

# Final Project – Multi-Tier Application

Thiago Soares de Souza  
14/04/2023

## - Display Student

Form1

Students Enrollments Courses Programs

	Student ID	Student Name	Program ID
▶	S000000001	John	P0001
	S000000002	Mary	P0001
	S000000003	Paul	P0002
	S000000004	Bob	P0002
	S000000005	Thiago	P0003
	S000000006	James	P0003
	S000000007	Monica	P0004
	S000000008	Victor	P0004
*			

## - Display Enrollments

Form1

Students Enrollments Courses Programs

	Student ID	Course ID	Course Name	Final Grade	Program ID	Program Name
▶	S000	C000001	Databases	100	P0001	AEC - Programming
	S000	C000002	C#	80	P0001	AEC - Programming
	S000	C000003	Java	65	P0001	AEC - Programming
	S000000002	C000004	C++	76	P0001	AEC - Programming
	S000000003	C000005	Animation	93	P0002	AEC - Gaming
	S000000003	C000006	Game Design	84	P0002	AEC - Gaming
	S000000004	C000005	Animation	78	P0002	AEC - Gaming
	S000000004	C000006	Game Design	85	P0002	AEC - Gaming
	S000000005	C000007	Design 3D	94	P0003	AEC - Design
	S000000005	C000008	Photoshop	99	P0003	AEC - Design
	S000000006	C000007	Design 3D	77	P0003	AEC - Design
	S000000006	C000008	Photoshop	89	P0003	AEC - Design
	S000000007	C000009	Accounting I	90	P0004	AEC - Accounting and...
	S000000007	C000010	Marketing	98	P0004	AEC - Accounting and...
	S000000008	C000009	Accounting I	97	P0004	AEC - Accounting and...
	S000000008	C000010	Marketing		P0004	AEC - Accounting and...
	S000000008	C000011	Accounting II		P0004	AEC - Accounting and...

## - Display Courses

Form1

Students Enrollments Courses Programs

	Course ID	Course Name	Program ID
▶	C000001	Databases	P0001
	C000002	C#	P0001
	C000003	Java	P0001
	C000004	C++	P0001
	C000005	Animation	P0002
	C000006	Game Design	P0002
	C000007	Design 3D	P0003
	C000008	Photoshop	P0003
	C000009	Accounting I	P0004
	C000010	Marketing	P0004
	C000011	Accounting II	P0004
	C000012	Marketing II	P0004
*			

## - Display Programs

Form1

Students Enrollments Courses Programs

Program ID	Program Name
P0001	AEC - Programming
P0002	AEC - Gaming
P0003	AEC - Design
P0004	AEC - Accounting and Management

- Display Form Add-Modify in Enrollment

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Pak	C000005	Python	94	P0002	AEC - Gaming
S000000003	Pak	C000006	JavaScript	85	P0002	AEC - Gaming
S000000004	Bob	C000007	Design 3D	77	P0002	AEC - Gaming
S000000004	Bob	C000008	Photoshop	89	P0002	AEC - Gaming
S000000005	Thi	C000009	Accounting I	90	P0003	AEC - Design
S000000005	Thi	C000010	Marketing	98	P0003	AEC - Design
S000000006	Jan	C000011	Accounting II	97	P0004	AEC - Accounting and...
S000000006	Jan	C000012	Management	95	P0004	AEC - Accounting and...

Form2

Student Id Student Name Course Id Course Name

OK Cancel

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Pak	C000005	Python	94	P0002	AEC - Gaming
S000000003	Pak	C000006	JavaScript	85	P0002	AEC - Gaming
S000000004	Bob	C000007	Design 3D	77	P0002	AEC - Gaming
S000000004	Bob	C000008	Photoshop	89	P0002	AEC - Gaming
S000000005	Thi	C000009	Accounting I	90	P0003	AEC - Design
S000000005	Thi	C000010	Marketing	98	P0003	AEC - Design
S000000006	Jan	C000011	Accounting II	97	P0004	AEC - Accounting and...
S000000006	Jan	C000012	Management	95	P0004	AEC - Accounting and...

Form2

Student Id Student Name Course Id Course Name

S000000008 Victor C000010 Marketing

OK Cancel

- Display form Manage Final Grade

Form1

Students	Enrollments	Courses	Programs
Student ID	Student Name	Course ID	Course Name
S000000001	John	C000001	Databases
S000000001	John	C000002	C#
S000000002	Mary	C000003	Java
S000000002	Mary	C000004	C++
S000000003			
S000000003			
S000000004			
S000000004			
S000000005			
S000000005			
S000000006			
S000000007	Monica	C000009	Accounting I
S000000007	Monica	C000010	Marketing
S000000008	Victor	C000009	Accounting I
S000000008	Victor	C000010	Marketing
S000000008	Victor	C000011	Accounting II

Form3

Student Id: S000000007, Student Name: Monica, Course Id: C000010, Course Name: Marketing, Final Grade: 98

OK Cancel

## - Validate program ID

Form1

Students	Enrollments	Courses	Programs
Program ID	Program Name		
P0001	AEC - Programming		
P0002	AEC - Gaming		
P0003	AEC - Design		
P0004	AEC - Accounting and Management		
dfs3g			
*			

Impossible to insert / update / delete

OK

Form1

Students	Enrollments	Courses	Programs
Program ID	Program Name		
P0001	AEC - Programming		
P0002	AEC - Gaming		
P0003	AEC - Design		
P0004	AEC - Accounting and Management		
**			

Form1

Students	Enrollments	Courses	Programs
	Program ID		Program Name
	P0001		AEC - Programming
	P0002		AEC - Gaming
	P0003		AEC - Design
	P0004		AEC - Accounting and Management
▶	P0005		hdjhdjsj
*			

Programs Insertion/Update rejected: ProgId must have P (uppercase) and followed by 4 digits"

OK

Form1

Students	Enrollments	Courses	Programs
	Program ID		Program Name
	P0001		AEC - Programming
	P0002		AEC - Gaming
	P0003		AEC - Design
▶	P0004		AEC - Accounting and Management
*			

## - Validate program name

Form1

Students	Enrollments	Courses	Programs
	Program ID		Program Name
	P0001		AEC - Programming
	P0002		AEC - Gaming
	P0003		AEC - Design
	P0004		AEC - Accounting and Management
▶	P0005		
*			

Impossible to insert / update / delete

OK

Form1

Students	Enrollments	Courses	Programs
	Program ID		Program Name
	P0001		AEC - Programming
	P0002		AEC - Gaming
	P0003		AEC - Design
▶	P0004		AEC - Accounting and Management
*			

## - Create Program

Form1

Students	Enrollments	Courses	Programs
	Program ID		Program Name
	P0001		AEC - Programming
	P0002		AEC - Gaming
	P0003		AEC - Design
	P0004		AEC - Accounting and Management
	P0005		AEC - Testing

Form1

Students	Enrollments	Courses	Programs
	Program ID		Program Name
	P0001		AEC - Programming
	P0002		AEC - Gaming
	P0003		AEC - Design
	P0004		AEC - Accounting and Management
	P0005		AEC - Testing

SQLQuery13.sql - US...college1en (sa (56)) - X USER-PC.College1

```

/***** Script for SelectTopNRows cor
SELECT TOP (1000) [ProgId]
      ,[ProgName]
FROM [College1en].[dbo].[Programs]

```

121 %

Results	Messages												
<table> <tr> <th>ProgId</th><th>ProgName</th></tr> <tr> <td>1 P0004</td><td>AEC - Accounting and Management</td></tr> <tr> <td>2 P0003</td><td>AEC - Design</td></tr> <tr> <td>3 P0002</td><td>AEC - Gaming</td></tr> <tr> <td>4 P0001</td><td>AEC - Programming</td></tr> <tr> <td>5 P0005</td><td>AEC - Testing</td></tr> </table>	ProgId	ProgName	1 P0004	AEC - Accounting and Management	2 P0003	AEC - Design	3 P0002	AEC - Gaming	4 P0001	AEC - Programming	5 P0005	AEC - Testing	
ProgId	ProgName												
1 P0004	AEC - Accounting and Management												
2 P0003	AEC - Design												
3 P0002	AEC - Gaming												
4 P0001	AEC - Programming												
5 P0005	AEC - Testing												

## - Validate student ID

Form1

Students	Enrollments	Courses	Programs
	Student ID	Student Name	Program ID
	S000000001	John	P0001
	S000000002	Mary	P0001
	S000000003	Paul	P0002
	S000000004	Bob	P0002
	S000000005	Thiago	P0003
	S000000006	James	P0003
	S000000007	Monica	P0004
	S000000008	Victor	P0004
	shjdjhsj	sdsd	dhsdh

Impossible to insert / update / delete

OK

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Program ID
S000000001	John	P0001
S000000002	Mary	P0001
S000000003	Paul	P0002
S000000004	Bob	P0002
S000000005	Thiago	P0003
S000000006	James	P0003
S000000007	Monica	P0004
S000000008	Victor	P0004
*		

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Program ID
S000000001	John	P0001
S000000002	Mary	P0001
S000000003	Paul	P0002
S000000004	Bob	P0002
S000000005	Thiago	P0003
S000000006	James	P0003
S000000007	Monica	P0004
S000000008	Victor	P0004
S000000009	Testing	P0005
*		

Students Insertion/Update rejected: Student Id must have S (uppercase) and followed by 9 digits  
 Progid must have P (uppercase) and followed by 4 digits"

OK

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Program ID
S000000001	John	P0001
S000000002	Mary	P0001
S000000003	Paul	P0002
S000000004	Bob	P0002
S000000005	Thiago	P0003
S000000006	James	P0003
S000000007	Monica	P0004
S000000008	Victor	P0004
*		

- Validate program id in students

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Program ID
S000000001	John	P0001
S000000002	Mary	P0001
S000000003	Paul	P0002
S000000004	Bob	P0002
S000000005	Thiago	P0003
S000000006	James	P0003
S000000007	Monica	P0004
S000000008	Victor	P0004
S000000009	Testing	
*		

