## **What are Stored Procedures?**

In SQL, a stored procedure is a set of SQL statements that are stored as a named object in the database. Stored procedures can accept input parameters and return output parameters, and they can be called from within SQL queries, other stored procedures, or even from application code.

Here are some important things to note about stored procedures in SQL:

1. Stored procedures can be used to encapsulate complex business logic, making it easier to maintain and update over time.
2. Stored procedures can be used to improve performance by reducing the amount of data that needs to be transferred between the database and the application.
3. Stored procedures can be used to provide a simplified interface for end-users, making it easier to interact with the database.
4. Stored procedures can be used to enforce business rules and security policies, ensuring that data is always handled in a consistent and secure manner.
5. Stored procedures can be used to reduce the amount of duplicated code in an application, improving maintainability and reducing the risk of bugs.

## Example –

*-- Create a table to store employee data*

*CREATE TABLE Employees (*

*ID int PRIMARY KEY,*

*Name varchar(50),*

*Department varchar(50),*

*Salary int*

*);*

*-- Insert some dummy data*

*INSERT INTO Employees VALUES*

*(1, 'John Smith', 'Sales', 50000),*

*(2, 'Jane Doe', 'Marketing', 60000),*

*(3, 'Bob Johnson', 'Sales', 55000),*

*(4, 'Mary Lee', 'Accounting', 70000),*

*(5, 'Tom Brown', 'Marketing', 65000);*

*DELIMITER //*

*CREATE PROCEDURE emp()*

*BEGIN*

*select \* from employees;*

*END //*

*DELIMITER ;*

*call emp*

**Example 2 –**

*DELIMITER //*

*CREATE PROCEDURE dept(IN new varchar(50))*

*BEGIN*

*select \* from employees where department=new;*

*END //*

*DELIMITER ;*

*select \* from employees;*

*CALL dept('Sales');*