InsertStudent	dbo.InsertAnswerForQuestion
dbo.InsertExam dbo.InsertQuestion dbo.InsertQuestionInExam dbo.InsertStudent	dbo.InsertChoiceForQuestion
dbo.InsertQuestion dbo.InsertQuestionInExam dbo.InsertStudent	dbo.InsertDepartment
dbo.InsertQuestionInExam dbo.InsertStudent	dbo.InsertExam
dbo.InsertStudent	dbo.InsertQuestion
	dbo.InsertQuestionInExam
dbo.InsertStudentAnswerOfQuestionInExam	dbo.InsertStudent
	dbo.InsertStudentAnswerOfQuestionInExam

dbo.InsertStudentCourse
dbo.questionsAndChoicesFromExamID
dbo.Report6_ExamQuestions_StudnetAnswers
dbo.select_Course
dbo.select_CourseInstructor
dbo.select_CourseInstructor2
dbo.select_Instructor
dbo.select_Topic
dbo.SelectAnswerForQuestion
dbo.SelectChoices
dbo.SelectDepartment
dbo.SelectExam
dbo.SelectExamQuestion
dbo.SelectQuestion
dbo.SelectStudent
dbo.SelectStudentAnswerOfQuestionInExam
dbo.SelectStudentCourse
dbo.update_Course
dbo.update_CourseInstructor
dbo.update_CourseInstructor2
dbo.update_Instructor
dbo.update_Topic
dbo.UpdateAnswerForQuestion
dbo.UpdateChoiceForQuestion
dbo.UpdateDepartment
dbo.UpdateExam
dbo.UpdateQuestion
dbo.UpdateQuestionInExam
dbo.UpdateStudent
dbo.UpdateStudentAnswerOfQuestionInExam
dbo.UpdateStudentCourse

[dbo].[delete_Course]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Course_ID	int	4

SQL Script

```
create proc [dbo].[delete_Course] @Course_ID int
as
    delete from Courses
    where Course_Id = @Course_ID
GO
```

Uses

[dbo].[Courses]

[dbo].[delete_CourseInstructor]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Course_ID	int	4

SQL Script

```
create proc [dbo].[delete_CourseInstructor] @Course_ID int
as
    delete from Courses_Instructor
    where Course_Id = @Course_ID
GO
```

Uses

[dbo].[Courses_Instructor]

[dbo].[delete_CourseInstructor2]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Instructor_ID	int	4

SQL Script

```
create proc [dbo].[delete_CourseInstructor2] @Instructor_ID int
as
    delete from Courses_Instructor
    where Ins_Id = @Instructor_ID
GO
```

Uses

[dbo].[Courses_Instructor]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.delete_-Instructor



Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@InstructorID	int	4

SQL Script

```
--4 delete by instructor_ID
create proc [dbo].[delete_Instructor] @InstructorID int
as
delete from Instructors
where Instructor_Id = @InstructorID
GO
```

Uses

[dbo].[Instructors]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.delete_-Topic



Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@TopicID	int	4

SQL Script

```
create proc [dbo].[delete_Topic] @TopicID int
as
    delete from Topic
    where Topic_Id = @TopicID
GO
```

Uses

[dbo].[Topic]

[dbo].[DeleteAllChoicesForQuestion]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Quest_id	int	4

SQL Script

```
create proc [dbo].[DeleteAllChoicesForQuestion] @Quest_id int
as
delete from Choices
where Question_Id = @Quest_id
GO
```

Uses

[dbo].[Choices]

[dbo].[DeleteAnswersForQuestion]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Quest_id	int	4

SQL Script

```
create proc [dbo].[DeleteAnswersForQuestion] @Quest id int
delete from Answers
where Question_Id = @Quest_id
```

Uses

[dbo].[Answers]



Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Quest_id	int	4
@choice_id	varchar(50)	50

SQL Script

```
CREATE proc [dbo].[DeleteChoiceForQuestion] @Quest_id int , @choice_id varchar(50)
as
delete from Choices
where Question_Id = @Quest_id and Choice_Number = @choice_id
GO
```

Uses

[dbo].[Choices]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.Delete-Department

[dbo].[DeleteDepartment]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@DepartmentID	int	4

SQL Script

```
CREATE PROC [dbo].[DeleteDepartment]
    @DepartmentID INT

AS

BEGIN
    DELETE FROM Departments WHERE Department_ID = @DepartmentID;

END;

GO
```

Uses

[dbo].[Departments]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.Delete-Exam

[dbo].[DeleteExam]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Exam_id	int	4

SQL Script

```
create proc [dbo].[DeleteExam] @Exam_id int
as
delete from Exams
where Exam_Id = @Exam_id
GO
```

Uses

[dbo].[Exams]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.Delete-Question



Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@id	int	4

SQL Script

```
create proc [dbo].[DeleteQuestion] @id int
as
delete from Questions
where Question_Id = @id
GO
```

Uses

[dbo].[Questions]

[dbo].[DeleteQuestionFromExam]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Quest_id	int	4
@Exam_name	varchar(50)	50

SQL Script

```
CREATE proc [dbo].[DeleteQuestionFromExam] @Quest_id int ,@Exam_name varchar(50)
as
delete eq
from Exams e , Exam_Questions eq
where e.Exam_Id=eq.Exam_ID and e.Exam_Name = @Exam_name
GO
```

