Database Testing Tasks & Answers

1. Ensuring Data Integrity

Scenario: You need to check if database operations (insert, update, delete) work correctly without data loss.
Expected Result: No record should remain after deletion.

Student Guidance: Explain why transactional integrity is important in databases.

2. Validating Database Schema

Scenario: You need to verify that the database structure matches specifications.

Expected Result: The table should have correct columns and data types.

Student Guidance: Discuss how schema validation helps maintain database consistency.

3. Testing Stored Procedures

Scenario: A database has a stored procedure for user registration. You need to test if it works correctly.

Expected Result: The user is successfully added to the database.

Student Guidance: Explain when and why stored procedures are used.

4. Security Testing: Preventing SQL Injection

Scenario: A web application should prevent SQL injection attacks.

Expected Result: The system should **reject** the input and prevent SQL injections.

Student Guidance: Discuss secure coding practices and parameterized queries.