

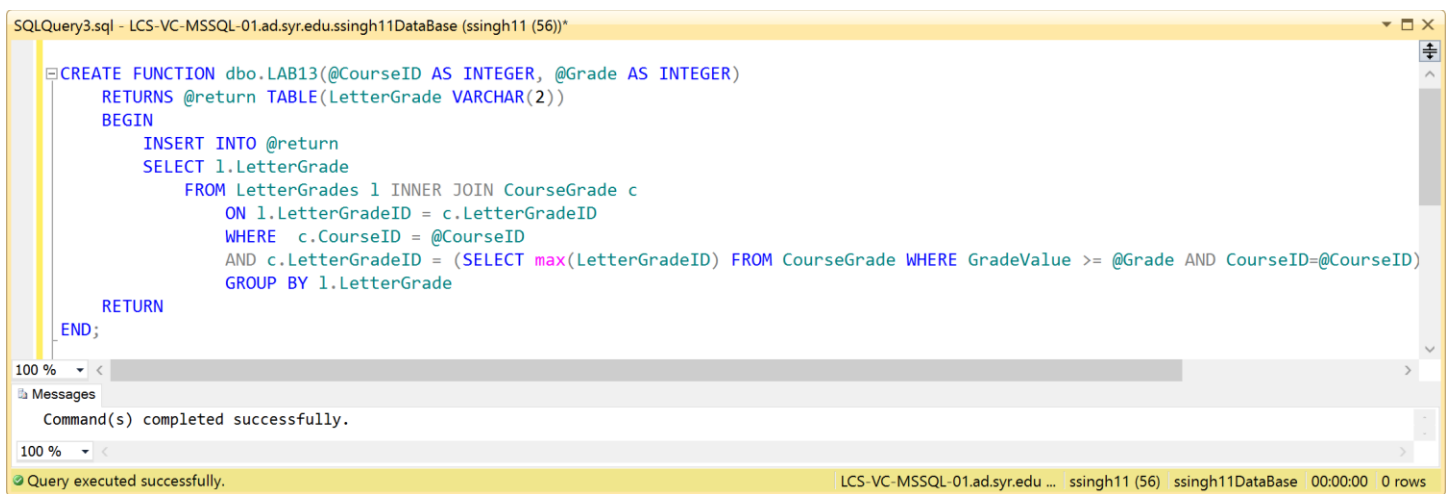
LAB 13: Functions

```

1. CREATE FUNCTION dbo.LAB13 (@CourseID AS INTEGER, @Grade AS INTEGER)
    RETURNS @return TABLE(LetterGrade VARCHAR(2))
    BEGIN
        INSERT INTO @return
        SELECT l.LetterGrade
            FROM LetterGrades l INNER JOIN CourseGrade c
                ON l.LetterGradeID = c.LetterGradeID
            WHERE c.CourseID = @CourseID
                AND c.GradingScaleID = (SELECT max(GradingScaleID) FROM CourseGrade
WHERE GradeValue >= @Grade AND CourseID=@CourseID)
            GROUP BY l.LetterGrade

        RETURN
    END;

```



```

SQLQuery3.sql - LCS-VC-MSSQL-01.ad.syr.edu.ssingh11DataBase (ssingh11 (56))*
CREATE FUNCTION dbo.LAB13(@CourseID AS INTEGER, @Grade AS INTEGER)
    RETURNS @return TABLE(LetterGrade VARCHAR(2))
    BEGIN
        INSERT INTO @return
        SELECT l.LetterGrade
            FROM LetterGrades l INNER JOIN CourseGrade c
                ON l.LetterGradeID = c.LetterGradeID
            WHERE c.CourseID = @CourseID
                AND c.LetterGradeID = (SELECT max(LetterGradeID) FROM CourseGrade WHERE GradeValue >= @Grade AND CourseID=@CourseID)
            GROUP BY l.LetterGrade

        RETURN
    END;

```

100 %

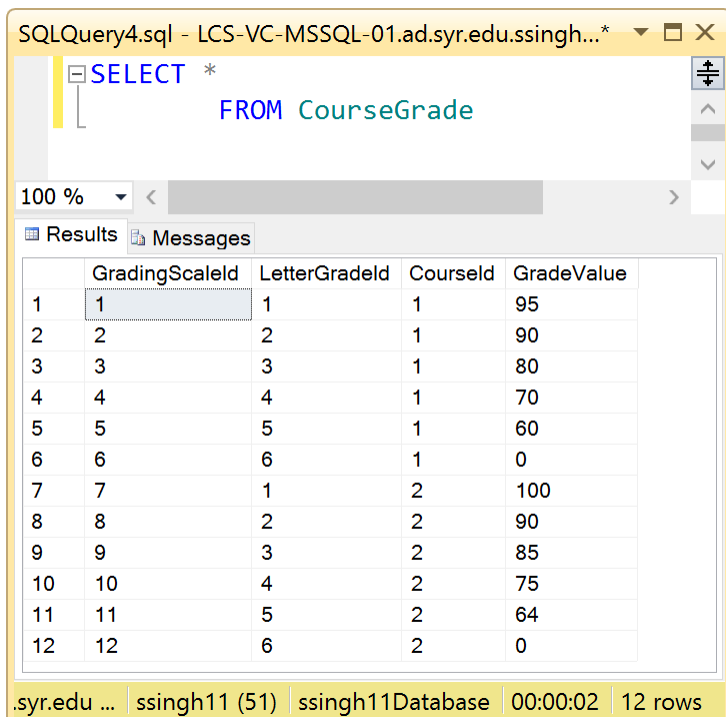
Messages

Command(s) completed successfully.

