# **STLC**

The Software Testing Life Cycle (STLC) is a sequence of specific activities conducted during the testing process to ensure software quality. It involves both verification and validation activities. Here's a high-level overview of the STLC phases:

#### 1. Requirement Analysis

**Activities:** Understanding and analyzing the requirements to identify testable requirements.

**Deliverables**: Requirement Traceability Matrix (RTM), Automation feasibility report (if applicable).

### 2. Test Planning

**Activities**: Defining the scope, objectives, and approach for testing. Estimating effort and resources needed.

**Deliverables**: Test Plan document, effort estimation, tool selection, and resource planning.

#### 3. Test Case Development

**Activities**: Designing detailed test cases and preparing test data. **Deliverables**: Test cases, test scripts (for automation), and test data.

## 4. Test Environment Setup

**Activities**: Setting up the testing environment and preparing the necessary hardware and software.

**Deliverables**: Test environment ready, smoke test results.

#### 5. Test Execution

**Activities**: Executing test cases and recording the results. Reporting and logging defects.

**Deliverables**: Test execution results, defect logs.

## 6. Test Cycle Closure

**Activities**: Evaluating the test cycle completion criteria and preparing test metrics. Documenting the learning and best practices.

**Deliverables**: Test summary report, metrics, closure report, lessons learned.