Eka Utama

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Foundations of Databases

Assignment 06

Views, Functions, and Stored Procedures

# Introduction

For module 6, I learned about views, functions, and stored procedures. The assignment for this module contained two parts. In the first part, I created SQL code to develop views for the codes from module 5. In this paper, I will talk about the purpose of views and the differences between views, functions, and stored procedures.

# Explain when you would use a SQL View?

SQL views are a type of “Named” Select statements. A SQL view is used to ensure that users cannot mess with the original SQL code or table, while still extracting the data needed. There are “Reporting Views” where the editor can save either simple or complex Select statements. This means that the code used to extract data is stored in the database. There are also “Base Views” which forces users to use the data in the “Abstract”.

# Explain the differences and similarities between View, Function, and Stored Procedures

Views, Functions, and Stored Procedures are all SQL codes that are saved within in a database for reuse. The differences come from what each statement types are used for. Views are used to either extract data for reporting or use to show table data in the “Abstract”. Functions are for reusing a user defined function (UDF). Functions allow both parameters and to return a single (scaler) value as an expression, which Views cannot. A Sproc (stored procedure) are for reusing statements, without the limitation of being a Select statement (which is required for Views and Functions).

# Summary

The concepts that were taught in module 6 were completely new to me. I enjoyed learning how to simplify complex queries by using either Views, Functions, and Stored Procedures. I also enjoyed the bridge between module 5 and module 6 by reusing the codes from the past assignment. I look forward to expanding what I’ve learned in this module for future modules.