100 %

Query executed successfully. LCS-VC-MSSQL-01.ad.syr.edu ... ssingh11 (56) ssingh11DataBase 00:00:00 0 rows

2.



```

SQLQuery4.sql - LCS-VC-MSSQL-01.ad.syr.edu.ssingh...
SELECT *
FROM CourseGrade

```

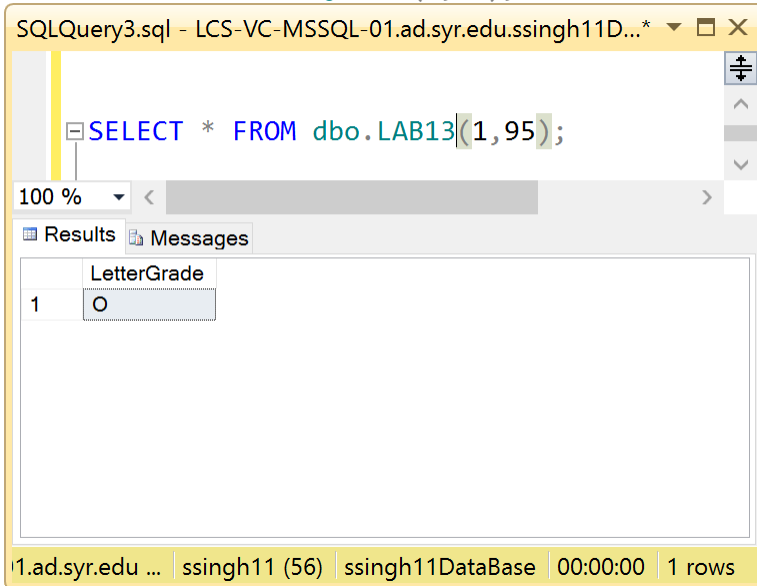
100 %

Results Messages

	GradingScaleId	LetterGradeId	CourseId	GradeValue
1	1	1	1	95
2	2	2	1	90
3	3	3	1	80
4	4	4	1	70
5	5	5	1	60
6	6	6	1	0
7	7	1	2	100
8	8	2	2	90
9	9	3	2	85
10	10	4	2	75
11	11	5	2	64
12	12	6	2	0

.syr.edu ... ssingh11 (51) ssingh11Database 00:00:02 12 rows

a. `SELECT * FROM dbo.QLAB13(1,95);`



SQLQuery3.sql - LCS-VC-MSSQL-01.ad.syr.edu.ssingh11D...*

```
SELECT * FROM dbo.LAB13(1,95);
```

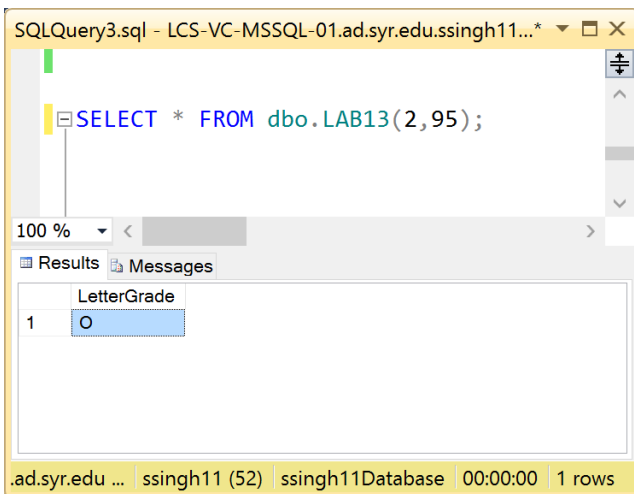
100 %

Results Messages

	LetterGrade
1	O

1.ad.syr.edu ... ssingh11 (56) ssingh11DataBase 00:00:00 1 rows

b. `SELECT * FROM dbo.QLAB13(2,95);`



SQLQuery3.sql - LCS-VC-MSSQL-01.ad.syr.edu.ssingh11...*

```
SELECT * FROM dbo.LAB13(2,95);
```

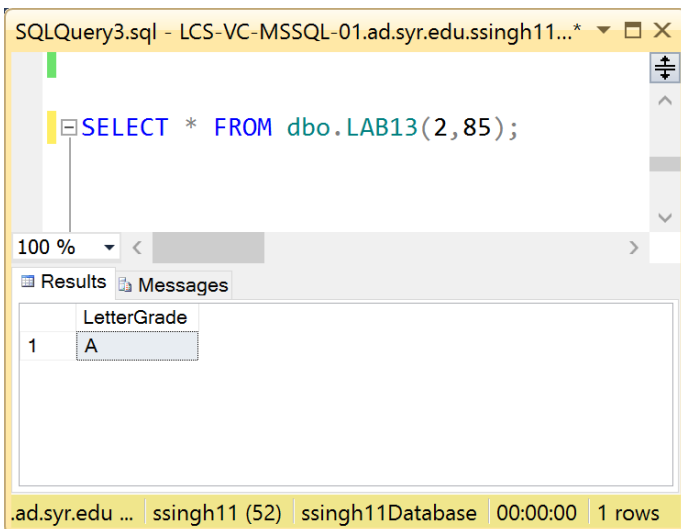
100 %

Results Messages

	LetterGrade
1	O

.ad.syr.edu ... ssingh11 (52) ssingh11Database 00:00:00 1 rows

c. `SELECT * FROM dbo.QLAB13(2,85);`



SQLQuery3.sql - LCS-VC-MSSQL-01.ad.syr.edu.ssingh11...*

```
SELECT * FROM dbo.LAB13(2,85);
```

100 %

Results Messages

	LetterGrade
1	A

.ad.syr.edu ... ssingh11 (52) ssingh11Database 00:00:00 1 rows