

## SQL Views

### Introduction

In this brief report, I will discuss views, functions, and stored procedures. First, I will summarize views, and then I will explain the similarities and differences between views, functions, and stored procedures.

### Views

Views allow users to access data in SQL without being able to alter any data. Views can be used in a query to preserve data integrity, or in situations where portions of a database contains secure information, as views can be structured with restrictions and can specify which areas of the database are included.

### Views, Functions, and Stored Procedures

Views, functions, and stored procedures are all options to view and query a database. As mentioned above, views are a way to create access to portions of a database while allowing for restrictions to updating and viewing all data. Functions are recommended to include the “dbo” portion of an object name (2020, August 10, retrieved from <https://www.youtube.com/watch?v=wdMk2YG2sBo&list=PLfycUyp06LG8cefs0gA38wO7nFrRjD5Ad&index=4>). Functions can return to show an individual table or value. Also, in regard to formatting, functions must have a pair of parentheses after the name, which allow for parameters inside (i.e. variables). A stored procedure is a code that is executed. Stored procedures aren’t limited to select statements.

Generally, some similarities between views, functions, and stored procedures are that each can return the same values and are composed of a set of statements. Some differences are in the way that each is coded. Also, functions allow for parameters, whereas views and stored procedures don’t. Also, stored procedures can alter a table, unlike views and functions. Although each can return the same values depending on how they are set up, each operates on its own rules.

### Conclusion

To conclude, views, functions, and stored procedures are options available to view data within a database. They are helpful tools in maintaining data integrity as well as security.