Impossible to insert / update / delete

OK

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Program ID
S000000001	John	P0001
S000000002	Mary	P0001
S000000003	Paul	P0002
S000000004	Bob	P0002
S000000005	Thiago	P0003
S000000006	James	P0003
S000000007	Monica	P0004
S000000008	Victor	P0004
*		

## - Validate student name

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Program ID
S000000001	John	P0001
S000000002	Mary	P0001
S000000003	Paul	P0002
S000000004	Bob	P0002
S000000005	Thiago	P0003
S000000006	James	P0003
S000000007	Monica	P0004
S000000008	Victor	P0004
S000000009		P0005
*		

Impossible to insert / update / delete

OK



Form1

Students	Enrollments	Courses	Programs
Student ID	Student Name	Program ID	
S000000001	John	P0001	
S000000002	Mary	P0001	
S000000003	Paul	P0002	
S000000004	Bob	P0002	
S000000005	Thiago	P0003	
S000000006	James	P0003	
S000000007	Monica	P0004	
S000000008	Victor	P0004	
*			

## - Create Student

Form1

Students	Enrollments	Courses	Programs
Student ID	Student Name	Program ID	
S000000001	John	P0001	
S000000002	Mary	P0001	
S000000003	Paul	P0002	
S000000004	Bob	P0002	
S000000005	Thiago	P0003	
S000000006	James	P0003	
S000000007	Monica	P0004	
S000000008	Victor	P0004	
S000000009	Testing	P0005	
*			

Form1

Students	Enrollments	Courses	Programs
Student ID	Student Name	Program ID	
S000000001	John	P0001	
S000000002	Mary	P0001	
S000000003	Paul	P0002	
S000000004	Bob	P0002	
S000000005	Thiago	P0003	
S000000006	James	P0003	
S000000007	Monica	P0004	
S000000008	Victor	P0004	
S000000009	Testing	P0005	
**			

```
SQLQuery14.sql - US...ollege1en (sa (68)) SQLQuery13.sql - r
/***** Script for SelectTopNRows.com
SELECT TOP (1000) [StId]
                , [StName]
                , [ProgId]
FROM [College1en].[dbo].[Students]
```

121 %

Results		Messages	
	StId	StName	ProgId
1	S000000001	John	P0001
2	S000000002	Mary	P0001
3	S000000003	Paul	P0002
4	S000000004	Bob	P0002
5	S000000005	Thiago	P0003
6	S000000006	James	P0003
7	S000000007	Monica	P0004
8	S000000008	Victor	P0004
9	S000000009	Testing	P0005

- Validate Courses ID

Form1

Students Enrollments Courses Programs

	Course ID	Course Name	Program ID
	C000001	Databases	P0001
	C000002	C#	P0001
	C000003	Java	P0001
	C000004	C++	P0001
	C000005	Animation	P0002
	C000006	Game Design	P0002
	C000007	Design 3D	P0003
	C000008	Photoshop	P0003
	C000009	Accounting I	P0004
	C000010	Marketing	P0004
	C000011	Accounting II	P0004
	C000012	Marketing II	P0004
▶	dashidsa	dhjasdh	hdsaja
*			

Impossible to insert / update / delete

OK

Form1

Students Enrollments Courses Programs

	Course ID	Course Name	Program ID
	C000001	Databases	P0001
	C000002	C#	P0001
	C000003	Java	P0001
	C000004	C++	P0001
	C000005	Animation	P0002
	C000006	Game Design	P0002
	C000007	Design 3D	P0003
	C000008	Photoshop	P0003
	C000009	Accounting I	P0004
	C000010	Marketing	P0004
	C000011	Accounting II	P0004
▶	C000012	Marketing II	P0004
*			

Form1

Students Enrollments Courses Programs

Course ID	Course Name	Program ID
C000001	Databases	P0001
C000002	C#	P0001
C000003	Java	P0001
C000004	C++	P0001
C000005	Animation	P0002
C000006	Game Design	P0002
C000007	Design 3D	P0003
C000008	Photoshop	P0003
C000009	Accounting I	P0004
C000010	Marketing	P0004
C000011	Accounting II	P0004
C000012	Marketing II	P0004
C000013	Testing II	P0005
*		

Courses Insertion/Update rejected: Course Id must have C (uppercase) and followed by 6 digits  
Progid must have P (uppercase) and followed by 4 digits"

OK

P0004  
C000013

Form1

Students Enrollments Courses Programs

Course ID	Course Name	Program ID
C000001	Databases	P0001
C000002	C#	P0001
C000003	Java	P0001
C000004	C++	P0001
C000005	Animation	P0002
C000006	Game Design	P0002
C000007	Design 3D	P0003
C000008	Photoshop	P0003
C000009	Accounting I	P0004
C000010	Marketing	P0004
C000011	Accounting II	P0004
C000012	Marketing II	P0004
*		

- Validate program id in Courses

Form1

Students Enrollments Courses Programs

Course ID	Course Name	Program ID
C000001	Databases	P0001
C000002	C#	P0001
C000003	Java	P0001
C000004	C++	P0001
C000005	Animation	P0002
C000006	Game Design	P0002
C000007	Design 3D	P0003
C000008	Photoshop	P0003
C000009	Accounting I	P0004
C000010	Marketing	P0004
C000011	Accounting II	P0004
C000012	Marketing II	P0004
C000013	Testing I	
*		

Impossible to insert / update / delete

OK

Form1

Students Enrollments Courses Programs

Course ID	Course Name	Program ID
C000001	Databases	P0001
C000002	C#	P0001
C000003	Java	P0001
C000004	C++	P0001
C000005	Animation	P0002
C000006	Game Design	P0002
C000007	Design 3D	P0003
C000008	Photoshop	P0003
C000009	Accounting I	P0004
C000010	Marketing	P0004
C000011	Accounting II	P0004
C000012	Marketing II	P0004
*		

## - Validate Courses name

Form1

Students Enrollments Courses Programs

Course ID	Course Name	Program ID
C000001	Databases	P0001
C000002	C#	P0001
C000003	Java	P0001
C000004	C++	P0001
C000005	Animation	P0002
C000006	Game Design	P0002
C000007	Design 3D	P0003
C000008	Photoshop	P0003
C000009	Accounting I	P0004
C000010	Marketing	P0004
C000011	Accounting II	P0004
C000012	Marketing II	P0004
C000013		P0005
*		

Impossible to insert / update / delete

OK

Form1			
Students	Enrollments	Courses	Programs
Course ID	Course Name	Program ID	
C000001	Databases	P0001	
C000002	C#	P0001	
C000003	Java	P0001	
C000004	C++	P0001	
C000005	Animation	P0002	
C000006	Game Design	P0002	
C000007	Design 3D	P0003	
C000008	Photoshop	P0003	
C000009	Accounting I	P0004	
C000010	Marketing	P0004	
C000011	Accounting II	P0004	
C000012	Marketing II	P0004	

## - Create Course

Form1			
Students	Enrollments	Courses	Programs
Course ID	Course Name	Program ID	
C000001	Databases	P0001	
C000002	C#	P0001	
C000003	Java	P0001	
C000004	C++	P0001	
C000005	Animation	P0002	
C000006	Game Design	P0002	
C000007	Design 3D	P0003	
C000008	Photoshop	P0003	
C000009	Accounting I	P0004	
C000010	Marketing	P0004	
C000011	Accounting II	P0004	
C000012	Marketing II	P0004	
C000013	Testing I	P0005	

Form1			
Students	Enrollments	Courses	Programs
Course ID	Course Name	Program ID	
C000001	Databases	P0001	
C000002	C#	P0001	
C000003	Java	P0001	
C000004	C++	P0001	
C000005	Animation	P0002	
C000006	Game Design	P0002	
C000007	Design 3D	P0003	
C000008	Photoshop	P0003	
C000009	Accounting I	P0004	
C000010	Marketing	P0004	
C000011	Accounting II	P0004	
C000012	Marketing II	P0004	
C000013	Testing I	P0005	

SQLQuery15.sql - US...ollege1en (sa (56)) - X SQLQuery14.sql -

```

/***** Script for SelectTopNRows co
SELECT TOP (1000) [CId]
      ,[CName]
      ,[ProgId]
FROM [College1en].[dbo].[Courses]

```

121 %

	CId	CName	ProgId
1	C000001	Databases	P0001
2	C000002	C#	P0001
3	C000003	Java	P0001
4	C000004	C++	P0001
5	C000005	Animation	P0002
6	C000006	Game Design	P0002
7	C000007	Design 3D	P0003
8	C000008	Photoshop	P0003
9	C000009	Accounting I	P0004
10	C000010	Marketing	P0004
11	C000011	Accounting II	P0004
12	C000012	Marketing II	P0004
13	C000013	Testing I	P0005

## - Creating enrollment

Form1

Students	Enrollments	Courses	Programs
Stud	Add	Course ID	Course Name
	Modify	Final Grade	Program ID
	Delete		Program Name
	Manage Final Grade		
S000000002	Mary	C000001	Databases
S000000003	Paul	C000002	C#
S000000004	Bob	C000003	Java
S000000004	Bob	C000004	C++
S000000005	Thiago	C000005	Animation
S000000005	Thiago	C000006	Game Design
S000000006	James	C000005	Animation
S000000006	James	C000006	Game Design
S000000007	Monica	C000007	Design 3D
S000000007	Monica	C000008	Photoshop
S000000008	Victor	C000009	Accounting I
S000000008	Victor	C000010	Marketing
S000000008	Victor	C000011	Accounting II

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S00000001	John	C000001	Databases	100	P0001	AEC - Programming
S00000001	John	C000002	C#	80	P0001	AEC - Programming
S00000002	Mary				P0001	AEC - Programming
S00000002	Mary				P0001	AEC - Programming
S00000003	Paul				P0002	AEC - Gaming
S00000003	Paul				P0002	AEC - Gaming
S00000004	Bob				P0002	AEC - Gaming
S00000004	Bob				P0002	AEC - Gaming
S00000005	Thiago				P0003	AEC - Design
S00000005	Thiago				P0003	AEC - Design
S00000006	James	C000007	Design 3D	77	P0003	AEC - Design
S00000006	James	C000008	Photoshop	89	P0003	AEC - Design
S00000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S00000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S00000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S00000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S00000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...

