**Types of Function**

1. **System Defined Function**

## Scalar Function

Scalar functions operate on a single value and return a single value. Below is the list of some useful **SQL Server Scalar functions.**

**abs(-10.67)**

This returns an absolute number of the given number means 10.67.

**rand(10)**

This will generate a random number of 10 characters.

**round(17.56719,3)**

This will round off the given number to 3 places of decimal means 17.567

**upper('dotnet')**

This will returns the upper case of given string means 'DOTNET'

**lower('DOTNET')**

This will returns the lower case of given string means 'dotnet'

**ltrim(' dotnet'**)

This will remove the spaces from the left-hand side of 'dotnet' string.

**convert(int, 15.56)**

This will convert the given float value to integer means 15.

## Aggregate Function

Aggregate functions operate on a collection of values and return a single value. Below is the list of some useful SQL Server Aggregate functions.

**max()**

This returns maximum value from a collection of values.

**min()**

This returns the minimum value from a collection of values.

**avg()**

This returns an average of all values in a collection.

**count()**

This returns no of counts from a collection of values.

## User Defined Function

## Scalar Function

The user-defined scalar function also returns a single value as a result of actions performed by the function. We return any data type value from a function.

## Inline Table-Valued Function

The user-defined inline table-valued function returns a table variable as a result of actions performed by the function. The value of the table variable should be derived from a single SELECT statement.

## Multi-Statement Table-Valued Function

A user-defined multi-statement table-valued function returns a table variable as a result of actions performed by the function. In this, a table variable must be explicitly declared and defined whose value can be derived from multiple **SQL statements.**