Name: Matthew Coffey

Date: Mar 14, 2025

Course: IT FDN 130 A

Assignment 07 – Write SQL Code and Document Your Knowledge

Introduction

In this assignment, I was tasked with creating some SQL code to query data and to answer the following questions:

1. *Explain when you would use a SQL UDF.*
2. *Explain are the differences between Scalar, Inline, and Multi-Statement Functions.*

This document will expound on my logic for the first and answer the second.

Coding Assignment - Reflections

I was asked to write code to create increasingly complicated views, culminating in a function using the most complicated view to return different views based on a given value. This week was challenging from a work perspective and I had a number of errors while writing my code that caused very silly data problems (joins where I was using the wrong ID resulting in me realizing 3-4 questions later that I was only getting one day of data, leading to backwards TS.

During the backwards TS I got the opportunity to try out a bunch of different ways of re-formatting dates, so that was a plus. It was a bit frustrating to realize how far back in the code that error was, though.

Assignment Question – Explain when you would use a SQL UDF.

I can see using functions to make frequent queries for different conditions much quicker. I can see where I'd want to use them to build some queries at work (unfortunately we use Tableau so this course is more getting me baseline DB skills than directly translatable).

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

Scalar functions return a single value. Inline functions return single views. Multi-statement functions can return single or multiple views and perform multiple levels of query and/or manipulation on the DB data.