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Course: Foundations of Databases & SQL Programming

GitHubURL: [https://github.com/aharada12/ DBFoundations-Module07](https://github.com/aharada12/DBFoundations-Module07)

Assignment 07: Functions

Introduction

This will summarize when to use a SQL UDF (User-Defined Function) and explain the differences between scalar, inline, and multi-statement functions.

When would you use a SQL UDF?

A SQL UDF (User-Defined Function) would be used when one of the built-in SQL functions would not accomplish your goal. A UDF is a custom function that can return either a single value or a table of values.

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

A Scalar function is a function that returns a single value. Parameters are very useful when working with scalar functions as they can manipulate the value returned. An Inline function returns a single set of rows that satisfy the function input. A Multi-Statement function returns a table of data but requires some additional processing as well as a Begin and End statement. The data types of the returned columns and parameters are defined in the function rather than just the parameters (as with the Inline function).

Summary

In summary, a SQL UDF is used to build a custom function. UDF's can be scalar (returning one value), Inline (returning a simple table), or Multi-Statement (returning a table with additional processing).