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Foundations of Databases & SQL Programming

Assignment07

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

Module 7: Questions

# Introduction

In this document, I will answer the questions from Assignment07 regarding SQL User defined functions, scalar functions, inline functions and multi-statement functions.

# Content

## Explain when you would use a SQL UDF

Use a User Defined Function when you need to create your own custom function, adequate to a specific need. There are functions that return a table of values and functions that return a single value (scalar functions).

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

### Scalar Function

This function returns a single value as a result. It can return *int, char, varchar* data types, but the *Text, ntext, image and timestamp* data types are not supported.

Result example: 6

### Inline (Table-Valued) Function

The Inline Function returns a table variable as a result of the function, derived from a single SELECT statement. There is no BEGIN/END block needed in the CREATE FUNCTION statement.

### Multi-Statement (Table-Valued) Functions

A Multi-Statement Function returns a table variable as a result of actions performed by the function, but it can have more than one SQL statement.

# Reference

<https://excelkingdom.blogspot.com/2018/01/how-to-create-scalar-inline-and-multi.html>, 2021 (External Link).

# Summary

In this Module, I answered all the questions related to the User Defined Functions (UDF), which allows you to perform customized tasks within it, scalar, and table-valued functions. Within the table valued functions, there is the inline and the multi-statement functions.