

Lab 16: Cursors

1.

```
CREATE FUNCTION dbo.LAB16(@studentid VARCHAR(100))
RETURNS DECIMAL(5,2)
AS
BEGIN

    DECLARE @TotalGrade INT;
    DECLARE @temp INT;
    DECLARE @avg DECIMAL(5,2);
    DECLARE @count INT;
    DECLARE labcursor16 CURSOR FOR
        SELECT FinalGrade
           FROM dbo.CourseEnrollment
          WHERE CourseEnrollment.StudentId = @studentid;

    SET @TotalGrade = 0;
    SET @count = 0;
    OPEN labcursor16;
    FETCH NEXT FROM labcursor16 INTO @temp

    WHILE @@FETCH_STATUS=0
    BEGIN

        SET @TotalGrade = @TotalGrade + @temp;
        SET @count= @count + 1;

        FETCH NEXT FROM labcursor16 INTO @temp
    END
    SET @avg=@TotalGrade/@count
    CLOSE labcursor16
    DEALLOCATE labcursor16

    RETURN @avg;
END
```

```
CREATE FUNCTION dbo.CalculateAverageGrade(@studentid VARCHAR(100))
RETURNS DECIMAL(5,2)
AS
BEGIN

    DECLARE @TotalGrade INT;
    DECLARE @temp INT;
    DECLARE @avg DECIMAL(5,2);
    DECLARE @count INT;
    DECLARE labcursor16 CURSOR FOR
        SELECT FinalGrade
        FROM dbo.CourseEnrollment
        WHERE CourseEnrollment.StudentId = @studentid;

    SET @TotalGrade = 0;
    SET @count = 0;
    OPEN labcursor16;
    FETCH NEXT FROM labcursor16 INTO @temp

    WHILE @@FETCH_STATUS=0
    BEGIN

        SET @TotalGrade = @TotalGrade + @temp;
        SET @count = @count + 1;

        FETCH NEXT FROM labcursor16 INTO @temp
    END
    SET @avg=@TotalGrade/@count
    CLOSE labcursor16
    DEALLOCATE labcursor16

    RETURN @avg;
END
```

100 %

Messages

Command(s) completed successfully.

100 %

Query executed successfully.

LCS-VC-MSSQL-01.ad.syr.edu ... ssingh11 (93) ssingh11Database 00:00:00 0 rows

2. `SELECT * FROM CourseEnrollment;`
`SELECT dbo.CalculateAverageGrade('01-HJPotter') AS AverageGrade ;`

prac1ab16.sql - LCS-VC-MSSQL-01.ad.syr.edu.ssingh11Database (ssingh11 (74))*

```
SELECT * FROM CourseEnrollment;  
SELECT dbo.CalculateAverageGrade('01-HJPotter') AS AverageGrade ;
```

100 %

Results Messages

	EnrollmentId	StudentId	CourseId	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	1	100.00
8	8	03-HJGranger	6	96.00

	AverageGrade
1	97.00

Query executed successfully | LCS-VC-MSSQL-01.ad.syr.edu ... | ssingh11 (74) | ssingh11Database | 00:00:00 | 9 rows