Uses

[dbo].[Exam_Questions] [dbo].[Exams]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.Delete-Student



Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@StudentID	int	4

SQL Script

```
CREATE PROC [dbo].[DeleteStudent]
    @StudentID INT

AS

BEGIN
    DELETE FROM Students WHERE Student_Id = @StudentID;

END;

GO
```

Uses

[dbo].[Students]

[dbo].[DeleteStudentAnswerOfQuestionInExam]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@stud_ld	int	4
@Quest_ld	int	4

SQL Script

```
create proc [dbo].[DeleteStudentAnswerOfQuestionInExam] @stud_Id int , @Quest_Id int
delete from Student_Answer_In_Exam
where Student_Id = @stud_Id and Question_Id = @Quest_Id
```

Uses

[dbo].[Student_Answer_In_Exam]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.Delete-StudentCourse



Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@StudentID	int	4
@CourseID	int	4

SQL Script

```
CREATE PROC [dbo].[DeleteStudentCourse]
    @StudentID INT,
    @CourseID INT

AS

BEGIN
    DELETE FROM Student_Courses
    WHERE Student_Id = @StudentID AND Course_Id = @CourseID;

END;

GO
```

Uses

[dbo].[Student_Courses]

[dbo].[Exam_Answers]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@exam_id	int	4
@std_ld	int	4
@Ans_1	varchar(50)	50
@Ans_2	varchar(50)	50
@Ans_3	varchar(50)	50
@Ans_4	varchar(50)	50
@Ans_5	varchar(50)	50
@Ans_6	varchar(50)	50
@Ans_7	varchar(50)	50
@Ans_8	varchar(50)	50
@Ans_9	varchar(50)	50
@Ans_10	varchar(50)	50

SQL Script

```
Declare @CourseID int;
   Select @CourseID = Exams.Course_Id From Exams where Exams.Exam_Id = @exam_id
   if exists (
       Select Student Courses.Student Id
       From Student Courses
       Where Student Id= @std Id and Course Id = @CourseID and StudentGrade IS NOT NULL)
       begin
            RAISERROR('Student Has already took this exam!', 16, 1);
            return;
       end
   declare @indx int =0 , @Quest id int
   while @indx <10
   begin
       set @indx +=1
       select @Quest_id=Question_Id from(
           select * , ROW_NUMBER() over (partition by Exam_ID order by Question_Id) as RN
           from Exam Questions
           where Exam ID = @exam id
        ) as Newtable Where RN =@indx
               declare @Answer varchar(50) = CASE @indx
               WHEN 1 THEN @Ans 1
               WHEN 2 THEN @Ans 2
               WHEN 3 THEN @Ans 3
               WHEN 4 THEN @Ans 4
               WHEN 5 THEN @Ans 5
               WHEN 6 THEN @Ans 6
               WHEN 7 THEN @Ans 7
               WHEN 8 THEN @Ans_8
               WHEN 9 THEN @Ans 9
               WHEN 10 THEN @Ans 10
            END
       exec InsertStudentAnswerOfQuestionInExam @std Id,@Quest id,@exam id,@Answer
    end
GO
```

Uses

```
[dbo].[Exam_Questions]
[dbo].[Exams]
[dbo].[Student_Courses]
[dbo].[Students]
[dbo].[InsertStudentAnswerOfQuestionInExam]
```

[dbo].[Exam_Correct]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@ExamID	int	4
@StudentID	int	4

SQL Script

```
CREATE PROC [dbo].[Exam_Correct] @ExamID int, @StudentID int
AS
   if not exists(select Exams.Exam_Id From Exams where Exams.Exam_Id = @ExamID)
       RAISERROR('Invalid Exam ID', 16, 1);
       return;
   end
   if not exists(select Students.Student_Id From Students where Students.Student_Id =
@StudentID)
       RAISERROR('Invalid Student ID', 16, 1);
       return;
    end
   Declare @StudentGrade decimal(18,2) = 0;
   Declare @totalGrade int = 0;
   DECLARE @SavedResult TABLE (
       Question Id INT,
        Student Answer VARCHAR (255),
        Answer_Value VARCHAR(255),
        Grade INT
   );
   INSERT INTO @SavedResult (Question Id, Student Answer, Answer Value, Grade)
   SELECT Student_Answer_In_Exam.Question_Id, Student_Answer_In_Exam.Student_Answer,
Answers. Value, Questions. Grade
   FROM Student Answer In Exam, Questions, Answers
```

```
WHERE Student_Answer_In_Exam.Question_Id = Questions.Question_Id
       AND Answers.Question_Id = Questions.Question_Id
       AND Student_Id = @StudentID
       AND Exam_Id = @ExamID;
   Declare @tableRows int;
   Select @tableRows = count(*) From @SavedResult;
   if ( @tableRows = 0 )
       begin
           RAISERROR('This student did not take this exam!', 16, 1);
           return;
       end
   DECLARE @Student Answer VARCHAR(255);
   DECLARE @Answer Value VARCHAR(255);
   DECLARE @Grade INT;
   DECLARE cursor saved result CURSOR FOR
   SELECT Student_Answer, Answer_Value, Grade
   FROM @SavedResult;
   OPEN cursor saved result;
   FETCH NEXT FROM cursor saved result INTO @Student Answer, @Answer Value, @Grade;
   WHILE @@FETCH STATUS = 0
   BEGIN
       set @totalGrade += @Grade;
       if (@Student_Answer = @Answer_Value)
               Set @StudentGrade += @Grade;
       FETCH cursor saved result INTO @Student Answer, @Answer Value, @Grade;
   END
   CLOSE cursor_saved_result;
   DEALLOCATE cursor saved result;
   set @StudentGrade = (@StudentGrade / @totalGrade) * 100;
   Declare @CourseID int;
   Select @CourseID = Exams.Course Id
                        From Exams
                        Where Exams.Exam Id = @ExamID
   declare @old_grade decimal(18,2)
   select @old grade = StudentGrade
                        From Student Courses
                        Where Student Id = @StudentID and @CourseID = Course Id
   if (@old grade is NULL)
       exec UpdateStudentCourse @StudentID, @CourseID, @StudentGrade
   else
       exec InsertStudentCourse @StudentID, @CourseID, @StudentGrade
GO
```