Form2

Student Id Student Name Course Id Course Name

OK Cancel

Form1

Students Enrollments Courses Programs

Course ID	Course Name	Program ID
C000001	Databases	P0001
C000002	C#	P0001
C000003	Java	P0001
C000004	C++	P0001
C000005	Animation	P0002
C000006	Game Design	P0002
C000007	Design 3D	P0003
C000008	Photoshop	P0003
C000009	Accounting I	P0004
C000010	Marketing	P0004
C000011	Accounting II	P0004
C000012	Marketing II	P0004
C000013	Testing II	P0005

Courses Insertion/Update rejected: Course Id must have C (uppercase) and followed by 6 digits  
Progid must have P (uppercase) and followed by 4 digits"

OK

- Click ok without enter data

Form1

Students	Enrollments	Courses	Programs
Student ID	Student Name	Course ID	Course Name
S000000001	John	C000001	Databases
S000000001	John	C000002	C#
S000000002	Mary	C000003	Java
S000000002	Mary	C000004	C++
S000000003	Paul	C000005	Python
S000000003	Paul	C000006	JavaScript
S000000004	Bob	C000007	PHP
S000000004	Bob	C000008	Perl
S000000005	Thiago	C000009	Accounting I
S000000005	Thiago	C000010	Marketing
S000000006	James	C000011	Accounting II
S000000006	James	C000012	Finance
S000000007	Monica	C000013	Business Law
S000000007	Monica	C000014	Human Resources
S000000008	Victor	C000015	Project Management
S000000008	Victor	C000016	Quality Management
S000000008	Victor	C000017	Supply Chain Management

Form2

Student Id:  Student Name:  Course Id:  Course Name:

OK Cancel

Student Id and Course Id selected

OK

- Click in cancel

Form1

Students	Enrollments	Courses	Programs
Student ID	Student Name	Course ID	Course Name
S000000001	John	C000001	Databases
S000000001	John	C000002	C#
S000000002	Mary	C000003	Java
S000000002	Mary	C000004	C++
S000000003	Paul	C000005	Python
S000000003	Paul	C000006	JavaScript
S000000004	Bob	C000007	PHP
S000000004	Bob	C000008	Perl
S000000005	Thiago	C000009	Accounting I
S000000005	Thiago	C000010	Marketing
S000000006	James	C000011	Accounting II
S000000006	James	C000012	Finance
S000000007	Monica	C000013	Business Law
S000000007	Monica	C000014	Human Resources
S000000008	Victor	C000015	Project Management
S000000008	Victor	C000016	Quality Management
S000000008	Victor	C000017	Supply Chain Management

Form2

Student Id:  Student Name:  Course Id:  Course Name:

OK Cancel



Form1

Students	Enrollments	Courses	Programs			
Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...

- Put the student ID but not the course ID

Form1

Students	Enrollments	Courses	Programs			
Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary					AEC - Programming
S000000002	Mary					AEC - Programming
S000000003	Paul					AEC - Gaming
S000000003	Paul					AEC - Gaming
S000000004	Bob					AEC - Gaming
S000000004	Bob					AEC - Gaming
S000000005	Thiago					AEC - Design
S000000005	Thiago					AEC - Design
S000000006	James					AEC - Design
S000000006	James					AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...

Form2

Student Id	Student Name	Course Id	Course Name
S000000005	Testing		

OK Cancel

Form1

Students	Enrollments	Courses	Programs			
Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary					AEC - Programming
S000000002	Mary					AEC - Programming
S000000003	Paul					AEC - Gaming
S000000003	Paul					AEC - Gaming
S000000004	Bob					AEC - Gaming
S000000004	Bob					AEC - Gaming
S000000005	Thiago					AEC - Design
S000000005	Thiago					AEC - Design
S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...

Form2

Student Id	Student Name	Course Id	Course Name
S000000009	Testing		

OK Cancel

- Try to click on ok with only Student ID

Form1

Students	Enrollments	Courses	Programs
Student ID	Student Name	Course ID	Course Name
S000000001	John	C000001	Databases
S000000001	John	C000002	C#
S000000002	Mary	C000002	C#
S000000002	Mary	C000002	C#
S000000003	Paul	C000003	Python
S000000003	Paul	C000003	Python
S000000004	Bob	C000004	Java
S000000004	Bob	C000004	Java
S000000005	Thiago	C000005	JavaScript
S000000005	Thiago	C000005	JavaScript
S000000006	James	C000007	Design 3D
S000000006	James	C000008	Photoshop
S000000007	Monica	C000009	Accounting I
S000000007	Monica	C000010	Marketing
S000000008	Victor	C000009	Accounting I
S000000008	Victor	C000010	Marketing
S000000008	Victor	C000011	Accounting II

Form2

Student Id	Student Name	Course Id	Course Name
S000000009	Testing		

OK Cancel

Form1

Students	Enrollments	Courses	Programs
Student ID	Student Name	Course ID	Course Name
S000000001	John	C000001	Databases
S000000001	John	C000002	C#
S000000002	Mary	C000002	C#
S000000002	Mary	C000002	C#
S000000003	Paul	C000003	Python
S000000003	Paul	C000003	Python
S000000004	Bob	C000004	Java
S000000004	Bob	C000004	Java
S000000005	Thiago	C000005	JavaScript
S000000005	Thiago	C000005	JavaScript
S000000006	James	C000007	Design 3D
S000000006	James	C000008	Photoshop
S000000007	Monica	C000009	Accounting I
S000000007	Monica	C000010	Marketing
S000000008	Victor	C000009	Accounting I
S000000008	Victor	C000010	Marketing
S000000008	Victor	C000011	Accounting II

Form2

Student Id	Student Name	Course Id	Course Name
S000000009	Testing		

OK Cancel

Student Id and Course Id selected

OK

CONTINUE HERE

- Put a course ID that not has the same program ID then the student

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary					AEC - Programming
S000000002	Mary					AEC - Programming
S000000003	Paul					AEC - Gaming
S000000003	Paul					AEC - Gaming
S000000004	Bob					AEC - Gaming
S000000004	Bob					AEC - Gaming
S000000005	Thiago					AEC - Design
S000000005	Thiago					AEC - Design
S000000006	James	C000007	Design 3D		P0003	AEC - Design
S000000006	James	C000008	Photoshop		P0003	AEC - Design
S000000007	Monica	C000009	Accounting I		P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...

Form2

Student Id: S000000009 Student Name: Testing Course Id: C000001 Course Name: Databases

OK Cancel

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary					AEC - Programming
S000000002	Mary					AEC - Programming
S000000003	Paul					AEC - Gaming
S000000003	Paul					AEC - Gaming
S000000004	Bob					AEC - Gaming
S000000004	Bob					AEC - Gaming
S000000005	Thiago					AEC - Design
S000000005	Thiago					AEC - Design
S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...

Form2

Student Id: S000000009 Student Name: Testing Course Id: C000001 Course Name: Databases

OK Cancel

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary					AEC - Programming
S000000002	Mary					AEC - Programming
S000000003	Paul					AEC - Gaming
S000000003	Paul					AEC - Gaming
S000000004	Bob					AEC - Gaming
S000000004	Bob					AEC - Gaming
S000000005	Thiago					AEC - Design
S000000005	Thiago					AEC - Design
S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
S000000006	James					AEC - Design
S000000007	Monica					AEC - Accounting and...
S000000007	Monica					AEC - Accounting and...
S000000008	Victor					AEC - Accounting and...
S000000008	Victor					AEC - Accounting and...
S000000008	Victor					AEC - Accounting and...

Form2

Student Id: S000000009 Student Name: Testing Course Id: C000001 Course Name: Databases

OK Cancel

Business Rules: Addition/Modification rejected. Course must be in the same Program of the Student.

OK

Form1

Students	Enrollments	Courses	Programs			
Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...

CONTINUE FROM HERE

- Enter the student ID and Course ID that are at the same program ID

Form1

Students	Enrollments	Courses	Programs			
Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005				AEC - Gaming
S000000003	Paul	C000006				AEC - Gaming
S000000004	Bob	C000005				AEC - Gaming
S000000004	Bob	C000006				AEC - Gaming
S000000005	Thiago	C000007				AEC - Design
S000000005	Thiago	C000008				AEC - Design
S000000006	James	C000007				AEC - Design
S000000006	James	C000008				AEC - Design
S000000007	Monica	C000009		90	P0004	AEC - Accounting and...
S000000007	Monica	C000010		98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...

