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Foundations of Databases & SQL Programming

Assignment 07

https://github.com/dishiyer/DBFoundations-Module07

# Assignment 07 – Functions

#### Introduction

The seventh module covered Functions and how to use functions to get information from a database.

### Summary

In this module, some of the key topics I learned about are:

- 1. Functions: aggregate functions, selecting with common functions, partitioned functions
- 2. Using functions when reporting
- 3. User Defined Functions
- 4. Creating Advanced GitHub pages

#### Questions

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

## Response

#### When to use a SQL UDF

User Defined Functions (UDF) should be used when performing an action that requires inputting parameters and expecting an output result based on the calculation within the functions. I would use SQL UDFs when I am trying to perform the same calculation repeatedly within the same database.

#### Differences between Scalar, Inline, and Multi-Statement Functions

Scalar Functions: Scalar functions are functions that can be used to return a single value. The return value supports most data types.

Inline Functions: Inline functions can be used to return tables like a single query. The return value is therefore a table that can be further used in data analysis.

Multi-Statement Functions: These types of functions build upon the inline functions. They can return multiple query results which can be then used for further data analysis.