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Assignment 06

<https://github.com/kdoehlertUW/DBFoundations>

SQL Views

# Introduction

In module 6 we learned how to use SQL Views and the basics of using Functions and Stored Procedures. In this paper I am going to discuss when you would use a SQL View. I will also cover the similarities and differences between Views, Functions, and Stored Procedures.

# Using SQL Views

SQL Views are saved Select statements. If you have written a complex query, you can save it as a View in the database so that in the future you can simply select the View. This can make it easier for users who only have basic SQL experience to run the query. Saved queries used for reporting are called Reporting Views.

You can also create Base Views so that there is an abstraction layer between the user and the tables. A Base View reflects all the data that is in the table. If the underlying tables need to be modified, the View can be rewritten so that the user can continue to select from the View without disruption. You can also restrict access to the tables and only let users access the View. If you add Schema Binding to the View, changes cannot be made to the table that will break the View. This will protect the table from accidentally being dropped.

# Views, Functions, and Stored Procedures

Views, Functions, and Stored Procedures are named sets of SQL statements stored in the database. Views and Functions can only store Select statements. Functions can use parameters to change the results of a query. You cannot use parameters with Views, you but can achieve a similar outcome by adding a Where clause when selecting the View.

Stored Procedures can store Select statements, but can also include Inserts, Updates, and Deletes. You Select from Views and Functions, but you must use the Execute statement when using Stored Procedures. All three are useful for saving complex SQL statements.

# Summary

In this paper I discussed when you would use SQL Views. I also described the similarities and differences between Views, Functions, and Stored Procedures.