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GitHub repository: https://github.com/jazmingithub/DBFoundations-Module07

GitHub webpage: https://jazmingithub.github.io/DBFoundations-Module07/

**Assignment 07: Functions**

**Introduction**

Functions are SQL statements that perform a specific task or operation, they can be saved in the database and used by other users. They are similar to views but can accept parameters and return a table or a single value per row. This article will briefly introduce functions and discuss the difference between scalar and table-valued functions (TVFs).

**When to Use a SQL UDF**

The advantages of functions are that they maintain the code's integrity and allow for reusability. It is necessary to use the two-part name of the database when working with functions: the schema name with the table name (ie. Dbo.tblanama).

**The Differences Between Scalar, Inline, and Multi-Statement Functions**

Scalar, inline and multi-statement functions are all user defined functions (UDFs). Scalar functions have one or more parameters, return a single value per row, and can also be used as a check constraint. They can be used anywhere in the SELECT statement. Table-valued functions output a table. They can be used after the FROM clause in a SELECT statement. There are two types of TVFs: inline and multi-statement. Unlike scalar function, inline tabular functions do not require BEGIN/END block. A multi-statement function returns a table that is constructed in the script and can include multiple selection statements.

**Summary**

This article covered two types of functions: Scalar that return a single value per row and table-valued function which output a table.