**Maven Quiz Paper**

1)What is Maven ? What is your experience with it?

Maven is a project management tool. It is based on POM (Project Object Model). It provides the developer a complete build lifecycle framework.

2)What are the different tools that you have integrated Maven with?

3)What are the steps that happen before a software projects deployment?

[Requirements](https://en.wikipedia.org/wiki/Requirements_analysis)

[Design](https://en.wikipedia.org/wiki/Software_design)

[Construction](https://en.wikipedia.org/wiki/Software_construction)

[Testing](https://en.wikipedia.org/wiki/Software_testing)

[Debugging](https://en.wikipedia.org/wiki/Debugging)

4)What are the Advantages of maven over Ant ?

ANS: Better dependency management

More powerful builds

Better debugging

Better collaboration

5)What does it mean when you say Maven uses Convention over Configuration?

ANS: It means developers are not required to create build process themselves. Developers do not have to mention each and every configuration details.

6)How do you know the version of mvn you are using?

ANS: mvn --version

7)List two most important files in your maven installation?

ANS: POM.XML and path

8)What is POM? What does it contain? Explain in detail

ANS:In Maven, POM (Project Object Model) is the fundamental unit of work. It is an XML file which holds the information about the project and configuration details used to build a project by Maven.

9)What is settings.xml ? What does it contain?

ANS: The **settings** element in the **settings**.**xml** file contains elements used to define values which configure Maven execution in various ways, like the pom.**xml**

10)What is a goal in Maven terminology?

11)Explain what the following commands will do?

mvn clean- This command consists of the mvn command which executes Maven

mvn test- This will run the entire unit tests in your project.

mvn install- The Apache Maven Install Plugin can include a pre-built custom POM

mvn deploy- In most project builds, the deploy phase of the build lifecycle is implemented using the deploy

12)What are the most important phases of a Maven Build Lifecycle?

#### ANS: Packaging

#### Plugins

13)What are Maven Profiles ? How do you use a specific profile?

14) What are Maven Plugins? List a few important maven plugins that you used?

(Must talk about maven release plugin)

ANS: **plugins** are where much of the real action is performed, **plugins** are used to: create jar files, create war files, compile code, unit test code, create project documentation, and on and on.

15)How do you use plugins in Maven?

ANS: **plugins** will be executed during the build and then, they should be configured in the <build/> element.

16)What are dependencies in maven? How are they declared? How is transitive dependencies managed in Maven?

ANS: When **maven** is run on project B version 1.0 of artifacts a, b, c, and d will be used regardless of the version specified in their pom. a and c both are declared as **dependencies** of the project

17)What is difference between Dependency Management and Plugin Management in maven?

determines what version of a dependency is to be used when multiple versions of an artifact are encountered

18)how do you create properties in a maven pom ?

ANS: Properties are the last required piece in understanding POM basics. Maven properties are value placeholder, like properties in Ant. Their values are accessible anywhere within a POM by using the notation ${X}, where X is the property.

19)How would you if a given pom is parent pom or a child pom ?

20)How would you use modules in maven? When do you create a module for your project?

* ANS: Collects all the available modules to build
* Sorts the projects into the correct build order
* Builds the selected projects in order

21)What is the order of inheritence between following files:

settings file

company pom

project pom

child/ module pom

22)What is the difference between the aggregation and inheritence in Maven?

23) In your current/previous project, how did you guys manage application version strings ?

Talk about what mV versions:set -Dnewversion=X.X.X.X and maven release plugin