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.Exam_-Correct

Uses

[dbo].[Answers]

[dbo].[Exams]

[dbo].[Questions]

[dbo].[Student_Answer_In_Exam]

[dbo].[Student_Courses]

[dbo].[Students]

[dbo].[InsertStudentCourse]

[dbo].[UpdateStudentCourse]

[dbo].[Exam_Generation]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Crs_Name	varchar(10)	10
@num_MCQ	int	4
@num_ToF	int	4

SQL Script

```
CREATE proc [dbo].[Exam Generation] @Crs Name varchar(10), @num MCQ int ,@num ToF int
   if not exists(select c.Course Name from Courses c where c.Course Name = @Crs Name)
      RAISERROR('Invalid Course Name', 16, 1);
      return;
   if @num_MCQ + @num_ToF = 10
   BEGIN
       DECLARE @crsID int
       Select @crsID = Courses.Course_Id From Courses where Courses.Course_Name = @Crs_Name
       DECLARE @LastExam int
       Select @LastExam =
          Count (Exams.Exam_Id)
          From Exams
          Group By Course ID
          Having Course_Id = @crsID
       declare @ExamName varchar(50) =concat(@Crs_Name + ' ',(ISNULL (@LastExam,0) + 1))
       exec InsertExam @ExamName, '1', @crsID;
       DECLARE @ExmId INT
       SET @ExmId = ISNULL((select top(1) Exam_Id from Exams order by Exam_Id DESC),1)
       insert into Exam_Questions
       where q.Question_Type = 'MCQ' and c.Course_Id = q.Course_Id and c.Course_Name = @Crs_-
Name
```

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.Exam_-Generation

```
order by NEWID()

insert into Exam_Questions
    select top(@num_ToF) q.Question_Id , @ExmId from Questions q ,Courses c
    where q.Question_Type = 'T/F' and c.Course_Id = q.Course_Id and c.Course_Name = @Crs_-
Name
    order by NEWID()
End

else
    RAISERROR('Invalid Parameter', 16, 1);
```

Uses

[dbo].[Courses]
[dbo].[Exam_Questions]
[dbo].[Exams]
[dbo].[Questions]
[dbo].[InsertExam]

[dbo].[ExamQuestions_StudentAnswers_ModelAnswers]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@examID	int	4
@studentID	int	4

SQL Script

```
CREATE PROCEDURE [dbo].[ExamQuestions_StudentAnswers_ModelAnswers]
    @examID INT,
    @studentID INT
)
AS
   IF NOT EXISTS (SELECT 1 FROM Exams WHERE Exam Id = @examID)
       RAISERROR ('Invalid Exam ID', 16, 1);
        RETURN;
   END
   IF NOT EXISTS (SELECT 1 FROM Students WHERE Student Id = @studentID)
   BEGIN
       RAISERROR('Invalid Student ID', 16, 1);
       RETURN;
    END
    SELECT q.Content AS Question,
         CONCAT(a.Value,') ', mc.Content) AS ModelAnswer,
          s.Student_Answer AS StudentAnswer
    FROM Questions q
    JOIN Student_Answer_In_Exam s ON s.Question_ID = q.Question_Id
    \tt JOIN \ Answers \ a \ ON \ a.Question\_ID = q.Question\_Id
    JOIN Choices mc ON a.Value = mc.Choice Number AND q.Question Id = mc.Question Id
    WHERE s.Exam Id = @examID AND s.Student Id = @studentID;
END
GO
```

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.Exam-Questions_StudentAnswers_ModelAnswers

Uses

[dbo].[Answers]
[dbo].[Choices]
[dbo].[Exams]
[dbo].[Questions]
[dbo].[Student_Answer_In_Exam]
[dbo].[Students]

[dbo].[GetCoursesTeachedByInstructor]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@insID	int	4

