Kegan Sanchez

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Foundations of Databases

Assignment 07

<https://github.com/kegans/DBFoundations-Module07>

Functions

# Introduction

This week, I learned about the different types of SQL functions, including how to create and use them for reporting. I now have a better understanding of the following concepts:

## When to Use a SQL UDF

SQL UDFs or User Defined Functions are custom functions that take parameters. UDFs are useful for when a query will be performed multiple times and return a single value and when you can’t find a function that meets your needs. They can be used instead of or in addition to SQL Server’s built-in functions, but can affect query performance.

## Similarities and Differences Between Scalar, Inline, and Multi-Statement Functions

Scalar functions allow you to return a single value including a string of text, a number, or a date. Simple (In-line) functions return a table of data or single set of rows. The output of in-line functions can be used like any other SQL table or view. When selecting functions, both scalar and in-line functions require the dbo prefix (the schema name) for them to work. A multi-statement function is a function that returns a table of data, but only after some additional processing. Multi-statement functions can also have multiple parameters, but need a table to be defined and typically require rows to be inserted into the table.

# Summary

I now have a better understanding of functions and their uses. I can take this knowledge and build upon it to become more comfortable with the different types and determining when they would be most useful.