

Lab 12: Stored Procedures

1:

```

CREATE PROCEDURE dbo.Lab12SP(@TeachingFaculty AS VARCHAR(30), @Student AS VARCHAR(20),
@Course AS INTEGER, @FinalNumericGrade AS DECIMAL(5,2))
AS
    BEGIN
        DECLARE @oldgrade AS INTEGER
        SET @oldgrade = (SELECT FinalGrade FROM CourseEnrollment WHERE CourseId = @Course AND
StudentID = @Student)

        IF EXISTS (SELECT Faculty FROM Courses WHERE Faculty = @TeachingFaculty)
        BEGIN
            IF EXISTS(SELECT StudentId FROM CourseEnrollment WHERE StudentId = @Student)
                BEGIN
                    IF EXISTS(SELECT CourseId FROM CourseEnrollment WHERE CourseId =
@Course)
                        BEGIN
                            PRINT 'Sucess, Student's existing grade ' +
CONVERT(VARCHAR(30),@oldgrade) + 'was changed to ' + CONVERT(VARCHAR(30),@FinalNumericGrade)
                            UPDATE CourseEnrollment
                                SET FinalGrade = @FinalNumericGrade
                                WHERE CourseId = @Course
                        END
                    ELSE
                        BEGIN
                            PRINT 'Sucess'
                            UPDATE CourseEnrollment
                                SET FinalGrade = @FinalNumericGrade
                                WHERE CourseID = @Course
                        END
                END
            ELSE
                BEGIN
                    PRINT 'Error: The student is not taking the course you specified.'
                END
        END
    ELSE
        BEGIN
            PRINT 'Error: You are not allowed to assign grades for this course'
        END
    END;

```

```
CREATE PROCEDURE dbo.Lab12SP(@TeachingFaculty AS VARCHAR(30), @Student AS VARCHAR(20),
@Course AS INTEGER, @FinalNumericGrade AS DECIMAL(5,2))
AS
BEGIN
    DECLARE @oldgrade AS INTEGER
    SET @oldgrade = (SELECT FinalGrade FROM CourseEnrollment WHERE CourseId = @Course AND StudentID = @Student)

    IF EXISTS (SELECT Faculty FROM Courses WHERE Faculty = @TeachingFaculty)
    BEGIN
        IF EXISTS(SELECT StudentId FROM CourseEnrollment WHERE StudentId = @Student)
        BEGIN
            IF EXISTS(SELECT CourseId FROM CourseEnrollment WHERE CourseId = @Course)
            BEGIN
                PRINT 'Success, Student's existing grade ' + CONVERT(VARCHAR(30),@oldgrade) + 'was changed to ' + CONVERT(VARCHAR(30),@FinalNumericGrade)
                UPDATE CourseEnrollment
                SET FinalGrade = @FinalNumericGrade
                WHERE CourseId = @Course
            END
        END
    ELSE
        BEGIN
            PRINT 'Success'
            UPDATE CourseEnrollment
            SET FinalGrade = @FinalNumericGrade
            WHERE CourseID = @Course
        END
    END
    BEGIN
        PRINT 'Error: The student is not taking the course you specified.'
    END
END
ELSE
    BEGIN
        PRINT 'Error: You are not allowed to assign grades for this course'
    END
END;
```

100 %

Messages

Command(s) completed successfully.

100 %

Query executed successfully.

LCS-VC-MSSQL-01.ad.syr.edu ... ssingh11 (56) ssingh11Database 00:00:00 0 rows

a)

```
EXEC LAB12SP '01-HJPotter', 'RBWeasly', 1, 96;
```

SQLQuery3.sql - LCS-VC-MSSQL-01.ad.syr.edu.ssingh11Database (ssingh11 (52))*

```
EXEC LAB12SP '01-HJPotter', 'RBWeasly', 1, 96;
```

100 %

Messages

Error: You are not allowed to assign grades for this course

100 %

Qu... LCS-VC-MSSQL-01.ad.syr.edu ... ssingh11 (52) ssingh11Database 00:00:00 0 rows

b)

```
EXEC LAB12SP '11-Fflitwick', 'RBWeasly', 5, 96;
```

SQLQuery3.sql - LCS-VC-MSSQL-01.ad.syr.edu.ssingh11Database (ssingh11 (55))*

```
EXEC LAB12SP '11-Fflitwick', 'RBWeasly', 5, 96;
```

100 %

Messages

Error: The student is not taking the course you specified.