SQL Script

```
CREATE proc [dbo].[GetCoursesTeachedByInstructor] @insID int

as

if(@insID not in (select Instructor_Id from Instructors))

begin

RAISERROR('Invalid Instructor ID', 16, 1);

return;

end

select i.Instructor_Name,c.Course_Name , COUNT(sc.Student_Id) as [Number Of Students]

from Instructors i , Courses_Instructor ci , Courses c,Student_Courses sc

where i.Instructor_Id = ci.Ins_Id and

c.Course_Id = ci.Course_Id and

sc.Course_Id = c.Course_Id and

i.Instructor_Id = @insID

group by sc.Course_Id,i.Instructor_Name,c.Course_Name , c.Course_Id

GO
```

Uses

[dbo].[Courses]
[dbo].[Courses_Instructor]
[dbo].[Instructors]
[dbo].[Student_Courses]

[dbo].[getExamFromCrsID]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@crs_id	int	4
@studID	int	4

SQL Script

```
CREATE proc [dbo].[getExamFromCrsID] @crs_id int , @studID int as select distinct e.Exam_Id from Exams e ,Student_Courses sc , Student_Answer_In_Exam sa where @crs_id = e.Course_Id and sc.Student_Id = @studID and sc.Course_Id = @crs_id and sa.Student_Id = @studID and sa.Exam_Id = @studID and sa.Exam_Id = e.Exam_Id GO
```

Uses

[dbo].[Exams]
[dbo].[Student_Answer_In_Exam]
[dbo].[Student_Courses]

[dbo].[GetStudentAnswerAndModelAnswer]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@courseID	int	4
@studentID	int	4

SQL Script

```
CREATE PROC [dbo].[GetStudentAnswerAndModelAnswer] @courseID int, @studentID int
select q.Content as Question,
      CONCAT(sa.Student_Answer,') ', c.Content) AS StudentAnswer,
      CONCAT(a.Value,') ', mc.Content) AS ModelAnswer
from Student Courses sc , Exams e, Student Answer In Exam sa, Questions q, Answers a, Choices
c, Choices mc
where sc.Course_Id = @courseID and
       e.Course_Id = @courseID and
       sa.Exam Id = e.Exam Id and
       sc.Student Id = @studentID and
       sa.Student Id = @studentID and
       q.Question Id = a.Question Id and
       q.Question_Id = sa.Question_Id and
       sa.Student_Answer = c.Choice_Number AND
       q.Question_Id = c.Question_Id and
       a.Value = mc.Choice Number and
       q.Question_Id = mc.Question_Id
GO
```

Uses

```
[dbo].[Answers]
[dbo].[Choices]
[dbo].[Exams]
[dbo].[Questions]
[dbo].[Student_Answer_In_Exam]
[dbo].[Student_Courses]
```

[dbo].[GetStudentGradeInAllCourses]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Student_id	int	4

SQL Script

```
CREATE proc [dbo].[GetStudentGradeInAllCourses] @Student_id int
as
if(@Student_id not in (select Student_Id from Student_Courses))
    begin
        RAISERROR('Invalid Student ID', 16, 1);
        return;
    end

select sc.Student_Id, c.Course_Name, sc.StudentGrade from Student_Courses sc, Courses c
where sc.Course_Id = c.Course_Id and sc.Student_Id = @Student_id and sc.StudentGrade is not
Null
GO
```

Uses

[dbo].[Courses]
[dbo].[Student_Courses]

[dbo].[GetStudentsInDepartment]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@dept_ld	int	4

SQL Script

```
CREATE proc [dbo].[GetStudentsInDepartment] @dept_Id int

as

if(@dept_Id not in (select Department_ID from Departments))

begin

RAISERROR('Invalid Departemnt ID', 16, 1);

return;

end

select d.Department_Name, CONCAT (s.Fname ,' ',s.LName) as [Student Name] , s.Email,s.Age

from Students s , Departments d

where s.Dept_Id =@dept_Id and d.Department_ID =s.Dept_Id

GO
```

Uses

[dbo].[Departments] [dbo].[Students]

[dbo].[GetTopicsOfCourse]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@CrsID	int	4

SQL Script

```
CREATE proc [dbo].[GetTopicsOfCourse] @CrsID int
as
select t.Topic_Name from Topic t , Courses c
where c.Course_Id = t.Course_Id and c.Course_Id = @CrsID
GO
```

Uses

[dbo].[Courses] [dbo].[Topic] Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.insert_-Course



Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Course_Name	nchar(10)	20

SQL Script

```
create proc [dbo].[insert_Course] @Course_Name nchar(10)
as
    insert into Courses (Course_Name)
    values(@Course_Name)
GO
```

Uses

[dbo].[Courses]

[dbo].[insert_CourseInstructor]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Course_ID	int	4
@Instructor_ID	int	4

SQL Script

```
create proc [dbo].[insert_CourseInstructor] @Course_ID int,@Instructor_ID int
as
    insert into Courses_Instructor
    values(@Course_ID,@Instructor_ID)
GO
```

Uses

[dbo].[Courses_Instructor]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.insert_-Instructor



Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Instructor_Name	varchar(50)	50
@Dept_no	int	4

SQL Script

```
create proc [dbo].[insert_Instructor] @Instructor_Name varchar(50),@Dept_no int
as
    insert into Instructors (Instructor_Id,Dept_Id)
    values(@Instructor_Name,@Dept_no)
GO
```

Uses

[dbo].[Instructors]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.insert_-Topic



Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Course_ID	int	4
@Topic_Name	varchar(50)	50

SQL Script

```
create proc [dbo].[insert_Topic] @Course_ID int,@Topic_Name varchar(50)
as
    insert into Topic (Course_Id,Topic_Name)
    values(@Course_ID,@Topic_Name)
GO
```

Uses

[dbo].[Topic]

[dbo].[InsertAnswerForQuestion]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Ques_id	int	4
@correct_Answer	varchar(50)	50

SQL Script

```
CREATE proc [dbo].[InsertAnswerForQuestion] @Ques_id int , @correct_Answer varchar(50)
as
insert into Answers(Question_Id , Value)
values(@Ques_id,@correct_Answer)
GO
```

Uses

[dbo].[Answers]

[dbo].[InsertChoiceForQuestion]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Ques_id	int	4
@choiceNumber	int	4
@content	varchar(250)	250

SQL Script

```
CREATE proc [dbo].[InsertChoiceForQuestion] @Ques_id int , @choiceNumber int, @content varchar(250)
as
insert into Choices(Question_Id , Choice_Number, Content)
values(@Ques_id,@choiceNumber,@content)
GO
```

Uses

[dbo].[Choices]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.Insert-Department

[dbo].[InsertDepartment]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Department_Name	varchar(50)	50
@Dept_Description	varchar(200)	200

SQL Script

```
CREATE PROCEDURE [dbo].[InsertDepartment]
    @Department_Name VARCHAR(50),
    @Dept_Description VARCHAR(200)

AS

BEGIN
    INSERT INTO Departments (Department_Name, Dept_Description)
    VALUES (@Department_Name, @Dept_Description);

END;

GO
```

Uses

[dbo].[Departments]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.Insert-Exam

[dbo].[InsertExam]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@ExamName	varchar(50)	50
@duration	varchar(50)	50
@Crs_id	int	4

SQL Script

```
CREATE proc [dbo].[InsertExam] @ExamName varchar(50) , @duration varchar(50) , @Crs_id int as insert into Exams(Exam_Name , Exam_Duration , Course_Id) values(@ExamName , @duration , @Crs_id) GO
```

Uses

[dbo].[Exams]

Used By

[dbo].[Exam_Generation]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.Insert-Question



Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@grade	int	4
@content	varchar(400)	400
@Qust_type	varchar(100)	100
@crs_id	int	4

SQL Script

```
create proc [dbo].[InsertQuestion] @grade int , @content varchar(400),@Qust_type
varchar(100),@crs_id int
as
insert into Questions(Grade , Content , Question_Type,Course_Id)
values(@grade,@content,@Qust_type,@crs_id)
GO
```

Uses

[dbo].[Questions]

[dbo].[InsertQuestionInExam]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@QuestID	int	4
@ExamName	varchar(50)	50

SQL Script

```
CREATE proc [dbo].[InsertQuestionInExam] @QuestID int,@ExamName varchar(50)
as
insert into Exam_Questions
select @QuestID, Exam_Id as eID from Exams
where Exam_Name = @ExamName
GO
```

Uses

[dbo].[Exam_Questions] [dbo].[Exams]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.Insert-Student

[dbo].[InsertStudent]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@FName	varchar(10)	10
@LName	varchar(10)	10
@Age	int	4
@Email	varchar(50)	50
@Dept_ld	int	4

SQL Script

Uses

[dbo].[Students]

[dbo].[InsertStudentAnswerOfQuestionInExam]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@stud_ld	int	4
@Quest_ld	int	4
@Exam_ld	int	4
@stud_Answer	varchar(200)	200

SQL Script

```
create proc [dbo].[InsertStudentAnswerOfQuestionInExam] @stud_Id int , @Quest_Id int,@Exam_Id
int , @stud_Answer varchar(200)
as
insert into Student_Answer_In_Exam
values(@stud_Id,@Exam_Id,@Quest_Id,@stud_Answer)
GO
```

Uses

[dbo].[Student_Answer_In_Exam]

Used By

[dbo].[Exam_Answers]

[dbo].[InsertStudentCourse]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@StudentID	int	4
@CourseID	int	4
@StudentGrade	decimal(18,2)	9

SQL Script

```
CREATE PROC [dbo].[InsertStudentCourse]
    @StudentID INT,
    @CourseID INT,
    @StudentGrade decimal (18,2)

AS
BEGIN
    INSERT INTO Student_Courses (Student_Id, Course_Id,StudentGrade)
    VALUES (@StudentID, @CourseID,@StudentGrade);
END;
GO
```

Uses

[dbo].[Student_Courses]

Used By

 $[dbo].[Exam_Correct] \\$

[dbo].[questionsAndChoicesFromExamID]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@ExamID	int	4

SQL Script

```
CREATE PROC [dbo].[questionsAndChoicesFromExamID] @ExamID int

AS

if(@ExamID not in (select Exam_Id from Exams))

begin

RAISERROR('Invalid Exam ID', 16, 1);

return;

end

Select Questions.Content as [QuestionContent], Choices.Choice_Number,
Choices.Content,Questions.Question_Type

From Exams e, Exam_Questions, Questions, Choices
Where e.Exam_Id = Exam_Questions.Exam_ID AND

Exam_Questions.Question_Id = Questions.Question_Id AND
Questions.Question_Id = Choices.Question_Id and
e.Exam_Id = @ExamID

GO
```

