

What are functions?

Functions are methods used to perform data operations.. SQL has many in-built functions used to perform string concatenations, mathematical calculations etc.

SQL functions are categorized into the following two categories:

1. Aggregate Functions
2. Scalar Functions

Let us look into each one of them, one by one.

Aggregate SQL Functions

The Aggregate Functions in SQL perform calculations on a group of values and then return a single value. Following are a few of the most commonly used Aggregate Functions:

Function	Description
SUM()	Used to return the sum of a group of values.
COUNT()	Returns the number of rows either based on a condition, or without condition.
AVG()	Used to calculate the average value of a numeric column.
MIN()	This function returns the minimum value of a column.
MAX()	Returns a maximum value of a column.
FIRST()	Used to return the first value of the column.
LAST()	This function returns the last value of the column.

Scalar SQL Functions

The Scalar Functions in SQL are used to return a single value from the given input value. Following are a few of the most commonly used Aggregate Functions:

Let us look into each one of the above functions in depth.

Function	Description
LCASE() LOWER()	Used to convert string column values to lowercase
UCASE() UPPER()	This function is used to convert a string column values to Uppercase.
LEN()	Returns the length of the text values in the column.
MID() SUBSTRING()	Extracts substrings in SQL from column values having String data type.
ROUND()	Rounds off a numeric value to the nearest integer.
NOW() GETDATE()	This function is used to return the current system date and time.
FORMAT()	Used to format how a field must be displayed.