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# SQL Views

## Intro

SQL views are a helpful tool for any developer to have in their pocket. Views allow the developer to quickly select from complicated SQL statements, limit visibility to various data, and more. This paper will provide an overview of when and how to use a SQL view, as well as the differences between views, functions, and stored procedures.

## Using a SQL View

A SQL view allows the developer to create a virtual table through a saved SQL query. A developer may want to query based on data from multiple tables, but perhaps only wants to display certain columns or wants to focus in on specific data. They can create a view saving a complex query with multiple joins and aliases. The view itself does not technically hold any data, but rather it is using the SQL queries the developer identified to pull the data into a view. The developer can run a select statement on the view only, simplifying the query and presenting limited results to their end user.

## Views, Functions, & Stored Procedures: Differences & Similarities

A function is used to return either a table of values or a single value. While views and functions are very similar, a major difference is that views will not accept parameters while functions will. Because of this, a developer could use a function to filter down to a specific data point, such as Category Name. However, while views may not be built with parameters one could still use a SELECT and WHERE statement to query a view, providing similar results. Stored procedures contain a set of SQL statements and are often using additional commands such as INSERT or UPDATE to produce results so can be more helpful for complex queries.

## Summary

As you can see, views can be a powerful way to query data and setup the end user with access to only the desired columns. A developer can create views, functions, or stored procedures to more easily manage queries, with each providing similar but varying levels of complexity.