Darlene Fritts
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Foundations of Databases and SQL Programming
Assignment 07
https://github.com/DarleneFritts/DBFoundations

## **SQL Functions**

## Introduction:

SQL Functions are used to perform calculations and manipulate data. By writing a Function a user can use the same function multiple times without having to re-write the code every time they want a certain result set.

1. Explain when you would use a SQL UDF.

A User Defined Function (UDF) is when a user defines and creates their own function to pull aggregate data from their table/dataset. Some commonly used functions are:

- Min()
- Max()
- Sum()
- Count()
- Avg()
- 2. Explain the differences between Scalar, Inline, and Multi-Statement Functions.
  - "...A *scalar function* is one which returns a single value (which could) be a string of text, a number, or a date" 1
  - "An in-line table-valued function returns a single set of rows"2
  - "A *multi-statement table-valued function* is a function which returns a table of data".3

## Summary:

This week's assignment in learning Functions was interesting. It was a bit challenging, which means I watched the video several times. I don't mind that I needed to watch the videos more than once, because I got a bit more out of the videos each time I viewed them.

This week's homework really made me stop, and take the questions in small chunks, to come up with the correct function syntax.

## References:

- 1. <a href="https://www.wiseowl.co.uk/blog/s344/scalar-udfs.htm">https://www.wiseowl.co.uk/blog/s344/scalar-udfs.htm</a>
- 2. <a href="https://www.wiseowl.co.uk/blog/s347/in-line.htm">https://www.wiseowl.co.uk/blog/s347/in-line.htm</a>
- 3. https://www.wiseowl.co.uk/blog/s347/multi-statement.htm