Form2

Student Id:  Student Name:  Course Id:  Course Name:

OK Cancel

Form1

Students	Enrollments	Courses	Programs
Student ID	Student Name	Course ID	Course Name
S00000001	John	C000001	Databases
S00000001	John	C000002	C#
S00000002	Mary	C000003	Java
S00000002	Mary	C000004	C++
S00000003	Paul	C000005	
S00000003	Paul	C000006	
S00000004	Bob	C000005	
S00000004	Bob	C000006	
S00000005	Thiago	C000007	
S00000005	Thiago	C000008	
S00000006	James	C000007	
S00000006	James	C000008	
S00000007	Monica	C000009	Accounting I
S00000007	Monica	C000010	Marketing
S00000008	Victor	C000009	Accounting I
S00000008	Victor	C000010	Marketing
S00000008	Victor	C000011	Accounting II

Form2

Student Id: S000000009 Student Name: Testing Course Id: Course Name:

OK Cancel

Form1

Students	Enrollments	Courses	Programs
Student ID	Student Name	Course ID	Course Name
S00000001	John	C000001	Databases
S00000001	John	C000002	C#
S00000002	Mary	C000003	Java
S00000002	Mary	C000004	C++
S00000003	Paul	C000005	
S00000003	Paul	C000006	
S00000004	Bob	C000005	
S00000004	Bob	C000006	
S00000005	Thiago	C000007	
S00000005	Thiago	C000008	
S00000006	James	C000007	
S00000006	James	C000008	
S00000007	Monica	C000009	Accounting I
S00000007	Monica	C000010	Marketing
S00000008	Victor	C000009	Accounting I
S00000008	Victor	C000010	Marketing
S00000008	Victor	C000011	Accounting II

Form2

Student Id: S000000009 Student Name: Testing Course Id: Course Name:

OK Cancel

Form1

Students	Enrollments	Courses	Programs
Student ID	Student Name	Course ID	Course Name
S00000001	John	C000001	Databases
S00000001	John	C000002	C#
S00000002	Mary	C000003	Java
S00000002	Mary	C000004	C++
S00000003	Paul	C000005	
S00000003	Paul	C000006	
S00000004	Bob	C000005	
S00000004	Bob	C000006	
S00000005	Thiago	C000007	
S00000005	Thiago	C000008	
S00000006	James	C000007	
S00000006	James	C000008	
S00000007	Monica	C000009	Accounting I
S00000007	Monica	C000010	Marketing
S00000008	Victor	C000009	Accounting I
S00000008	Victor	C000010	Marketing
S00000008	Victor	C000011	Accounting II

Form2

Student Id: S000000009 Student Name: Testing Course Id: C000013 Course Name: Testing I

OK Cancel

Form1

Students	Enrollments	Courses	Programs			
Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

SQLQuery16.sql - US...ollege1en (sa (69)) - X SQLQuery15.sql - US...oll

```

/***** Script for SelectTopNRows command *****/
SELECT TOP (1000) [StId]
      ,[CId]
      ,[FinalGrade]
FROM [College1en].[dbo].[Enrollments]

```

121 %

Results Messages

	StId	CId	FinalGrade
1	S000000001	C000001	100
2	S000000001	C000002	80
3	S000000002	C000003	65
4	S000000002	C000004	76
5	S000000003	C000005	93
6	S000000003	C000006	84
7	S000000004	C000005	78
8	S000000004	C000006	85
9	S000000005	C000007	94
10	S000000005	C000008	99
11	S000000006	C000007	77
12	S000000006	C000008	89
13	S000000007	C000009	90
14	S000000007	C000010	98
15	S000000008	C000009	97
16	S000000008	C000010	NULL
17	S000000008	C000011	NULL
18	S000000009	C000013	NULL

- Modify the enrolments

Form1

Students	Enrollments	Courses	Programs
Student ID	Student Name	Course ID	Course Name
S000000001	John	C000001	Databases
S000000001	John	C000002	C#
S000000002	Mary	C000003	Java
S000000002	Mary	C000004	C++
S000000003	Paul	C000005	Animation
S000000003	Paul	C000006	Game Design
S000000004	Bob	C000005	Animation
S000000004	Bob	C000006	Game Design
S000000005	Thiago	C000007	Design 3D
S000000005	Thiago	C000008	Photoshop
S000000006	James	C000007	Design 3D
S000000006	James	C000008	Photoshop
S000000007	Monica	C000009	Accounting I
S000000007	Monica	C000010	Marketing
S000000008	Victor	C000009	Accounting I
S000000008	Victor	C000010	Marketing
S000000008	Victor	C000011	Accounting II
S000000009	Testing	C000013	Testing I

- Modify the enrollments without select a row

Form1

Students	Enrollments	Courses	Programs
Student ID	Student Name	Course ID	Course Name
S000000001	John	C000001	Databases
S000000001	John	C000002	C#
S000000002	Mary	C000003	Java
S000000002	Mary	C000004	C++
S000000003	Paul	C000005	Animation
S000000003	Paul	C000006	Game Design
S000000004	Bob	C000005	Animation
S000000004	Bob	C000006	Game Design
S000000005	Thiago	C000007	Design 3D
S000000005	Thiago	C000008	Photoshop
S000000006	James	C000007	Design 3D
S000000006	James	C000008	Photoshop
S000000007	Monica	C000009	Accounting I
S000000007	Monica	C000010	Marketing
S000000008	Victor	C000009	Accounting I
S000000008	Victor	C000010	Marketing
S000000008	Victor	C000011	Accounting II
S000000009	Testing	C000013	Testing I

Form1

Students	Enrollments	Courses	Programs			
Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

- Modify a enrollments selecting more than one line

Form1

Students	Enrollments	Courses	Programs				
	Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
	S000000001	John	C000001	Databases	100	P0001	AEC - Programming
	S000000001	John	C000002	C#	80	P0001	AEC - Programming
	S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
	S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
	S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
	S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
	S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
	S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
	S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
	S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
	S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
	S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
	S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
	S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
▶	S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
	S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
	S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
	S000000009	Testing	C000013	Testing I		P0005	AEC - Testing



Form1

Students	Enrollments	Courses	Programs
Stud	Add		
S000	Modify	Course ID	Course Name
S000	Delete	Final Grade	Program ID
S000	Manage Final Grade		Program Name
S000000002	Mary	C000004	AEC - Programming
S000000003	Paul	C000005	AEC - Programming
S000000003	Paul	C000006	AEC - Programming
S000000004	Bob	C000005	AEC - Programming
S000000004	Bob	C000006	AEC - Programming
S000000005	Thiago	C000007	AEC - Programming
S000000005	Thiago	C000008	AEC - Programming
S000000006	James	C000007	AEC - Programming
S000000006	James	C000008	AEC - Programming
S000000007	Monica	C000009	AEC - Programming
S000000007	Monica	C000010	AEC - Programming
S000000008	Victor	C000009	AEC - Programming
S000000008	Victor	C000010	AEC - Programming
S000000008	Victor	C000011	AEC - Programming
S000000009	Testing	C000013	AEC - Programming

Form1

Students	Enrollments	Courses	Programs
Student ID	Student Name	Course ID	Course Name
S000000001	John	C000001	Databases
S000000001	John	C000002	C#
S000000002	Mary	C000003	Java
S000000002	Mary	C000004	C++
S000000003	Paul	C000005	
S000000003	Paul	C000006	
S000000004	Bob	C000005	
S000000004	Bob	C000006	
S000000005	Thiago	C000007	
S000000005	Thiago	C000008	
S000000006	James	C000007	Design 3D
S000000006	James	C000008	Photoshop
S000000007	Monica	C000009	Accounting I
S000000007	Monica	C000010	Marketing
S000000008	Victor	C000009	Accounting I
S000000008	Victor	C000010	Marketing
S000000008	Victor	C000011	Accounting II
S000000009	Testing	C000013	Testing I

Only one line must be selected for update

OK

- Edit one row with null final grade

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul				P0002	AEC - Gaming
S000000004	Bob				P0002	AEC - Gaming
S000000004	Bob				P0002	AEC - Gaming
S000000005	Thiago				P0003	AEC - Design
S000000005	Thiago				P0003	AEC - Design
S000000006	James				P0003	AEC - Design
S000000006	James				P0003	AEC - Design
S000000007	Monica				P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

Form2

Student Id: S000000008 Student Name: Victor Course Id: C000011 Course Name: Accounting II

OK Cancel

- Chose a course ID that does not have the same program ID than the student ID

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S00000001	John	C000001	Databases	100	P0001	AEC - Programming
S00000001	John	C000002	C#	80	P0001	AEC - Programming
S00000002	Mary	C000003	Java	65	P0001	AEC - Programming
S00000002	Mary	C000004	C++	76	P0001	AEC - Programming
S00000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S00000003	Paul				02	AEC - Gaming
S00000004	Bob				02	AEC - Gaming
S00000004	Bob				02	AEC - Gaming
S00000005	Thiago				03	AEC - Design
S00000005	Thiago				03	AEC - Design
S00000006	James				03	AEC - Design
S00000006	James				03	AEC - Design
S00000007	Monica				04	AEC - Accounting and...
S00000007	Monica	C000010	Marketing		P0004	AEC - Accounting and...
S00000008	Victor	C000009	Accounting		P0004	AEC - Accounting and...
S00000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S00000008	Victor	C000011	Accounting		P0004	AEC - Accounting and...
S00000009	Testing	C000013	Testing I		P0005	AEC - Testing

Form2

Student Id: S000000008 Student Name: Victor Course Id: C000011 Course Name: Accounting II

OK Cancel

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S00000001	John	C000001	Databases	100	P0001	AEC - Programming
S00000001	John	C000002	C#	80	P0001	AEC - Programming
S00000002	Mary	C000003	Java	65	P0001	AEC - Programming
S00000002	Mary	C000004	C++	76	P0001	AEC - Programming
S00000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S00000003	Paul				02	AEC - Gaming
S00000004	Bob				02	AEC - Gaming
S00000004	Bob				02	AEC - Gaming
S00000005	Thiago				03	AEC - Design
S00000005	Thiago				03	AEC - Design
S00000006	James				03	AEC - Design
S00000006	James				03	AEC - Design
S00000007	Monica				04	AEC - Accounting and...
S00000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S00000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S00000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S00000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S00000009	Testing	C000013	Testing I		P0005	AEC - Testing

Form2

Student Id: S000000008 Student Name: Victor Course Id: C000004 Course Name: C++

OK Cancel



SQLQuery16.sql - US...ollege1en (sa (69)) SQLQuery15.sql - US...

```

/***** Script for SelectTopNRows command *****/
SELECT TOP (1000) [StId]
, [CId]
, [FinalGrade]
FROM [College1en].[dbo].[Enrollments]

```

121 %

Results Messages

	StId	CId	FinalGrade
1	S000000001	C000001	100
2	S000000001	C000002	80
3	S000000002	C000003	65
4	S000000002	C000004	76
5	S000000003	C000005	93
6	S000000003	C000006	84
7	S000000004	C000005	78
8	S000000004	C000006	85
9	S000000005	C000007	94
10	S000000005	C000008	99
11	S000000006	C000007	77
12	S000000006	C000008	89
13	S000000007	C000009	90
14	S000000007	C000010	98
15	S000000008	C000009	97
16	S000000008	C000010	NULL
17	S000000008	C000011	NULL
18	S000000009	C000013	NULL