Uses

[dbo].[Choices]
[dbo].[Exam_Questions]
[dbo].[Exams]
[dbo].[Questions]

[dbo].[Report6_ExamQuestions_StudnetAnswers]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@examID	int	4
@studentID	int	4

SQL Script

```
CREATE proc [dbo].[Report6_ExamQuestions_StudnetAnswers]
   @examID int,
   @studentID int
)
AS
   if not exists(select Exams.Exam_Id From Exams where Exams.Exam_Id = @examID)
       RAISERROR('Invalid Exam ID', 16, 1);
       return;
   end
   if not exists(select Students.Student Id From Students where Students.Student Id =
   begin
      RAISERROR('Invalid Student ID', 16, 1);
       return;
   SELECT q.Content as Question,s.Student_Answer,c.Content
   FROM Questions q
   JOIN Student_Answer_In_Exam s ON s.Question_ID = q.Question_Id
   join Choices c on s.Student_Answer = c.Choice_Number AND q.Question_Id = c.Question_Id
   WHERE s.Exam_Id = @examID AND s.Student_Id = @studentID;
END;
GO
```

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.Report6_-ExamQuestions_StudnetAnswers

Uses

[dbo].[Choices]
[dbo].[Exams]
[dbo].[Questions]
[dbo].[Student_Answer_In_Exam]
[dbo].[Students]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.select_-Course

[dbo].[select_Course]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@courseID	int	4

SQL Script

```
create proc [dbo].[select_Course] @courseID int
as
    select Course_Id, Course_Name
    from Courses
    where Course_Id = @courseID
GO
```

Uses

[dbo].[Courses]

[dbo].[select_CourseInstructor]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@CourseID	int	4

SQL Script

```
create proc [dbo].[select_CourseInstructor] @CourseID int
as
    select Course_Id, Ins_Id
    from Courses_Instructor
    where Course_Id = @CourseID
GO
```

Uses

[dbo].[Courses_Instructor]



Properties

Property	Value	
ANSI Nulls On	True	
Quoted Identifier On	True	

Parameters

Name	Data Type	Max Length (Bytes)
@InstructorID	int	4

SQL Script

```
create proc [dbo].[select_CourseInstructor2] @InstructorID int
as
    select Course_Id, Ins_Id
    from Courses_Instructor
    where Ins_Id = @InstructorID
GO
```

Uses

[dbo].[Courses_Instructor]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.select_-Instructor



Properties

Property	Value	
ANSI Nulls On	True	
Quoted Identifier On	True	

Parameters

Name	Data Type	Max Length (Bytes)
@InstructorID	int	4

SQL Script

```
create proc [dbo].[select_Instructor] @InstructorID int
as
    select Instructor_Id, Instructor_Name, Dept_Id
    from Instructors
    where Instructor_Id = @InstructorID
GO
```

Uses

[dbo].[Instructors]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.select_-Topic

[dbo].[select_Topic]

Properties

Property	Value	
ANSI Nulls On	True	
Quoted Identifier On	True	

Parameters

Name	Data Type	Max Length (Bytes)
@topicID	int	4

SQL Script

```
create proc [dbo].[select_Topic] @topicID int
as
    select Topic_id,Course_Id, Topic_Name
    from Topic
    where Topic_Id = @topicID
GO
```

Uses

[dbo].[Topic]

[dbo].[SelectAnswerForQuestion]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@id_Question	int	4

SQL Script

```
CREATE proc [dbo].[SelectAnswerForQuestion] @id_Question int
as
select Question_Id , Value as [Correct Answer] from Answers
GO
```

Uses

[dbo].[Answers]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.Select-Choices



Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@id_Question	int	4

SQL Script

```
CREATE proc [dbo].[SelectChoices] @id_Question int
as
select c.Question_Id , c.Content from Choices c inner join Questions q
on c.Question_Id = q.Question_Id and c.Question_Id = @id_Question
GO
```

Uses

[dbo].[Choices] [dbo].[Questions] Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.Select-Department

[dbo].[SelectDepartment]

Properties

Property	Value	
ANSI Nulls On	True	
Quoted Identifier On	True	

Parameters

Name	Data Type	Max Length (Bytes)
@DepartmentID	int	4

SQL Script

```
CREATE PROC [dbo].[SelectDepartment]
    @DepartmentID INT
AS
BEGIN
    SELECT * FROM Departments WHERE Department_ID = @DepartmentID;
END;
GO
```

Uses

[dbo].[Departments]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.Select-Exam



Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@id	int	4

SQL Script

```
create proc [dbo].[SelectExam] @id int
as
select * from Exams
where Exam_Id = @id
GO
```

Uses

[dbo].[Exams]

[dbo].[SelectExamQuestion]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Examld	int	4

SQL Script

```
CREATE proc [dbo].[SelectExamQuestion] @ExamId int
as
select q.* from Exams e , Questions q , Exam_Questions eq
where eq.Exam_ID = e.Exam_Id and eq.Question_Id = q.Question_Id and eq.Exam_ID = @ExamId
GO
```

