Name: Alex Van Gundy

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GITHub Link: https://github.com/avangund/DBFoundations-Module7

Assignment 7

Introduction

The following paper will explain when a SQL User Defined Function (UDF) can be used. The paper will also give detail on the differences between Scalar, Inline and Muli-Statement functions.

Explain when you would use a SQL UDF

A UDF can be used to store complex queries into a database for future use. This week, we created inventory views that held inventory counts for the current month. The views also held data for previous month's count by after function creation.

In our last assignment question, a UDF was created to store the complex query which consisted of a customized date format column and previously created functions for previous month counts. Once the function was created, we could extract the designed data using a Select statement with the function to get the summarized result.

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

According to Professor Root, a scalar function brings back a single item. An example of this was changing the date format in this week's assignment to "Month, Year".

An Inline function returns a table of data, example being all products in category "5".

A multi-statement function is similar to an Inline function with the difference being the query can have multiple select statements.

Summary

Functions are beneficial when a query becomes complex and will be used later down the road. The function can be saved and referenced in the database. This week, the functions were beneficial for changing date formats and creating KPI columns.