

1. *Explain when you would use a SQL UDF.*

**User Defined Functions:** SQL Server allows us to create our functions called as user defined functions in SQL Server. For example, if we want to perform some complex calculations, then we can place them in a separate function, and store it in the database. Whenever we need the calculation, we can call it. There are three types of SQL user defined functions: *Scalar, Inline & Multi-statement*.

2. *Explain the differences between Scalar, Inline, and Multi-Statement Functions.*

3.

**Scalar Function:** It is a function that returns a single value. Generally, we must define the function body between BEGIN ... END block, but for inline scalar function, you can omit them. We can use any [SQL data type](#) as the return type except text, image, next, cursor, and timestamp.

**Table Valued Functions:** It is a user defined function in SQL Server that returns a table.

**Inline Table valued Functions:** This function returns a table data type based on a single [SELECT Statement](#)

A **multi-statement table-valued** UDF returns a row-set populated by two or more T-SQL statements from within the UDF. The internal rows-sets are concatenated into a table variable for output from the UDF.

We can use UDF statements that can pull the same information from a database without rewriting the same code every time.