1. Views:

* Views are virtual tables that are generated dynamically based on the result of a SELECT query.
* They don't store any data themselves; instead, they provide a way to represent the data stored in one or more tables in a particular way.
* Views can simplify complex queries by encapsulating them into a single, reusable object.
* They provide security by restricting access to specific columns or rows of a table.
* Views can be used for data abstraction, allowing users to interact with a subset of the data without needing to understand the underlying structure.
* They are read-only by default, although some DBMS allow for updatable views with certain restrictions.

1. Stored Procedures:

* Stored procedures are precompiled SQL statements that are stored in the database catalog for later use.
* They can contain one or more SQL statements, control-of-flow statements (like IF-ELSE or loops), and variables.
* Stored procedures enhance performance by reducing network traffic since the SQL code is executed on the database server rather than being sent over the network.
* They promote code reusability and maintainability since they can be called from multiple applications or scripts.
* Stored procedures can be used for implementing business logic, data validation, and complex data manipulations.
* They can be secured by granting execution permissions to specific users or roles.

1. Functions:

* Functions are similar to stored procedures but return a single value or a table variable.
* They can accept parameters and perform calculations or operations on those parameters to return a result.
* Functions are primarily used for computations and transformations that return a single value.
* Scalar functions return a single value, while table-valued functions return a table variable.
* They can be used inline within SQL queries, making them useful for encapsulating common logic.
* Functions are deterministic, meaning they always produce the same output for a given set of input parameters, making them suitable for use in computed columns and constraints.