

A stored procedure is a precompiled collection of one or more SQL statements that can be executed as a unit. It's stored in a database and can be called by applications or users to perform specific tasks, such as querying data, updating records, or managing database schema.

Here's a breakdown of its key features:

1. **Precompiled Execution:** Stored procedures are compiled and stored in the database. This can improve performance because the database server can optimize the execution plan in advance.
2. **Encapsulation:** They encapsulate logic, which means you can store complex queries or business logic in one place, rather than embedding them in application code.
3. **Reusability:** Once created, a stored procedure can be reused multiple times, saving development time and reducing errors.
4. **Security:** Stored procedures can enhance security by controlling access to the underlying data. Users can be given permissions to execute a procedure without needing direct access to the tables.
5. **Parameterization:** Stored procedures can accept parameters, allowing for flexible and dynamic queries and operations.
6. **Error Handling:** They can include error handling to manage exceptions and ensure more reliable execution.

DELIMITER //

```
CREATE PROCEDURE GetEmployeeDetails(IN emp_id INT)
BEGIN
    SELECT * FROM Employees
    WHERE EmployeeID = emp_id;
END //

DELIMITER ;
```

CALL GetEmployeeDetails(123);