**## 💬 Interview Questions & Answers**

**### 1. What is a stored procedure?**

A stored procedure is a set of SQL statements stored in the database and can be called repeatedly. It accepts parameters, supports complex logic, and can perform insert, update, delete, or select operations.

**### 2. What is a stored function?**

A stored function is like a procedure but always returns a single value. Functions are used for computations, aggregations, and can be called inside SELECT queries.

**### 3. Difference between procedure and function?**

| Feature              | Procedure                | Function                 |

| Returns a value      | Optional (via OUT param) | Mandatory (via RETURN)   |

| Used in SELECT       | ❌ No                    | ✅ Yes                   |

| Purpose              | Tasks / Actions          | Calculations             |

**### 4. How do you call a procedure vs a function?**

- **\*\*Procedure:\*\*** `CALL GetLoanHistoryByMember(2);`

- **\*\*Function:\*\*** `SELECT TotalLoansByStaff(1);`

**### 5. Can we use loops and conditions inside them?**

Yes. Both procedures and functions support control statements like `IF`, `CASE`, `LOOP`, `WHILE`, `REPEAT`, etc.

**### 6. Can stored functions modify tables?**

❌ No. Functions are only for returning data and cannot use statements like INSERT, UPDATE, or DELETE.

**### 7. Can procedures return multiple result sets?**

✅ Yes. Multiple `SELECT` queries inside a procedure return multiple result sets.

**### 8. What is the purpose of `DELIMITER` in MySQL?**

`DELIMITER` is used to temporarily change the end-of-command symbol so that semicolons inside procedures don’t prematurely end the statement.

**### 9. Can we drop stored procedures/functions?**

Yes:

DROP PROCEDURE IF EXISTS procedure\_name;

DROP FUNCTION IF EXISTS function\_name;

**### 10. Why are stored procedures/functions important in real projects?**

They promote reusability, reduce repetitive code, and centralize business logic. Procedures/functions help maintain cleaner application code and optimize performance for database-heavy operations.