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IT FDN 130A Foundations of Databases

Assignment06

SQL View

Introduction

SQL or Structured Query Language is a programming language to manage data in a database. A SQL View are virtual tables. Views can have all the rows of a table or specific rows based on the criteria.

They are virtual tables. In a SQL database create a view by executing a SQL query. The results that are returned is the view.

SQL View

Views are used in relational databases. It can be used to provide a simple layout to a set of related tables. Views are useful when you want to present subsets of data. The view can filter out wanted or unwanted information. You can also use a view to join other tables and form a new table.

Views can be used when you have sensitive information and you do not want everything to be shown and it is a way to avoid writing complex queries.

There are differences and similarities between Views, Functions and Stored Procedures.

Differences and similarities between a View, Function, and Stored Procedure.

View us a virtual table using a SELECT Statement. There is no physical data stored by a view. Usually, a View is used when there are complex joins so it can be used over and over in queries or stored procedures. You can use the view as a building block for a larger query. Can be used to perform modifications to tables.

Functions are made up of SQL statements. There are 3 types- scalar, table and inline. You cannot use Functions to change the database. Functions must return a value.

Stored Procedures is a group of SQL statements compiled into one execution to complete a transaction. We use Stored Procedures to clear data and manipulate data in the back end without having to write the query over and over when needed. You cannot use it as a building block for a larger query or to modify tables. Does not need to return a value.

SUMMARY

Depending on the data we are looking for is why we would use a certain query type in a database. Stored Procedures are mostly used for INSERT-UPDATE-DELETE statements. Views are used for SELECT statements. Both are good to use it all depends on what you are wanting to accomplish. Stored Procedures are used when simple SQL is not efficient enough. Stored procedures can add variables and loops. Simple views will just run a query and filter out results in the database. Stored procedures allow you to change and manipulate data.