### 1. verify maven installation

mvn -version

description: checks if maven is installed and displays the installed version.

#### 2. create a new maven project

mvn archetype:generate -DgroupId=com.example -DartifactId=myapp DarchetypeArtifactId=maven-archetype-quickstart -DinteractiveMode=false

**description:** generates a simple maven project using the quickstart archetype.

### 3. compile the project

mvn compile

description: compiles the source code of the project.

## 4. clean the project

mvn clean

description: removes the target directory and cleans the project.

## 5. package the project

mvn package

description: compiles the code and packages it into a jar or war file.

### 6. install the package locally

mvn install

**description:** installs the package into the local repository for use as a dependency.

#### 7. run unit tests

mvn test

description: runs the unit tests of the project.

## 8. run the project

mvn exec:java -Dexec.mainClass=com.example.App

description: runs a java application with the specified main class.

### 9. skip unit tests during build

mvn install -DskipTests

description: skips running unit tests while building the project.

#### 10. update dependencies

mvn dependency:resolve

description: resolves and downloads all project dependencies.

### 11. generate project site

mvn site

description: generates project documentation based on the project configuration.

# 12. deploy the project

mvn deploy

description: deploys the project to a remote repository for sharing with other developers.

### 13. check for dependency updates

mvn versions:display-dependency-updates

description: displays the dependencies that have newer versions available.

#### 14. list all available goals

mvn help:describe -Dplugin=help

description: lists all available goals of a specified plugin.

### 15. run maven in offline mode

mvn clean install -

description: runs maven commands without accessing the remote repositories.