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Date: 11/27/2024

Course: Foundations Of Databases & SQL Programming

Assignment: 07

<https://github.com/diellzak1/DBFoundations-Module07>

# Functions

## Introduction

In this week's assignment, I was introduced to functions, user defined functions (UDFs), and using functions for reporting such as key performance indicators (KPIs). I worked on assignment seven by comparing the questions to answer six, so I can better analyze the difference and see the different ways that I can access information from the database. I created some basic functions, and also showed results based on KPI values.

## Explain when you would use a SQL UDF

The SQL UDF are functions as the name states that the user has created besides the SQL built-in functions. One can create UDF for a complex calculation that might be used a few times throughout the query, or other similar complex calculations.

## Explain what are the differences between Scalar, Inline, and Multi-Statement Functions

Scalar, inline, and multi statement are UDF functions. Scalars are used when the user wants to see a single value being returned. Inline returns columns and tables based on the parameters that the user wants to see. Multi statement also returns columns and tables similar to inline, but the difference is that here we use multiple complex statement to set the parameters that we want to view.

## Summary

In this week's assignment, I continued to learn about queries and the use of functions to access information from the database. I worked on assignment seven by comparing it to assignment six to see the different ways that we are running the queries to get similar or different data. I also created a key performance indicator (KPI) by performing a few calculations on what we wanted to see from our query. I learned the similarities and differences between scalar, inline, and multi-statement functions.