

## Functions

### Introduction

*Function*, like *views* and *stored procedures*, is a method to save queries in databases for users to reduce repetitive work. It is often used with a parameter, which cannot be done in a *view*. And although *stored procedures* can also have set parameters, users cannot use the derived results in another query, unlike in *function*.

### Topics

#### *User Defined Function*

User defined function (UDF)—as stated in the name—is any function created by the users rather than using ones built-in the SQL server. They can be both scalar and tabular functions (as shown below).

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

There are three types of *functions* in SQL:

- Scalar: returns single values.
- Inline: returns result sets.
- Multi-statement: returns result sets while executing multiple statements.

### Conclusion

There are several ways to store queries in SQL server to help developers reuse their code. Understanding features of each method will help users to choose the correct one to use.

## Works Cited

Root, Randal. "Module07Notes." Microsoft Docs. Retrieved March 2, 2022.

Wagner, Bert. "SQL Stored Procedures, Functions, and Views." *YouTube*, YouTube, 22 Oct. 2019, <https://www.youtube.com/watch?v=HR2DJYE0Kss>. (external site)