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IT FDN 130 A

Assignment 06

Views, Functions, and Stored Procedures

Intro

This week we move forward with views in depth and take a quick look at Functions and Stored Procedures. It is interesting to see how the three differ and how they can work together.

1.   Explain when you would use a SQL View

I will use a SQL view in the following situations:

- When I don't want to use a Select statement or the Select statement is quite complex.
- When I only want specific data accessible to users and not the underlying tables to protect some other data
- When there're complex queries that I know I will reuse.
- When I want to present an organized set of data, especially with readable or simplified column names
- When I want to have a foundation to work on a "multi-level" query, as to create a view as an initial step and then use other queries to analyze or present data.

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

Similarities:

View, Function, and Stored Procedure are both executions that save us from repeated queries.

Differences:

- Functions vs. View

Function accepts parameters; Views not

Function allows SELECT clause with the User Defined Function; View not

Function can be called by a procedure; View not

- Function vs. Procedure

Function can return a value, while Procedure does not have a return type. But it returns values using the OUT parameters.

Only Select queries are allowed in functions, while Procedure work with any DML queries.

Function can be called by a SELECT statement while Procedure cannot

A store procedure can contain a function, but a function cannot contain a procedure

Summary

So far, View is more like a one-step forward from the Select statements we have worked on. But with brief research, I can see Function and Procedure are more complex and exciting with input and output parameters and transactions. I look forward to learning more.