Uses

[dbo].[Exam_Questions] [dbo].[Exams] [dbo].[Questions] Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.Select-Question



Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@id	int	4

SQL Script

```
create proc [dbo].[SelectQuestion] @id int
as
select * from Questions
where Question_Id = @id
GO
```

Uses

[dbo].[Questions]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.Select-Student



Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Student_ID	int	4

SQL Script

```
-- 1- Select --
create proc [dbo].[SelectStudent] @Student_ID int
as
select *
from Students
where Student_Id = @Student_ID
--Calling
execute select_Student 1
GO
```

Uses

[dbo].[Students]

[dbo].[SelectStudentAnswerOfQuestionInExam]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@stud_ld	int	4
@Quest_ld	int	4

SQL Script

```
create proc [dbo].[SelectStudentAnswerOfQuestionInExam] @stud_Id int , @Quest_Id int
select * from Student_Answer_In_Exam
where Student_Id = @stud_Id and Question_Id = @Quest_Id
```

Uses

[dbo].[Student_Answer_In_Exam]

[dbo].[SelectStudentCourse]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@StudentID	int	4
@CourseID	int	4

SQL Script

```
CREATE PROC [dbo].[SelectStudentCourse]
    @StudentID INT,
    @CourseID INT

AS
BEGIN
    SELECT * FROM Student_Courses WHERE Student_Id = @StudentID AND Course_Id = @CourseID;
END;
GO
```

Uses

[dbo].[Student_Courses]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.update_-Course



Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Course_ID	int	4
@Course_Name	nchar(10)	20

SQL Script

Uses

[dbo].[Courses]

[dbo].[update_CourseInstructor]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Course_ID	int	4
@InstructorID	int	4

SQL Script

```
create proc [dbo].[update_CourseInstructor] @Course_ID int,@InstructorID int
as
    update Courses_Instructor
    set Course_Id = @Course_ID
    where Ins_Id = @InstructorID
GO
```

Uses

[dbo].[Courses_Instructor]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.update_-CourseInstructor2

[dbo].[update_CourseInstructor2]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@InstructorID	int	4
@Course_ID	int	4

SQL Script

```
create proc [dbo].[update_CourseInstructor2] @InstructorID int,@Course_ID int
as
    update Courses_Instructor
    set Ins_Id = @InstructorID
    where Course_Id = @Course_ID
GO
```

Uses

[dbo].[Courses_Instructor]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.update_-Instructor



Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@InstructorID	int	4
@Instructor_Name	varchar(50)	50
@Dept_no	int	4

SQL Script

```
create proc [dbo].[update_Instructor] @InstructorID int,@Instructor_Name varchar(50) =
NULL,@Dept_no int = NULL
as
    update Instructors
    set Instructor_Name = ISNULL(@Instructor_Name, Instructor_Name),
        Dept_Id = ISNULL(@Dept_no, Dept_Id)
    where Instructor_Id = @InstructorID
GO
```

Uses

[dbo].[Instructors]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.update_-Topic



Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@TopicID	int	4
@Course_ID	int	4
@Topic_Name	varchar(50)	50

SQL Script

```
create proc [dbo].[update_Topic] @TopicID int,@Course_ID int,@Topic_Name varchar(50)
as
     update Topic
     set Topic_Name = @Topic_Name ,Course_Id = @Course_ID
     where Topic_Id = @TopicID
GO
```

Uses

[dbo].[Topic]

[dbo].[UpdateAnswerForQuestion]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Question_id	int	4
@old_answer	varchar(50)	50
@correct_answer	varchar(50)	50

SQL Script

```
CREATE proc [dbo].[UpdateAnswerForQuestion] @Question_id int ,@old_answer varchar(50)
,@correct_answer varchar(50)
as
update Answers
set Value = @correct_answer
where Question_Id = @Question_id and Value = @old_answer

GO
```

Uses

[dbo].[Answers]

[dbo].[UpdateChoiceForQuestion]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Question_id	int	4
@choice_num	varchar(50)	50
@content	varchar(250)	250

SQL Script

```
CREATE proc [dbo].[UpdateChoiceForQuestion] @Question_id int , @choice_num varchar(50) , @content varchar(250) as update Choices set Content = @content where Question_id and Choice_Number = @choice_num GO
```

Uses

[dbo].[Choices]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.Update-Department

[dbo].[UpdateDepartment]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@DepartmentID	int	4
@Department_Name	varchar(50)	50
@Dept_Description	varchar(200)	200

SQL Script

```
CREATE PROC [dbo].[UpdateDepartment]
    @DepartmentID INT,
    @Department_Name VARCHAR(50) = NULL,
    @Dept_Description VARCHAR(200) = NULL

AS
BEGIN
    UPDATE Departments
    SET Department_Name = ISNULL(@Department_Name, Department_Name),
        Dept_Description = ISNULL(@Dept_Description, Dept_Description)
    WHERE Department_ID = @DepartmentID;
END;
GO
```

Uses

[dbo].[Departments]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.Update-Evam

[dbo].[UpdateExam]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Exam_id	int	4
@Exam_Name	varchar(50)	50
@duration	varchar(50)	50
@Crs_id	int	4

