1. Explain what is Maven? How does it work?

Maven is a popular open source build tool for enterprise Java projects, designed to take much of the hard work out of the build process.

It is based on POM(project object model) and used for projects build, dependency and documentation.

Maven works by downloading all the required dependencies specified in the pom.xml in to local repo from central or remote repositories.

1. Explain what is POM and its significance?

A Project Object Model or POM is the fundamental unit of work in Maven. It is an XML file that contains information about the project and configuration details used by Maven to build the project.

POM plays a significant role in the project making life of developer easy by guiding the maven to do its work properly for downloading all the dependencies.

1. Explain what a Maven artifact is?

An artifact is a file, mainly a jar that gets deployed into a maven repository.

A maven build process one or more artifacts such as compiled jars or sources.

Each artifact has a group ID, artifact ID, and version string

1. List out the dependency scope in Maven?

**Maven dependency scope** attribute is used to specify the visibility of a dependency which are relative to the different lifecycle phases.

Compile, provided, runtime, test, system and import.

1. List out what are the build phases in Maven?

Maven lifecycle goes through a set of stages they are called phases

->Validate

->Compile

->Test

->Package

->Verify

->Install

->Deploy

1. Mention the three build lifecycle of Maven?

default: handles project build and deployment

clean: handles project cleaning

site: handles the creation of project site documentation

1. List out what are the aspects does Maven Manages?

* Build.
* Documentation.
* Reporting.
* Dependencies.
* SCMs.
* Releases.
* Distribution.
* Mailing list.

1. Explain what a Maven Repository is? What are their types?

**repository** in **Maven** holds build artifacts **and** dependencies of varying **types**.

They are local, central and remote repositories.

1. Explain how you can exclude dependency?

Maven allows us to exclude specific dependencies in which Exclusions are set on a specific dependency in your POM, and are targeted at a specific groupId and artifactId.

1. For POM what are the minimum required elements?

The minimum requirement for a POM are:

* project root
* modelVersion - should be set to 4.0.0
* groupId - the id of the project's group.
* artifactId - the id of the artifact (project)
* version - the version of the artifact under the specified group