1) What is Maven

- It is a project management tool doing everything from compiling to deploying it to server. It uses Convention over Configuration, here it means that it will do work on its own and we do not need to do the structuring of the folders or such thing on our own using archetypes.

Folder Structure

main/java

source code

main/resources

xml config, property files

test/java

unit testing

test/resources

xml config, property files of test units

2) Why Maven?

- Maven does all the thing from building the project for us even if it is not build by us, by using various maven commands. Thus as it simplifies the things we use Maven. We can also manage the dependencies very easily as compared to the java web or other projects. It is very easy to work with it as there are plugin that will be downloaded automatically by Maven.

3) Different Maven Commands and their Uses?

- mvn clean

This command cleans the maven project by deleting the target directory.

- mvn compiler:compile

This command compiles the java source classes of the maven project.

- mvn package

This command builds the maven project and packages them into a JAR, WAR, etc.

- mvn install

This command builds the maven project and installs the project files (JAR, WAR, pom.xml, etc) to the local repository.

- mvn compile

It’s used to compile the source Java classes of the project.

4) Maven Life Cycle

- Maven have various Life Cycles Phases, it goes in the order.

process-resources

- it does all the actual work using their plugins.

compile

- it does the work related to compile plugins.

test

- it does all the work related to Surefire plugins.

package

- id does all the work related to jar plugins.