100 %

LCS-VC-MSSQL-01.ad.syr.edu ... ssingh11 (55) ssingh11Database 00:00:00 0 rows

c)

SQLQuery2.sql - LCS-VC-MSSQL-01.ad.syr.edu.ssingh11D...*

```
SELECT *  
FROM CourseEnrollment;
```

100 %

Results Messages

	EnrollmentId	StudentId	Courseld	FinalGrade
1	1	01-HJPotter	1	98.00
2	2	01-HJPotter	4	91.00
3	3	03-HJGranger	1	95.00
4	4	03-HJGranger	4	95.00
5	5	02-RBWeasley	1	98.00
6	6	02-RBWeasley	4	88.00
7	7	01-HJPotter	2	95.00
8	8	03-HJGranger	6	NULL

1.ad.syr.edu ... ssingh11 (54) ssingh11Database 00:00:00 8 rows

```
EXEC dbo.LAB12SP '11-Fflitwick', '01-HJPotter',2,100;
```

SQLQuery3.sql - LCS-VC-MSSQL-01.ad.syr.edu.ssingh11Database (ssingh11 (55))*

```
EXEC dbo.LAB12SP '11-Fflitwick', '01-HJPotter',2,100;
```

100 %

Messages

Sucess, Student's existing grade 95was changed to 100.00

(1 row(s) affected)

100 %

LCS-VC-MSSQL-01.ad.syr.edu ... ssingh11 (55) ssingh11Database 00:00:00 0 rows

SQLQuery2.sql - LCS-VC-MSSQL-01.ad.syr.edu.ssingh11D...*

```
SELECT *  
FROM CourseEnrollment;
```

100 %

Results Messages

	EnrollmentId	StudentId	Courseld	FinalGrade
1	1	01-HJPotter	1	98.00
2	2	01-HJPotter	4	95.00
3	3	03-HJGranger	1	95.00
4	4	03-HJGranger	4	95.00
5	5	02-RBWeasley	1	98.00
6	6	02-RBWeasley	4	95.00
7	7	01-HJPotter	2	100.00
8	8	03-HJGranger	6	NULL

1.ad.syr.edu ... ssingh11 (54) ssingh11Database 00:00:00 8 rows

d)

SQLQuery2.sql - LCS-VC-MSSQL-01.ad.syr.edu.ssingh11D...*

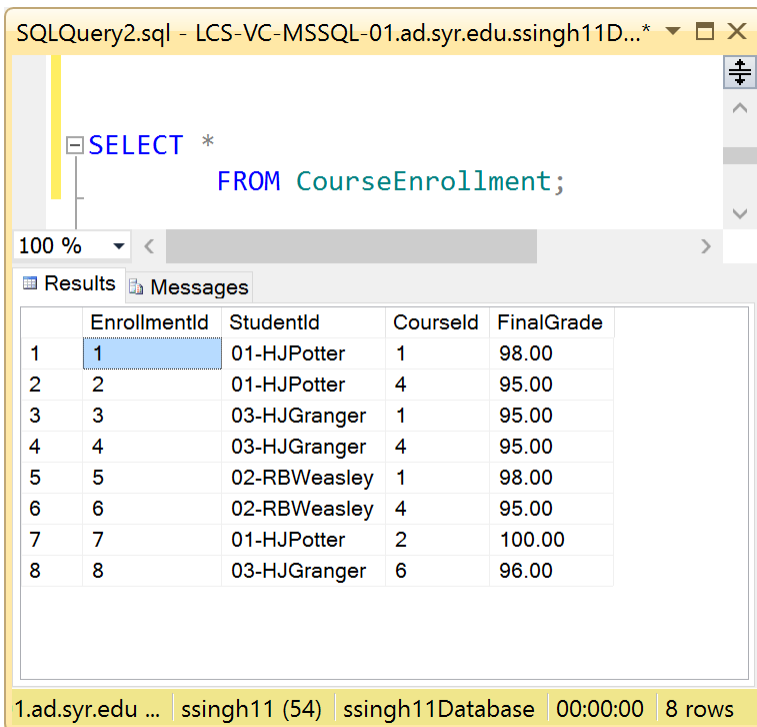
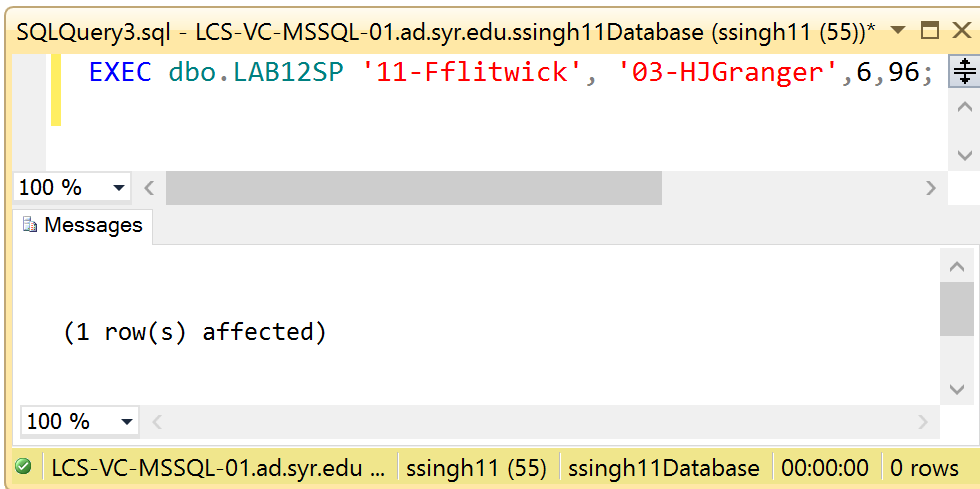
```
SELECT *  
FROM CourseEnrollment;
```

