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Assignment 06

Intro to DB

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

**Assignment 06 - Views, Functions, and Stored Procedures**

**Introduction**

In SQL, views, functions, and stored procedures all perform very similar tasks. They take a block of code and save it to the database to be called on later, or utilized in applications.

**Views**

Views in particular are a very handy way to save a block of code for various purposes. For example it can be used to create a select statement that is very commonly used, so the code doesn't need to be fully written every time. Or it could be used in place of a very complex code, in order to avoid rewriting that over and over. Additionally there can be a use to create a “base view”. A base view is used to create a layer of abstraction in the database to avoid any errors from outside users making changes.

**Function, and Stored Procedure uses**

Views, functions, and stored procedures all have very similar uses, they all save a block of code to the database, but they have very subtle nuanced differences. For example a function can be used to return just a single value, or as much as an entire table. It also needs to be stated what values are to be returned as a result of the code. A stored procedure runs very similarly to a view, however it doesn't exist as a snapshot of data. It is an executable code that does not need any select statements, rather it needs to be executed.

**Conclusion**

While views, functions, and stored procedures exist in similar spaces within a database, they way they are executed and utilized vary in different situations. A view is like a snapshot of the database based on the code that is saved. A function needs to be stated as what value gets returned, and is able to return a single value rather than an entire table. And a stored procedure needs to be executed rather than selected from.