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GitHub Link: https://github.com/shultsa/DBFoundations-Module07/

SQL Functions

Intro

Using functions as a developer allows you more customizability and accuracy in querying your data. In this paper I will outline the use cases for both User-Defined Functions (UDFs) and Scalar, Inline, and Multi-Statement functions, providing more flexible and efficient optimization of your database.

Using a SQL UDF

While SQL has a number of built in functions, a user-defined function (UDF) allows the developer to create custom functions. A UDF can return a table of values or a single value. It can be helpful to use UDFs to optimize the use of the database by executing queries more quickly, saving them for reporting, and more.

Scalar, Inline, and Multi-Statement Functions: Differences & Similarities

A scalar function is a UDF that returns a single value from the statement. Because of this, when using a scalar function parameters can be very helpful. An inline function contains only one line of a select statement, whereas a multi-statement table valued function looks at a series of statements to return a tabled value. These are often used for much more complex statements.

Summary

Further understanding the best functions to use is a critical skill in leveraging SQL. By knowing when to create a user-defined function vs employing a built in function, or utilizing a multi-statement vs scalar function, a user can optimize their queries and setup others for success.