

Assignment 7 – Functions

Introduction

This week's module took a further look at functions, the different varieties of default functions and how they can be applied, as well as how to set up custom, user defined functions or UDFs.

When to use a SQL UDF

UDFs allow you to return either a scalar or table based on a parameter that you pass to them. Arguably UDFs are most useful when returning a scalar, as a view can often accomplish the same thing when the output is a table. More people tend to be familiar with views and this can make maintaining them over time more feasible with less training needed. It's also notable that sometimes external software doesn't allow you to easily access UDFs, but does allow you to access views.

Scalar, Inline, and Multi-Statement Functions

There are several types of UDFs. A **scalar** functions return a single value, being able to pass parameters in scalar functions can be very useful. There are also tabular functions that Microsoft breaks into two categories. **Inline** functions return a simple table value, while **Multi-Statement** functions can have more complex table value functions – these must be wrapped with a Begin and End statement that are not required in inline functions.

Summary

Functions are a useful tool to have for retrieving information, however some thought should be given as to if a view could produce the same output. Being able to create custom functions, and being familiar with the default functions available, can add additional flexibility and allow for more complex code outputs.