- Selecting a course ID that has the same program ID than the student ID

Form1

Students	Enrollments	Courses	Programs			
Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006				AEC - Gaming
S000000004	Bob	C000007				AEC - Gaming
S000000004	Bob	C000008				AEC - Gaming
S000000005	Thiago	C000009				AEC - Design
S000000005	Thiago	C000010				AEC - Design
S000000006	James	C000011				AEC - Design
S000000006	James	C000012				AEC - Design
S000000007	Monica	C000013				AEC - Accounting and...
S000000007	Monica	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I		P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

Form2

Student Id	Student Name	Course Id	Course Name
S000000008	Victor	C000011	Accounting II

OK Cancel

Form1

Students	Enrollments	Courses	Programs			
Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

Form2

Student Id: S000000008 Student Name: Victor Course Id: C000012 Course Name: Marketing II

OK Cancel

Form1

Students	Enrollments	Courses	Programs			
Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000012	Marketing II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

SQLQuery16.sql - US...ollege1en (sa (69)) SQLQuery15.sql - US...

```

/***** Script for SelectTopNRows commar
SELECT TOP (1000) [StId]
      , [CId]
      , [FinalGrade]
FROM [College1en].[dbo].[Enrollments]

```

121 %

Results	StId	CId	FinalGrade
1	S000000001	C000001	100
2	S000000001	C000002	80
3	S000000002	C000003	65
4	S000000002	C000004	76
5	S000000003	C000005	93
6	S000000003	C000006	84
7	S000000004	C000005	78
8	S000000004	C000006	85
9	S000000005	C000007	94
10	S000000005	C000008	99
11	S000000006	C000007	77
12	S000000006	C000008	89
13	S000000007	C000009	90
14	S000000007	C000010	98
15	S000000008	C000009	97
16	S000000008	C000010	NULL
17	S000000008	C000012	NULL
18	S000000009	C000013	NULL

- Return to the previous course ID

Form1

Students	Enrollments	Courses	Programs
Student ID	Student Name	Course ID	Course Name
S000000001	John	C000001	Databases
S000000001	John	C000002	C#
S000000002	Mary	C000003	Java
S000000002	Mary	C000004	C++
S000000003	Paul	C000005	Animation
S000000003	Paul	C000006	Game Design
S000000004	Bob	C000005	Animation
S000000004	Bob	C000006	Game Design
S000000005	Thiago	C000007	Design 3D
S000000005	Thiago	C000008	Photoshop
S000000006	James	C000007	Design 3D
S000000006	James	C000008	Photoshop
S000000007	Monica	C000009	Accounting I
S000000007	Monica	C000010	Marketing
S000000008	Victor	C000009	Accounting I
S000000008	Victor	C000010	Marketing
S000000008	Victor	C000012	Marketing II
S000000009	Testing	C000013	Testing I

Form2

Student Id	Student Name	Course Id	Course Name
S000000008	Victor	C000011	Accounting II

OK Cancel

Form1

Students	Enrollments	Courses	Programs
Student ID	Student Name	Course ID	Course Name
S000000001	John	C000001	Databases
S000000001	John	C000002	C#
S000000002	Mary	C000003	Java
S000000002	Mary	C000004	C++
S000000003	Paul	C000005	Animation
S000000003	Paul	C000006	Game Design
S000000004	Bob	C000005	Animation
S000000004	Bob	C000006	Game Design
S000000005	Thiago	C000007	Design 3D
S000000005	Thiago	C000008	Photoshop
S000000006	James	C000007	Design 3D
S000000006	James	C000008	Photoshop
S000000007	Monica	C000009	Accounting I
S000000007	Monica	C000010	Marketing
S000000008	Victor	C000009	Accounting I
S000000008	Victor	C000010	Marketing
S000000008	Victor	C000011	Accounting II
S000000009	Testing	C000013	Testing I

- Edit one row with filled final grade

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

Form2

Student Id: S000000008 Student Name: Victor Course Id: C000009 Course Name: Accounting I

OK Cancel

- Chose a course ID that does not have the same program ID than the student ID



Form1

Students

Enrollments

Courses

Programs

	Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
	S000000001	John	C000001	Databases	100	P0001	AEC - Programming
	S000000001	John	C000002	C#	80	P0001	AEC - Programming
	S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
	S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
	S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
	S000000003	Paul	C000006	Accounting I	90	P0004	AEC - Gaming
	S000000004	Bob	C000007	Marketing	98	P0004	AEC - Gaming
	S000000004	Bob	C000008	Accounting II	97	P0004	AEC - Gaming
	S000000005	Thiago	C000009	Accounting I	97	P0004	AEC - Design
	S000000005	Thiago	C000010	Marketing	98	P0004	AEC - Design
	S000000006	James	C000011	Accounting II	97	P0004	AEC - Design
	S000000006	James	C000012	Accounting I	97	P0004	AEC - Design
	S000000007	Monica	C000013	Testing I	97	P0005	AEC - Accounting and...
	S000000007	Monica	C000014	Testing II	97	P0005	AEC - Accounting and...
	S000000008	Victor	C000015	Accounting I	97	P0004	AEC - Accounting and...
	S000000008	Victor	C000016	Marketing	98	P0004	AEC - Accounting and...
	S000000008	Victor	C000017	Accounting II	97	P0004	AEC - Accounting and...
	S000000009	Testing	C000018	Testing I	97	P0005	AEC - Testing

Form2

Student Id

Student Name

Course Id

Course Name

S000000008

Victor

C000009

Accounting I

OK

Cancel

Form1

Students

Enrollments

Courses

Programs

	Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
	S000000001	John	C000001	Databases	100	P0001	AEC - Programming
	S000000001	John	C000002	C#	80	P0001	AEC - Programming
	S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
	S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
	S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
	S000000003	Paul	C000006	Accounting I	90	P0004	AEC - Gaming
	S000000004	Bob	C000007	Marketing	98	P0004	AEC - Gaming
	S000000004	Bob	C000008	Accounting II	97	P0004	AEC - Gaming
	S000000005	Thiago	C000009	Accounting I	97	P0004	AEC - Design
	S000000005	Thiago	C000010	Marketing	98	P0004	AEC - Design
	S000000006	James	C000011	Accounting II	97	P0004	AEC - Design
	S000000006	James	C000012	Accounting I	97	P0004	AEC - Design
	S000000007	Monica	C000013	Testing I	97	P0005	AEC - Accounting and...
	S000000007	Monica	C000014	Testing II	97	P0005	AEC - Accounting and...
	S000000008	Victor	C000015	Accounting I	97	P0004	AEC - Accounting and...
	S000000008	Victor	C000016	Marketing	98	P0004	AEC - Accounting and...
	S000000008	Victor	C000017	Accounting II	97	P0004	AEC - Accounting and...
	S000000009	Testing	C000018	Testing I	97	P0005	AEC - Testing

Form2

Student Id

Student Name

Course Id

Course Name

S000000008

Victor

C000002

C#

OK

Cancel

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S00000004	Bob	C0000	Accounting I	100	P0001	AEC - Programming
S00000004	Bob	C0000	Accounting I	80	P0001	AEC - Programming
S00000005	Thiago	C0000	Accounting I	65	P0001	AEC - Programming
S00000005	Thiago	C0000	Accounting I	76	P0001	AEC - Programming
S00000006	James	C0000	Accounting I	93	P0002	AEC - Gaming
S00000006	James	C0000	Accounting I	84	P0002	AEC - Gaming
S00000007	Monica	C0000	Accounting I	78	P0002	AEC - Gaming
S00000007	Monica	C0000	Accounting I	85	P0002	AEC - Gaming
S00000007	Monica	C0000	Accounting I	94	P0003	AEC - Design
S00000007	Monica	C0000	Accounting I	99	P0003	AEC - Design
S00000007	Monica	C0000	Accounting I	77	P0003	AEC - Design
S00000007	Monica	C0000	Accounting I	89	P0003	AEC - Design
S00000007	Monica	C0000	Accounting I	90	P0004	AEC - Accounting and...
S00000007	Monica	C0000	Accounting I	98	P0004	AEC - Accounting and...
S00000008	Victor	C00009	Accounting I	97	P0004	AEC - Accounting and...
S00000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S00000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S00000009	Testing	C000013	Testing I		P0005	AEC - Testing

Business Rules: Addition/Modification rejected. Course must be in the same Program of the Student.

OK

Student Id Student Name Course Id Course Name

S000000008 Victor C000002 C#

OK Cancel

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

SQLQuery16.sql - US...ollege1en (sa (69)) - X SQLQuery15.sql - US...

```

/***** Script for SelectTopNRows commai
SELECT TOP (1000) [StId]
      ,[CId]
      ,[FinalGrade]
FROM [College1en].[dbo].[Enrollments]

```

121 %

Results Messages

	StId	CId	FinalGrade
1	S000000001	C000001	100
2	S000000001	C000002	80
3	S000000002	C000003	65
4	S000000002	C000004	76
5	S000000003	C000005	93
6	S000000003	C000006	84
7	S000000004	C000005	78
8	S000000004	C000006	85
9	S000000005	C000007	94
10	S000000005	C000008	99
11	S000000006	C000007	77
12	S000000006	C000008	89
13	S000000007	C000009	90
14	S000000007	C000010	98
15	S000000008	C000009	97
16	S000000008	C000010	NULL
17	S000000008	C000011	NULL
18	S000000009	C000013	NULL

- Select a course ID that has the same program ID than student ID (Not null final grade)

Form1

Students	Enrollments	Courses	Programs			
Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005				AEC - Gaming
S000000003	Paul	C000006				AEC - Gaming
S000000004	Bob	C000005				AEC - Gaming
S000000004	Bob	C000006				AEC - Gaming
S000000005	Thiago	C000007				AEC - Design
S000000005	Thiago	C000008				AEC - Design
S000000006	James	C000007				AEC - Design
S000000006	James	C000008	Microshop	85	P0003	AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

Form2

Student Id	Student Name	Course Id	Course Name
S000000008	Victor	C000012	Marketing II

OK Cancel

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000004	Bob			100	P0001	AEC - Programming
S000000004	Bob			80	P0001	AEC - Programming
S000000005	Thiago			65	P0001	AEC - Programming
S000000005	Thiago			76	P0001	AEC - Programming
S000000006	James					AEC - Gaming
S000000006	James					AEC - Gaming
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

Business Rules: Addition/Modification rejected. Course must be in the same Program of the Student or final grade should be null.

