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DB Foundations Module 07 – Functions

In this essay we will be discussing some use cases for User Defined Functions, or UDFs, when writing SQL code. We will also be looking at the differences between Scalar, Inline, and Multi-Statement Table-Valued functions.

One of the biggest benefits to using UDFs is that it can lead to faster execution of your code, as the instructions in the code can be cached and reused making your application more efficient. Another benefit is that it allows you to wrap up a piece of complex code for users to call in the future, making the data in your database easier for beginners to access. One thing UDFs cannot do is alter or add data to a table.

A Scalar function in SQL is a User Defined Function that returns only a single value each time it is called. This differs from an Inline Function, which will return a table of data when called. The results of an Inline function can also be referenced in a query just like a table or view. Multi-Statement Table-Valued Functions (MSTVFs) are a way to combine the versatility of a Scalar function with the table output of an Inline function.

In this essay, we have reviewed a few reasons why you would use UDFs in your SQL code. We have also looked at the differences between Scalar, Inline, and Multi-Line Statements.