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**IT FDN 130**

**Assignment 06**

[**https://github.com/jwins66/DBFoundations**](https://github.com/jwins66/DBFoundations)

**SQL Views**

**Introduction:**

SQL Views and Functions are “Named” Select statements whose code is stored in a database. Stored Procedures are similar, but they are not restricted to just Select statements.

**Questions to Answer:**

1. **Explain when you would use a SQL View.**

A view is a stored SQL query, called a virtual table, referring to other tables in the database. The result set created when using a view does consist of rows and columns. However, this virtual table is built on top of the stored database not within the table of the stored database. It is this virtual access that makes a view easier and faster to access than a stored table in a database. A view will store the SQL query that is executed whenever you refer to the view within the code, making it a more convenient way to retrieve the desired data. Relational databases offer features that can lead to complex queries, such as using constraints like primary and foreign keys for indexing, it is helpful to create views to store the complex queries as if it were a table storing the data requested. [**https://learnsql.com/blog/sql-view/**](https://learnsql.com/blog/sql-view/)

Can’t modify the data through a view.

1. **Explain the differences and similarities between a View, Function, and Stored Procedure.**

Views and Functions almost serve the same purpose with the exception that Functions can accept parameters, whereas Views cannot. Additionally, the output of a User Defined Function can be directly used in a Select clause. This cannot be done with a View.

A Function returns a value, it can be called by a procedure, used in a Select statement and compiles whenever it is called upon to do so. A procedure executes commands, compiles once and can use data manipulation language.

**Summary:**

A view is a tool used to select report data from a stored database. The data retrieved cannot be modified through a view. However, the ease of use and quicker access to a table of information within a database can be helpful without using extra storage. A view can also accelerate data analysis and provide extra security for the data that is stored.