Views, Functions, and Stored Procedures

Introduction  
This week, I learned how to create reporting views in SQL, create reporting functions and create reporting stored procedures. Additionally, I learned how to upload script and documents to GitHub. Select statements become complex as you create specific program so saving them as a text file allows repeated use and allows others to view your code.

Explain when you would use a SQL view

The programmer uses SQL view when the use wants to extract data for reporting purposes. The programmer can save simple, or complex select statements which allows to show specific views depending on what they are trying to report. It allows the programmer to create a virtual table referring to other tables in the database. A view stores a SQL query and is executed when the programmer refers to the view. A view is called a virtual table because it doesn’t store the rows and columns like a type of table does. Views hides complexity of the data and simplifies multiple tables into a single view.

Explain the differences and similarities between a view, function, and stored procedure

The difference and similarities between a view, function and stored procedure is that a view is a virtual table which is based on a select query. The programmer can join multiple tables in a view and use the view to present data as if the data were coming from a single table. A stored procedure uses parameters to do a function. It contains several statements, loops, clauses and can perform modifications to one or several tables. A view does not accept parameters and can only contain a single select query. A function returns a single value or a single result set and is executed every time whenever it is called. Both stored procedures and functions are database objects which contain a set of SQL statements to complete a task

Summary

In this assignment, the concepts of creating views, stored procedures, and functions were explored. In this assignment, I was tasked to create different views while integrating previous concepts like inner joining and select statements. I learned differences and similarities between views, functions, and stored procedures and put the operations to the test