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Introduction

This week, I learned about Views, and how to create reporting views.

Topic

1. Explain when you would use a SQL View.
SQL views can be used to simplify the process of accessing and analyzing data stored in a database. An SQL view is a virtual table derived from one or more existing database tables created based on a specific SQL query.

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

- View: A View acts as a virtual table that simplifies complex queries by storing a SELECT statement, allowing for easier data retrieval but without the ability to modify data.
- Function: A Function is used for calculations or returning a processed result, either as a single value or a table and can be used within SELECT statements but cannot modify data.
- Stored Procedure: A Stored Procedure can execute multiple SQL operations, including INSERT, UPDATE, and DELETE, and supports transaction control, making it ideal for automating business logic and batch processing.

Views and Functions are primarily used for querying and simplifying code, Stored procedures are best for performing actions and handling complex workflows within the database.

Summary

In summary, there are key scenarios where a view is useful.
1. Simplifying Complex Queries
2. Enhancing Security & Data Access Control
3. Improving Readability & Maintainability
4. Aggregating Data for Reports & Analytics.