OK

Student Id Student Name Course Id Course Name

S000000008 Victor C000012 Marketing II

OK Cancel

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000004	Bob			100	P0001	AEC - Programming
S000000004	Bob			80	P0001	AEC - Programming
S000000005	Thiago			65	P0001	AEC - Programming
S000000005	Thiago			76	P0001	AEC - Programming
S000000006	James			93	P0002	AEC - Gaming
S000000006	James					AEC - Gaming
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000007	Monica	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

Business Rules: Addition/Modification rejected. Course must be in the same Program of the Student and final grade should be null.

OK

Student Id Student Name Course Id Course Name

S000000008 Victor C000012 Marketing II

OK Cancel

Form1

Students	Enrollments	Courses	Programs				
	Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
	S000000001	John	C000001	Databases	100	P0001	AEC - Programming
	S000000001	John	C000002	C#	80	P0001	AEC - Programming
	S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
	S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
	S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
	S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
	S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
	S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
	S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
	S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
	S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
	S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
	S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
	S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
	S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
	S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
	S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
	S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

SQLQuery17.sql - US...ollege1en (sa (57))    SQLQuery16.sql - US...ollege1en (sa (69))

```

/***** Script for SelectTopNRows command from SSMS *****/
SELECT TOP (1000) [StId]
      ,[CId]
      ,[FinalGrade]
FROM [College1en].[dbo].[Enrollments]

```

121 %

Results    Messages

	StId	CId	FinalGrade
1	S000000001	C000001	100
2	S000000001	C000002	80
3	S000000002	C000003	65
4	S000000002	C000004	76
5	S000000003	C000005	93
6	S000000003	C000006	84
7	S000000004	C000005	78
8	S000000004	C000006	85
9	S000000005	C000007	94
10	S000000005	C000008	99
11	S000000006	C000007	77
12	S000000006	C000008	89
13	S000000007	C000009	90
14	S000000007	C000010	98
15	S000000008	C000009	97
16	S000000008	C000010	NULL
17	S000000008	C000011	NULL
18	S000000009	C000013	NULL

- Manage final grade



Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
S000000005	Thiago	C000008	Photoshop	89	P0003	AEC - Design
S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

Only one line must be selected for update

OK

- Try to edit final grade null

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
S000000005	Thiago	C000008	Photoshop	89	P0003	AEC - Design
S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

Add  
Modify  
Delete  
Manage Final Grade

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
S000000004	Bob					Gaming
S000000005	Thiago					Design
S000000005	Thiago					Design
S000000006	James					Design
S000000006	James					Design
S000000007	Monica					Accounting and...
S000000007	Monica					Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

Form3

Student Id Student Name Course Id Course Name Final Grade

S000000009 Testing C000013 Testing I

OK Cancel

- Leaving empty and clicking ok

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing



SQLQuery16.sql - US...ollege1en (sa (69)) X SQLQuery17.sql - US...oll

```

/***** Script for SelectTopNRows command
SELECT TOP (1000) [StId]
      ,[CId]
      ,[FinalGrade]
FROM [College1en].[dbo].[Enrollments]

```

121 %

Results Messages

	StId	CId	FinalGrade
1	S000000001	C000001	100
2	S000000001	C000002	80
3	S000000002	C000003	65
4	S000000002	C000004	76
5	S000000003	C000005	93
6	S000000003	C000006	84
7	S000000004	C000005	78
8	S000000004	C000006	85
9	S000000005	C000007	94
10	S000000005	C000008	99
11	S000000006	C000007	77
12	S000000006	C000008	89
13	S000000007	C000009	90
14	S000000007	C000010	98
15	S000000008	C000009	97
16	S000000008	C000010	NULL
17	S000000008	C000011	NULL
18	S000000009	C000013	NULL

- Put a number out side of 0 – 100

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob					AEC - Gaming
S000000004	Bob					AEC - Gaming
S000000005	Thiago					AEC - Design
S000000005	Thiago					AEC - Design
S000000006	James					AEC - Design
S000000006	James					AEC - Design
S000000007	Monica					AEC - Accounting and...
S000000007	Monica					AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

Form3

Student Id Student Name Course Id Course Name Final Grade

S000000009 Testing C000013 Testing I -1

OK Cancel

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000000				65	P0001	AEC - Programming
S000000000				76	P0001	AEC - Programming
S000000000				93	P0002	AEC - Gaming
S000000000				84	P0002	AEC - Gaming
S000000000						AEC - Gaming
S000000000						AEC - Gaming
S000000005	Thiago					AEC - Design
S000000005	Thiago					AEC - Design
S000000006	James					AEC - Design
S000000006	James					AEC - Design
S000000007	Monica					AEC - Accounting and...
S000000007	Monica					AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

Business Rules: Final Grade Modification rejected. Final Grade can be empty or int number between 0 - 100

OK

Student Id Student Name Course Id Course Name Final Grade

S000000009 Testing C000013 Testing I .1

OK Cancel

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

Form1

Students	Enrollments	Courses	Programs			
Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul					AEC - Gaming
S000000004	Bob					AEC - Gaming
S000000004	Bob					AEC - Gaming
S000000005	Thiago					AEC - Design
S000000005	Thiago					AEC - Design
S000000005	James					AEC - Design
S000000006	James					AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

Form3

Student Id	Student Name	Course Id	Course Name	Final Grade
S000000009	Testing	C000013	Testing I	101

OK Cancel

Form1

Students	Enrollments	Courses	Programs			
Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul					AEC - Gaming
S000000004	Bob					AEC - Gaming
S000000004	Bob					AEC - Gaming
S000000005	Thiago					AEC - Design
S000000005	Thiago					AEC - Design
S000000006	James					AEC - Design
S000000006	James					AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

Business Rules: Final Grade Modification rejected. Final Grade can be empty or int number between 0 - 100

OK

Form3

Student Id	Student Name	Course Id	Course Name	Final Grade
S000000009	Testing	C000013	Testing I	101

OK Cancel

Form1

Students	Enrollments	Courses	Programs			
Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

- Enter a correct number

Form1

Students	Enrollments	Courses	Programs			
Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob					
S000000004	Bob					
S000000005	Thiago					
S000000005	Thiago					
S000000006	James					
S000000006	James					
S000000007	Monica					
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

Form3

Student Id	Student Name	Course Id	Course Name	Final Grade
S000000009	Testing	C000013	Testing I	99

OK Cancel

Form1

Students	Enrollments	Courses	Programs				
	Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
	S000000001	John	C000001	Databases	100	P0001	AEC - Programming
	S000000001	John	C000002	C#	80	P0001	AEC - Programming
	S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
	S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
	S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
	S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
	S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
	S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
	S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
	S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
	S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
	S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
	S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
	S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
	S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
	S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
	S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
	S000000009	Testing	C000013	Testing I	95	P0005	AEC - Testing

SQLQuery16.sql - US...ollege1en (sa (69)) X SQLQuery17.sql - US...ol

```

/***** Script for SelectTopNRows command
SELECT TOP (1000) [StId]
      ,[CId]
      ,[FinalGrade]
FROM [College1en].[dbo].[Enrollments]

```

Results Messages

	StId	CId	FinalGrade
1	S000000001	C000001	100
2	S000000001	C000002	80
3	S000000002	C000003	65
4	S000000002	C000004	76
5	S000000003	C000005	93
6	S000000003	C000006	84
7	S000000004	C000005	78
8	S000000004	C000006	85
9	S000000005	C000007	94
10	S000000005	C000008	99
11	S000000006	C000007	77
12	S000000006	C000008	89
13	S000000007	C000009	90
14	S000000007	C000010	98
15	S000000008	C000009	97
16	S000000008	C000010	NULL
17	S000000008	C000011	NULL
18	S000000009	C000013	95

- Trying to modify

Form1

Students Enrollments Courses Programs

Business Rules: Addition/Modification rejected. Course must be in the same Program of the Student and final grade should be null.

OK

Student Id	Student Name	Course Id	Course Name	Final Grade	Program ID	Program Name
S000000003	Paul	C00000001	Databases	100	P0001	AEC - Programming
S000000004	Bob	C00000002	C#	80	P0001	AEC - Programming
S000000004	Bob	C00000003	Java	65	P0001	AEC - Programming
S000000005	Thiago	C00000004	C++	76	P0001	AEC - Programming
S000000005	Thiago	C00000005	Animation	93	P0002	AEC - Gaming
S000000006	James	C00000006	Game Design	84	P0002	AEC - Gaming
S000000006	James	C00000005	Animation	78	P0002	AEC - Gaming
S000000007	Monica	C00000006	Game Design	85	P0002	AEC - Gaming
S000000008	Victor	C00000010	Marketing		P0004	AEC - Design
S000000008	Victor	C00000011	Accounting II		P0004	AEC - Design
S000000009	Testing	C000013	Testing I	95	P0005	AEC - Design

Student Id: S000000009 Student Name: Testing Course Id: C000012 Course Name: Marketing II

OK Cancel

## - Returning to null

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C00000001	Databases	100	P0001	AEC - Programming
S000000001	John	C00000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C00000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C00000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C00000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C00000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob	C00000005	Animation	78	P0002	AEC - Gaming
S000000004	Bob	C00000006	Game Design	85	P0002	AEC - Gaming
S000000005	Thiago					AEC - Design
S000000005	Thiago					AEC - Design
S000000006	James					AEC - Design
S000000006	James					AEC - Design
S000000007	Monica					AEC - Design
S000000007	Monica					AEC - Design
S000000008	Victor					AEC - Design
S000000008	Victor					AEC - Design
S000000008	Victor					AEC - Design
S000000008	Victor					AEC - Design
S000000009	Testing	C000013	Testing I	95	P0005	AEC - Testing

Form3

Student Id: S000000009 Student Name: Testing Course Id: C000013 Course Name: Testing I Final Grade:

