CIS56
LAB 1 - Functions

1- Write a function called **fn_NoOfDays** which uses the **DateDiff** function to return the number of days between any two given dates.

Supply the script to call this new function, passing it parameter values of your choice.

Scalar function syntax:

```
CREATE FUNCTION NameOfFunction(
@Parameter1 datatype,
...
@Parametern datatype,
)
RETURNS datatype
AS
BEGIN
RETURN something
END
```

2- Write a function called **fn_GetProductByDescr (** Inlining table-valued functions) , That return list of all products that contains a certain description ,
Supply the script to call this new function, passing it parameter values of your choice.
Consider the following table

```
CREATE TABLE Product
(
  ProductId INT,
  ProductName NVARCHAR(40),
  VendorId INT,
  Description NVARCHAR(1000)
)
```

3- Write a user-defined function (UDF) that calculates a student's GPA for a given time frame. Inputs are StudentId int, ClassStartDateStart datetime, and ClassStartDateEnd datetime. The output should be the student's GPA for all classes that were taken between ClassStartDateStart and ClassStartDateEnd. Also, supply the script to call this new function, passing it parameter values of your choice.

Consider the Table Students_Classes

Fields:

```
([Student_ID],[Class_ID],[Start_Date], [End_Date], ,[Assignment1], [Assignment2], [Assignment3], [Assignment4], [Class_GPA])
```