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Assignment 6: Views

# Introduction

When working within a database, it is beneficial to have some layer of protection between the database user and the database tables themselves. This is provided with Views, which act as an abstraction layer. Functions and Stored Procedures act as methods of cutting down redundant code. Together, these three features can make complex coding situations easier to execute.

# SQL Views

When there are many users of a database, adding a layer of protection to the table is desirable to prevent unintended edits to the table content. This layer of protection is commonly in the form of a View. Views can display all or part of a table, depending on what is specified in the saved select statement.

# Views vs. Functions vs. Stored Procedures

Two other features of SQL are Functions and Stored Procedures. Views and Functions are similar in that they are both select statements saved in the database. The difference is that Views only result in a table while Functions can return a table or, if parameters are given, a value. Stored Procedures are a series of operations, not just limited to select statements, that manipulates data based on specified parameters. They are executed using EXEC, unlike Views and Functions which use SELECT.

# Conclusion

As interactions with a database grow more complex, features like Views, Functions and Stored Procedures are utilized to streamline SQL coding. Views provide an abstraction layer while Functions and Stored Procedures return tables or values based off specified parameters.