100 %

Results Messages

	EnrollmentId	StudentId	Courseld	FinalGrade
1	1	01-HJPotter	1	98.00
2	2	01-HJPotter	4	95.00
3	3	03-HJGranger	1	95.00
4	4	03-HJGranger	4	95.00
5	5	02-RBWeasley	1	98.00
6	6	02-RBWeasley	4	95.00
7	7	01-HJPotter	2	100.00
8	8	03-HJGranger	6	NULL

1.ad.syr.edu ... ssingh11 (54) ssingh11Database 00:00:00 8 rows



3.

```
CREATE PROCEDURE dbo.SPJoin
AS
BEGIN
SELECT *
    FROM Courses c INNER JOIN CourseEnrollment ce
    ON c.CourseId = ce.CourseId

END;
```

SQLQuery1.sql - LCS-VC-MSSQL-01.ad.syr.edu.ssingh11Database (ssingh11 (52))*

```

CREATE PROCEDURE dbo.SPJoin
AS
BEGIN
SELECT *
        FROM Courses c INNER JOIN CourseEnrollment ce
        ON c.CourseId = ce.CourseId
END;

```

100 %

Messages

Command(s) completed successfully.

100 %

Query executed successfully. LCS-VC-MSSQL-01.ad.syr.edu ... ssingh11 (52) ssingh11Database 00:00:00 0 rows

SQLQuery2.sql - LCS-VC-MSSQL-01.ad.syr.edu.ssingh11Database (ssingh11 (53))*

```

EXEC SPJoin;

```

100 %

Results Messages

	CourseId	CourseCode	CourseTitle	Faculty	OpenSeats	EnrollmentId	StudentId	CourseId	FinalGrade
1	1	DADA101	Defence Against the Dark Arts BASIC	16-Rhagrid	3	1	01-HJPotter	1	98.00
2	4	CHMS101	Charms BASIC	11-Fflitwick	2	2	01-HJPotter	4	95.00
3	1	DADA101	Defence Against the Dark Arts BASIC	16-Rhagrid	3	3	03-HJGranger	1	95.00
4	4	CHMS101	Charms BASIC	11-Fflitwick	2	4	03-HJGranger	4	95.00
5	1	DADA101	Defence Against the Dark Arts BASIC	16-Rhagrid	3	5	02-RBWeasley	1	98.00
6	4	CHMS101	Charms BASIC	11-Fflitwick	2	6	02-RBWeasley	4	95.00
7	2	DADA201	Defence Against the Dark Arts INTERMEDIATE	16-Rhagrid	2	7	01-HJPotter	2	100.00
8	6	CHMS301	Charms ADVANCED	11-Fflitwick	4	8	03-HJGranger	6	96.00

Query executed successfully. LCS-VC-MSSQL-01.ad.syr.edu ... ssingh11 (53) ssingh11Database 00:00:00 8 rows