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https://github.com/diellzak1/DBFoundations

# Views, Function, and Stored Procedure

## Introduction

In this week's assignment, I continued to work on assignment five from last week by updating it to use the View statement. This was good practice to see how much I could remember from what I did last week when typing the code again this week. I created four basic views, and another eight views where I joined different virtual tables. The SQL View statement creates virtual tables that allow specific access and restrictions to the database. It is useful for simple queries. I also learned about the Function and stored procedures and the similarities and differences between the three.

## Explain when you would use a SQL View

The SQL View enables users to create virtual tables that are saved to run queries. This is beneficial for security and reporting reasons as in this way users will not access or alter the database based on what the restrictions/access have been denied or granted. In this way one can allow users to have access to the view tables but not alter the actual database.

## Explain the differences and similarities between a View, Function, and Stored Procedure

View is a virtual table that allows the user access to specific tables to create tables and run queries. The way we create the syntax for view, function, and stored procedures in SQL is very similar. The main difference is that with Function we can set parameters that alter the query. As Professor Randal noted in the notes, to keep it simple, we can use the View statement and use a where clause for example if we want to retrieve specific results from our virtual tables. View is used for simple statements. Stored Procedures are useful for automation and more complex statements.

## Summary

In this week's assignment, I continued to learn about queries and how we use the View statement to create virtual tables and queries to access information in the database. I altered my code from assignment five and updated it to include the View statement. Besides the SQL View, I was also introduced to Function and Stored Procedures. I learned the similarities and differences between View, Function, and Stored Procedures. View are beneficial for simple statement to run virtual tables.