

**Name:** Usha Gundale

**Date:** May 21, 2022

**Course:** IT FDN 130 A Spring 22

**Assignment 01:** Views

**GitHub Url:** [UGunale2/FoundationsOfDB-SQLProgramming \(github.com\)](https://github.com/UGunale2/FoundationsOfDB-SQLProgramming)

## VIEWS

**INTRODUCTION:** In this module, I discuss when you would use a SQL View, the differences and similarities between a View, Function, and Stored Procedure, and use Professor Randal Root's material to prepare this document.

### EXPLAIN WHEN YOU WOULD USE A SQL VIEW

Views can be utilized as a subset of actual data to perform certain operations. It helps us to provide an abstraction to various users or hide the complexity for users who are accessing data from the table. For example, a user has permission to access particular columns of data rather than the whole table.

### EXPLAIN ARE THE DIFFERENCES AND SIMILARITIES BETWEEN A VIEW, FUNCTION, AND STORED PROCEDURE

#### VIEW :

- A view is a SQL statement that is stored in the database with an associated name. A view is a composition of a table in the form of a predefined SQL query.
- A view can contain all rows of a table or select rows from a table. A view can be created from one or many tables which depends on the written SQL query to create a view.

#### SYNTAX FOR CREATING A VIEW

```
CREATE VIEW view_name AS
SELECT column1,
       column2.....
FROM   table_name
WHERE  [condition];
```

#### FUNCTION :

- A function is a database object in SQL Server. It is a set of SQL statements that accept only input parameters, perform actions, and return the result. The function can return only a single value or a table. We can't use a function to Insert, Update, or Delete records in the database table(s). A function can be embedded in a SELECT statement.

## SYNTAX FOR CREATING A FUNCTION

```
CREATE FUNCTION [schema_name.]function_name (parameter_list)
returns data_type AS
BEGIN
    statements
RETURN value
END
```

## STORED PROCEDURE :

- A stored procedure is a prepared SQL code that you can save, so the code can be reused over and over again.
- if you have an SQL query that you write over and over again, save it as a stored procedure, and then just call it to execute it.
- You can also pass parameters to a stored procedure so that the stored procedure can act based on the parameter value(s) that is passed. -Stored Procedures are pre-compiled objects which are compiled for the first time and their compiled format is saved, which executes (compiled code) whenever it is called.

## SYNTAX FOR CREATING A STORED PROCEDURE

```
CREATE PROCEDURE Procedure_name
AS
sql_statement
go
```

## SUMMARY

This article learns about when you would use a SQL View, and the differences, and similarities between a View, Function, and Stored Procedure.