SQL Script

```
CREATE proc [dbo].[UpdateExam] @Exam_id int,@Exam_Name varchar(50) , @duration varchar(50),
@Crs_id int
as
update Exams
set Exam_Name =ISNULL(@Exam_Name,Exam_Name)
    ,Exam_Duration = isnull(@duration,Exam_Duration) ,
    Course_Id = isnull (@Crs_id,Course_Id)
where Exam_Id = @Exam_id
GO
```

Uses

[dbo].[Exams]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.Update-Question

[dbo].[UpdateQuestion]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@id	int	4
@grade	int	4
@content	varchar(400)	400
@qust_type	varchar(100)	100
@crsId	int	4

SQL Script

```
CREATE proc [dbo].[UpdateQuestion]
    @id int ,
    @grade int =NULL,
    @content varchar(400)=NULL,
    @qust_type varchar(100)=NULL ,
    @crsId int=NULL

as
    update Questions
    set Content =ISNULL(@content,Content),
        Grade = ISNULL(@grade,Grade),
        Question_Type = ISNULL(@qust_type,Question_Type),
        Course_Id =ISNULL (@crsId , Course_Id)

where Question_Id = @id
GO
```

Uses

[dbo].[Questions]

[dbo].[UpdateQuestionInExam]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@Exam_id	int	4
@old_quest	int	4
@newQuest	int	4

SQL Script

```
create proc [dbo].[UpdateQuestionInExam] @Exam_id int,@old_quest int , @newQuest int
as
update Exam_Questions
set Question_Id = @newQuest
where Exam_ID = @Exam_id and Question_Id = @old_quest
GO
```

Uses

[dbo].[Exam_Questions]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.Update-Student

[dbo].[UpdateStudent]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@StudentID	int	4
@FName	varchar(10)	10
@LName	varchar(10)	10
@Age	int	4
@Email	varchar(50)	50
@Dept_ld	int	4

SQL Script

```
CREATE PROC [dbo].[UpdateStudent]
   @StudentID INT,
   @FName VARCHAR(10) = NULL,
   @LName VARCHAR(10) = NULL,
   @Age INT = NULL,
   @Email VARCHAR(50) = NULL,
   @Dept Id INT = NULL
AS
BEGIN
   UPDATE Students
   SET FName = ISNULL(@FName, FName),
       LName = ISNULL(@LName, LName),
       Age = ISNULL(@Age, Age),
        Email = ISNULL(@Email, Email),
        Dept_Id = ISNULL(@Dept_Id, Dept_Id)
   WHERE Student_Id = @StudentID;
END;
GO
```

Uses

[dbo].[Students]

[dbo].[UpdateStudentAnswerOfQuestionInExam]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@stud_ld	int	4
@Quest_ld	int	4
@newAnswer	varchar(200)	200

SQL Script

```
--update
\label{local_create} \begin{tabular}{ll} create proc [dbo].[UpdateStudentAnswerOfQuestionInExam] @stud_Id int , @Quest_Id int , @new-Answer varchar(200) \\ \end{tabular}
update Student Answer In Exam
set Student_Answer = @newAnswer
where Student_Id = @stud_Id and Question_Id = @Quest_Id
```

Uses

[dbo].[Student_Answer_In_Exam]

Project > (local)\SQLEXPRESS > User databases > Examination-SystemDB > Programmability > Stored Procedures > dbo.Update-StudentCourse

[dbo].[UpdateStudentCourse]

Properties

Property	Value
ANSI Nulls On	True
Quoted Identifier On	True

Parameters

Name	Data Type	Max Length (Bytes)
@StudentID	int	4
@CourseID	int	4
@StudentGrade	decimal(18,2)	9

SQL Script

```
CREATE PROC [dbo].[UpdateStudentCourse]
    @StudentID INT,
    @CourseID INT,
    @StudentGrade decimal (18,2)

AS

BEGIN
    UPDATE Student_Courses
    SET StudentGrade = @StudentGrade
    WHERE Student_Id = @StudentID and Course_Id = @CourseID;
END;
GO
```

Uses

[dbo].[Student_Courses]

Used By

[dbo].[Exam_Correct]

1 Users

Objects

Name	
dbo	
guest	



Properties

Property	Value
Туре	SqlUser
Login Name	sa
Default Schema	dbo

Database Level Permissions

Туре	Action
CONNECT	Grant

SQL Script

GO



Properties

Property	Value
Туре	SqlUser
Default Schema	guest

SQL Script

-				
GO				

A Database Roles

Objects

Name
db_accessadmin
db_backupoperator
db_datareader
db_datawriter
db_ddladmin
db_denydatareader
db_denydatawriter
db_owner
db_securityadmin
public

♣ db_accessadmin

Properties

Property	Value
Owner	dbo

db_backupoperator

Properties

Property	Value
Owner	dbo

♣ db_datareader

Properties

Property	Value
Owner	dbo

db_datawriter

Properties

Property	Value
Owner	dbo

♣ db_ddladmin

Properties

Property	Value
Owner	dbo

db_denydatareader

Properties

Property	Value
Owner	dbo

db_denydatawriter

Properties

Property	Value
Owner	dbo

♣ db_owner

Properties

Property	Value
Owner	dbo

db_securityadmin

Properties

Property	Value
Owner	dbo

🕰 public

Properties

Property	Value
Owner	dbo