OK Cancel

Form1

Students	Enrollments	Courses	Programs			
Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

- Delete enrollment

Form1

Students	Enrollments	Courses	Programs				
	<div><div>Add</div><div>Modify</div><div>Delete</div><div>Manage Final Grade</div></div>						
		Course ID	Course Name	Final Grade	Program ID	Program Name	
	S000	C000001	Databases	100	P0001	AEC - Programming	
	S000	C000002	C#	80	P0001	AEC - Programming	
	S000	C000003	Java	65	P0001	AEC - Programming	
	S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
	S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
	S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
	S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
	S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
	S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
	S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
	S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
	S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
	S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
	S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
	S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
	S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
	S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
	S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

- Delete enrolment without select a row

Form1

Students	Enrollments	Courses	Programs			
Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
S000000005	Thiago	C000007	Design 3D			AEC - Design
S000000005	Thiago	C000008	Photoshop			AEC - Design
S000000006	James	C000007	Design 3D			AEC - Design
S000000006	James	C000008	Photoshop			AEC - Design
S000000007	Monica	C000009	Accounting			AEC - Accounting and...
S000000007	Monica	C000010	Marketing			AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

At least one line must be selected for deletion

OK

- Try to delete one row with not null final grade

Form1

Students	Enrollments	Courses	Programs				
	<div><div>Add</div><div>Modify</div><div>Delete</div><div>Manage Final Grade</div></div>						
		Course ID	Course Name	Final Grade	Program ID	Program Name	
	S000		C000001	Databases	100	P0001	AEC - Programming
	S000		C000002	C#	80	P0001	AEC - Programming
	S000		C000003	Java	65	P0001	AEC - Programming
	S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
	S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
	S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
	S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
	S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
	S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
	S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
	S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
	S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
	S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
	S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
	S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
	S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
	S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
	S000000009	Testing	C000013	Testing I		P0005	AEC - Testing



Form1

Students Enrollments Courses Programs

	Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
	S000000001	John	C000001	Databases	100	P0001	AEC - Programming
	S000000001	John	C000002	C#	80	P0001	AEC - Programming
	S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
	S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
	S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
	S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
	S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
	S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
	S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
	S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
	S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
	S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
	S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
	S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
▶	S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
	S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
	S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
	S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

Business Rules: Deletion rejected. The One or more Final Grade is already set.

OK

Form1

Students Enrollments Courses Programs

	Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
	S000000001	John	C000001	Databases	100	P0001	AEC - Programming
	S000000001	John	C000002	C#	80	P0001	AEC - Programming
	S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
	S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
	S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
	S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
	S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
	S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
	S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
	S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
	S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
	S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
	S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
	S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
▶	S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
	S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
	S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
	S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

SQLQuery16.sql - US...ollege1en (sa (69)) X SQLQuery17.sql - US...ol

```

/***** Script for SelectTopNRows comman
SELECT TOP (1000) [StId]
      ,[CId]
      ,[FinalGrade]
FROM [College1en].[dbo].[Enrollments]

```

121 %

Results Messages

	StId	CId	FinalGrade
1	S000000001	C000001	100
2	S000000001	C000002	80
3	S000000002	C000003	65
4	S000000002	C000004	76
5	S000000003	C000005	93
6	S000000003	C000006	84
7	S000000004	C000005	78
8	S000000004	C000006	85
9	S000000005	C000007	94
10	S000000005	C000008	99
11	S000000006	C000007	77
12	S000000006	C000008	89
13	S000000007	C000009	90
14	S000000007	C000010	98
15	S000000008	C000009	97
16	S000000008	C000010	NULL
17	S000000008	C000011	NULL
18	S000000009	C000013	NULL

- Try to delete more than one row that there is one or more not null final grade

Form1

Students Enrollments Courses Programs

Stud	Add	Course ID	Course Name	Final Grade	Program ID	Program Name
S000	Modify	C000001	Databases	100	P0001	AEC - Programming
S000	Delete	C000002	C#	80	P0001	AEC - Programming
S000	Manage Final Grade	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

Form1

Students	Enrollments	Courses	Programs				
	Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
	S000000001	John	C000001	Databases	100	P0001	AEC - Programming
	S000000001	John	C000002	C#	80	P0001	AEC - Programming
	S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
	S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
	S000000003	Paul	C000005				AEC - Gaming
	S000000003	Paul	C000006				AEC - Gaming
	S000000004	Bob	C000005				AEC - Gaming
	S000000004	Bob	C000006				AEC - Gaming
	S000000005	Thiago	C000007				AEC - Design
	S000000005	Thiago	C000008				AEC - Design
	S000000006	James	C000007				AEC - Design
	S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
	S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
	S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
	S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
	S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
	S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
	S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

Business Rules: Deletion rejected. The One or more Final Grade is already set.

OK

Form1

Students	Enrollments	Courses	Programs				
	Student ID ▲	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
	S000000001	John	C000001	Databases	100	P0001	AEC - Programming
	S000000001	John	C000002	C#	80	P0001	AEC - Programming
	S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
	S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
	S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
	S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
	S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
	S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
	S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
	S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
	S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
	S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
	S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
▶	S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
	S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
	S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
	S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
	S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

SQLQuery16.sql - US...ollege1en (sa (69)) x SQLQuery17.sql - US...o

```

/***** Script for SelectTopNRows commar
SELECT TOP (1000) [StId]
      , [CId]
      , [FinalGrade]
FROM [College1en].[dbo].[Enrollments]

```

121 %

Results Messages

	StId	CId	FinalGrade
1	S000000001	C000001	100
2	S000000001	C000002	80
3	S000000002	C000003	65
4	S000000002	C000004	76
5	S000000003	C000005	93
6	S000000003	C000006	84
7	S000000004	C000005	78
8	S000000004	C000006	85
9	S000000005	C000007	94
10	S000000005	C000008	99
11	S000000006	C000007	77
12	S000000006	C000008	89
13	S000000007	C000009	90
14	S000000007	C000010	98
15	S000000008	C000009	97
16	S000000008	C000010	NULL
17	S000000008	C000011	NULL
18	S000000009	C000013	NULL

- Delete one row with final grade null

Form1

Students Enrollments Courses Programs

Stud	Add Modify Delete Manage Final Grade	Course ID	Course Name	Final Grade	Program ID	Program Name
S000		C000001	Databases	100	P0001	AEC - Programming
S000		C000002	C#	80	P0001	AEC - Programming
S000		C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...
S000000009	Testing	C000013	Testing I		P0005	AEC - Testing

Form1

Students

Enrollments

Courses

Programs

	Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
	S000000001	John	C000001	Databases	100	P0001	AEC - Programming
	S000000001	John	C000002	C#	80	P0001	AEC - Programming
	S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
	S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
	S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
	S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
	S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
	S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
	S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
	S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
	S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
	S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
	S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
	S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
	S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
	S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
	S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...

SQLQuery16.sql - US...ollege1en (sa (69))

SQLQuery17.sql - US...oll

```

/***** Script for SelectTopNRows command
SELECT TOP (1000) [StId]
      ,[CId]
      ,[FinalGrade]
FROM [College1en].[dbo].[Enrollments]

```

121 %

Results Messages

	StId	CId	FinalGrade
1	S000000001	C000001	100
2	S000000001	C000002	80
3	S000000002	C000003	65
4	S000000002	C000004	76
5	S000000003	C000005	93
6	S000000003	C000006	84
7	S000000004	C000005	78
8	S000000004	C000006	85
9	S000000005	C000007	94
10	S000000005	C000008	99
11	S000000006	C000007	77
12	S000000006	C000008	89
13	S000000007	C000009	90
14	S000000007	C000010	98
15	S000000008	C000009	97
16	S000000008	C000010	NULL
17	S000000008	C000011	NULL

- Delete more than one row

Form1

Students Enrollments Courses Programs

Stud	Add Modify Delete Manage Final Grade	Course ID	Course Name	Final Grade	Program ID	Program Name
S000		C000001	Databases	100	P0001	AEC - Programming
S000		C000002	C#	80	P0001	AEC - Programming
S000		C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...
S000000008	Victor	C000010	Marketing		P0004	AEC - Accounting and...
S000000008	Victor	C000011	Accounting II		P0004	AEC - Accounting and...

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
S000000001	John	C000001	Databases	100	P0001	AEC - Programming
S000000001	John	C000002	C#	80	P0001	AEC - Programming
S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
S000000007	Monica	C000009	Accounting I	90	P0004	AEC - Accounting and...
S000000007	Monica	C000010	Marketing	98	P0004	AEC - Accounting and...
S000000008	Victor	C000009	Accounting I	97	P0004	AEC - Accounting and...

