Maven Lifecycle Overview

1. Build Lifecycle Phases

a. Default Lifecycle (Build Process)

- validate - Check if the project is correct and all necessary information is available.

- compile - Compile the source code.

- test - Run unit tests using a testing framework like JUnit.

- package - Package the compiled code into a JAR/WAR file.

- verify - Perform integration tests to validate the package.

- install - Install the package into the local repository.

- deploy - Deploy the package to a remote repository for sharing.

b. Clean Lifecycle

- pre-clean - Perform any necessary pre-cleaning steps.

- clean - Remove all compiled files.

- post-clean - Perform cleanup after the clean phase.

c. Site Lifecycle

- pre-site - Perform tasks before generating the site documentation.

- site - Generate documentation for the project.

- post-site - Execute tasks after site generation.

- site-deploy - Deploy the site documentation.

2. Commonly Used Maven Commands

- mvn clean - Removes target directory and cleans the project.

- mvn compile - Compiles the project source code.

- mvn test - Runs unit tests.

- mvn package - Packages the project into a JAR/WAR file.

- mvn install - Installs the package in the local repository.

- mvn deploy - Uploads the package to a remote repository.