Stephanie Huang
May 31st, 2022
IT FDN 130A
https://github.com/stephaniehuang1/DBFoundations-Module07

Assignment #7 – Functions

Introduction
In the seventh week of the course IT Foundations of Database Management, we learned about Functions including their usages and how to write them.

When to use a SQL UDF
A User Defined Function, or UDF, is a custom function that a user can create. These are helpful if the user needs to use a function not available from SQL server's built-in functions. UDFs can also be stored. In cases where the user is using a series of functions which become increasingly complex, it's useful to utilize a UDF to write the function once and store it for repeated use.

Scalar, Inline, and Multi-Statement Functions
The three main types of functions are the scalar, inline, and multi-statement functions. Scalar functions are functions that let the user bring back a single value. In contrast, inline and multi-statement functions will return a table of results when called on.

Inline and multi-statement functions differ in that multi-statement function can have multiple statements and has a more rigid structure. Inline functions do not require the usage of BEGIN and END blocks or the usage of the RETURN operator. However multi-statement functions do.

Summary

Functions in SQL allow the user to do "work" with data within a database. The user can modify data in tables, parse or combine data, and create custom functions for more complex tasks.