SQLQuery16.sql - US...ollege1en (sa (69)) X SQL

```

/***** Script for SelectTop
SELECT TOP (1000) [StId]
      , [CId]
      , [FinalGrade]
FROM [College1en].[dbo].[E

```

121 %

Results Messages

	StId	CId	FinalGrade
1	S000000001	C000001	100
2	S000000001	C000002	80
3	S000000002	C000003	65
4	S000000002	C000004	76
5	S000000003	C000005	93
6	S000000003	C000006	84
7	S000000004	C000005	78
8	S000000004	C000006	85
9	S000000005	C000007	94
10	S000000005	C000008	99
11	S000000006	C000007	77
12	S000000006	C000008	89
13	S000000007	C000009	90
14	S000000007	C000010	98
15	S000000008	C000009	97

## - Modify student

Form1

Students Enrollments Courses Programs

	Student ID	Student Name	Program ID
	S000000001	John	P0001
	S000000002	Mary	P0001
	S000000003	Paul	P0002
	S000000004	Bob	P0002
	S000000005	Thiago	P0003
	S000000006	James	P0003
	S000000007	Monica	P0004
	S000000008	Victor	P0004
	S000000009	Testing 22222	P0005
*			

Form1

Students Enrollments Courses Programs

	Student ID	Student Name	Program ID
	S000000001	John	P0001
	S000000002	Mary	P0001
	S000000003	Paul	P0002
	S000000004	Bob	P0002
	S000000005	Thiago	P0003
	S000000006	James	P0003
	S000000007	Monica	P0004
	S000000008	Victor	P0004
	S000000009	Testing 22222	P0005
**			

SQLQuery18.sql - US...ollege1en (sa (70))

```

/***** Script for SelectTop
SELECT TOP (1000) [StId]
      ,[StName]
      ,[ProgId]
FROM [College1en].[dbo].[StId]

```

121 %

Results Messages

	StId	StName	ProgId
1	S000000001	John	P0001
2	S000000002	Mary	P0001
3	S000000003	Paul	P0002
4	S000000004	Bob	P0002
5	S000000005	Thiago	P0003
6	S000000006	James	P0003
7	S000000007	Monica	P0004
8	S000000008	Victor	P0004
9	S000000009	Testing 22222	P0005

## - Delete student

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Program ID
S000000001	John	P0001
S000000002	Mary	P0001
S000000003	Paul	P0002
S000000004	Bob	P0002
S000000005	Thiago	P0003
S000000006	James	P0003
S000000007	Monica	P0004
S000000008	Victor	P0004
S000000009	Testing 22222	P0005
*		

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Program ID
S000000001	John	P0001
S000000002	Mary	P0001
S000000003	Paul	P0002
S000000004	Bob	P0002
S000000005	Thiago	P0003
S000000006	James	P0003
S000000007	Monica	P0004
S000000008	Victor	P0004
*		



SQLQuery18.sql - US...ollege1en (sa (70)) SQLQuery16.sql - US...

```

/***** Script for SelectTopNRows.com
SELECT TOP (1000) [StId]
      ,[StName]
      ,[ProgId]
FROM [College1en].[dbo].[Students]

```

121 %

Results Messages

	StId	StName	ProgId
1	S000000001	John	P0001
2	S000000002	Mary	P0001
3	S000000003	Paul	P0002
4	S000000004	Bob	P0002
5	S000000005	Thiago	P0003
6	S000000006	James	P0003
7	S000000007	Monica	P0004
8	S000000008	Victor	P0004

## - Update course

Form1

Students Enrollments Courses Programs

Course ID	Course Name	Program ID
C000001	Databases	P0001
C000002	C#	P0001
C000003	Java	P0001
C000004	C++	P0001
C000005	Animation	P0002
C000006	Game Design	P0002
C000007	Design 3D	P0003
C000008	Photoshop	P0003
C000009	Accounting I	P0004
C000010	Marketing	P0004
C000011	Accounting II	P0004
C000012	Marketing II	P0004
C000013	Testing I 3333333333333	P0005

Form1

Students Enrollments Courses Programs

Course ID	Course Name	Program ID
C000001	Databases	P0001
C000002	C#	P0001
C000003	Java	P0001
C000004	C++	P0001
C000005	Animation	P0002
C000006	Game Design	P0002
C000007	Design 3D	P0003
C000008	Photoshop	P0003
C000009	Accounting I	P0004
C000010	Marketing	P0004
C000011	Accounting II	P0004
C000012	Marketing II	P0004
C000013	Testing I 3333333333333	P0005

SQLQuery19.sql - US...ollege1en (sa (71)) SQLQuery18.sql

```

/***** Script for SelectTopNRows co
SELECT TOP (1000) [CId]
      , [CName]
      , [ProgId]
FROM [College1en].[dbo].[Courses]

```

121 %

Results Messages

	CId	CName	ProgId
1	C000001	Databases	P0001
2	C000002	C#	P0001
3	C000003	Java	P0001
4	C000004	C++	P0001
5	C000005	Animation	P0002
6	C000006	Game Design	P0002
7	C000007	Design 3D	P0003
8	C000008	Photoshop	P0003
9	C000009	Accounting I	P0004
10	C000010	Marketing	P0004
11	C000011	Accounting II	P0004
12	C000012	Marketing II	P0004
13	C000013	Testing I 33333333...	P0005

- Delete course

Form1

Students Enrollments Courses Programs

	Course ID	Course Name	Program ID
	C000001	Databases	P0001
	C000002	C#	P0001
	C000003	Java	P0001
	C000004	C++	P0001
	C000005	Animation	P0002
	C000006	Game Design	P0002
	C000007	Design 3D	P0003
	C000008	Photoshop	P0003
	C000009	Accounting I	P0004
	C000010	Marketing	P0004
	C000011	Accounting II	P0004
▶	C000012	Marketing II	P0004
*			

SQLQuery19.sql - US...ollege1en (sa (71)) SQLQuery18.sql

```

/***** Script for SelectTopNRows co
SELECT TOP (1000) [CId]
      ,[CName]
      ,[ProgId]
FROM [College1en].[dbo].[Courses]

```

121 %

Results Messages

	CId	CName	ProgId
1	C000001	Databases	P0001
2	C000002	C#	P0001
3	C000003	Java	P0001
4	C000004	C++	P0001
5	C000005	Animation	P0002
6	C000006	Game Design	P0002
7	C000007	Design 3D	P0003
8	C000008	Photoshop	P0003
9	C000009	Accounting I	P0004
10	C000010	Marketing	P0004
11	C000011	Accounting II	P0004
12	C000012	Marketing II	P0004

## - Update Program

Form1

Students Enrollments Courses Programs

Program ID	Program Name
P0001	AEC - Programming
P0002	AEC - Gaming
P0003	AEC - Design
P0004	AEC - Accounting and Management
P0005	AEC - Testing 55555
*	

Form1

Students Enrollments Courses Programs

Program ID	Program Name
P0001	AEC - Programming
P0002	AEC - Gaming
P0003	AEC - Design
P0004	AEC - Accounting and Management
P0005	AEC - Testing 55555
**	

SQLQuery20.sql - US...ollege1en (sa (72)) SQLQuery19.sql - l

```

/***** Script for SelectTopNRows con
SELECT TOP (1000) [ProgId]
      ,[ProgName]
FROM [College1en].[dbo].[Programs]

```

121 %

Results Messages

	ProgId	ProgName
1	P0004	AEC - Accounting and Management
2	P0003	AEC - Design
3	P0002	AEC - Gaming
4	P0001	AEC - Programming
5	P0005	AEC - Testing 55555

- Delete program

Form1

Students Enrollments Courses Programs

Program ID	Program Name
P0001	AEC - Programming
P0002	AEC - Gaming
P0003	AEC - Design
P0004	AEC - Accounting and Management
P0005	AEC - Testing 55555

Form1

Students Enrollments Courses Programs

Program ID	Program Name
P0001	AEC - Programming
P0002	AEC - Gaming
P0003	AEC - Design
P0004	AEC - Accounting and Management

SQLQuery24.sql - US...ollege1en (sa (73)) SQLQuery23.sql - US

```

/***** Script for SelectTopNRows comm
SELECT TOP (1000) [ProgId]
      ,[ProgName]
FROM [College1en].[dbo].[Programs]

```

121 %

Results Messages

	ProgId	ProgName
1	P0004	AEC - Accounting and Management
2	P0003	AEC - Design
3	P0002	AEC - Gaming
4	P0001	AEC - Programming

- Modify the Program ID and propagating for student, course ID and enrollment

Form1

Students Enrollments Courses Programs

Program ID	Program Name
P0001	AEC - Programming
P0002	AEC - Gaming
P0003	AEC - Design
P0004	AEC - Accounting and Management
*	

Form1

Students Enrollments Courses Programs

Program ID	Program Name
P0001	AEC - Programming
P0002	AEC - Gaming
P0003	AEC - Design
P0005	AEC - Accounting and Management
*	

Form1

Students Enrollments Courses Programs

Program ID	Program Name
P0001	AEC - Programming
P0002	AEC - Gaming
P0003	AEC - Design
P0005	AEC - Accounting and Management
**	

Form1

Students Enrollments Courses Programs

Course ID	Course Name	Program ID
C000001	Databases	P0001
C000002	C#	P0001
C000003	Java	P0001
C000004	C++	P0001
C000005	Animation	P0002
C000006	Game Design	P0002
C000007	Design 3D	P0003
C000008	Photoshop	P0003
C000009	Accounting I	P0005
C000010	Marketing	P0005
C000011	Accounting II	P0005
C000012	Marketing II	P0005
*		

Form1

Students Enrollments Courses Programs

Student ID	Student Name	Program ID
S000000001	John	P0001
S000000002	Mary	P0001
S000000003	Paul	P0002
S000000004	Bob	P0002
S000000005	Thiago	P0003
S000000006	James	P0003
S000000007	Monica	P0005
S000000008	Victor	P0005
*		

Students Enrollments Courses Programs

	Student ID	Student Name	Course ID	Course Name	Final Grade	Program ID	Program Name
	S000000001	John	C000001	Databases	100	P0001	AEC - Programming
	S000000001	John	C000002	C#	80	P0001	AEC - Programming
	S000000002	Mary	C000003	Java	65	P0001	AEC - Programming
	S000000002	Mary	C000004	C++	76	P0001	AEC - Programming
	S000000003	Paul	C000005	Animation	93	P0002	AEC - Gaming
	S000000003	Paul	C000006	Game Design	84	P0002	AEC - Gaming
	S000000004	Bob	C000005	Animation	78	P0002	AEC - Gaming
	S000000004	Bob	C000006	Game Design	85	P0002	AEC - Gaming
	S000000005	Thiago	C000007	Design 3D	94	P0003	AEC - Design
	S000000005	Thiago	C000008	Photoshop	99	P0003	AEC - Design
	S000000006	James	C000007	Design 3D	77	P0003	AEC - Design
	S000000006	James	C000008	Photoshop	89	P0003	AEC - Design
	S000000007	Monica	C000009	Accounting I	90	P0005	AEC - Accounting and...
	S000000007	Monica	C000010	Marketing	98	P0005	AEC - Accounting and...
	S000000008	Victor	C000009	Accounting I	97	P0005	AEC - Accounting and...
	S000000008	Victor	C000010	Marketing		P0005	AEC - Accounting and...
▶	S000000008	Victor	C000012	Marketing II		P0005	AEC - Accounting and...