**IT FDN 130 A Wi 22: Foundations Of Databases & SQL Programming**

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https://github.com/val2pet/UWClass\_SQL

**Assignment 07 – Functions: using SQL User Defined Functions; and the differences and between Scalar, Inline, and Multi-Statement Functions.**

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**Introduction**

**Functions are a very powerful feature of SQL and can be used to perform calculations on data, modify individual data items, manipulate output for groups of rows, format dates and numbers for display, and convert column data types.**[[1]](#footnote-1) **User-Defined Functions (UDF’s) are customized functions that can be used in a query. Scalar, inline, and multi-statement functions are functions that can be recalled by name.**

**User Defined Functions**

**UDF’s allows users to extend the use the SQL features. Functions are essential knowledge for analyst in their toolbox. Like any other language, the more you know, the easier it is to model the data with abstract layers that cooks the data for your results.**

**Scalar, Inline, and Multi-Statement Functions**

**There three different types of functions. The Scalar function returns single aggregated integer values. Inline functions. Inline and multi-statement functions can link a series of statements together. An inline table valued function definition specifies only Returns table and not the table definition.**[[2]](#footnote-2) **A multi-statement function is like the inline function, but the function can instruct the structure of the table that could be different from the original structure of the table.**

**Conclusion**

**Cooking data with functions is like the Julia Child’s cookbook for data scientist. Mastering UDF’s extends the use of SQL by customizing the features and adding layers. A data scientist should learn and keep learning aggregate, scalar, inline or multi-statement functions to be successful.**

1. https://analysistabs.com/sql/sql-functions/ [↑](#footnote-ref-1)
2. https://www.quora.com/What-is-difference-between-inline-table-valued-and-multi-statement-functions-in-SQL [↑](#footnote-ref-2)