1. What is Maven and why is it used?

* Maven is structuralized format of it is used in the java projects.
* In maven the java files are stored in pom.xml files
* Maven is a one of the tool of devops
* By using Maven developing, deploying, managing, packing the files.
* Maven is used for validation and deploying , testing the pom file

1. Explain the POM file in Maven.

* POM stands for programming object model
* It is extinction of the file pom.xml
* POM.xml is used to store the java files
* Packages is used to store the java files in the jar/war/ear
* POM.xml is used to validate, develop, maintained the files

1. What are Maven coordinates and what do they represent?
2. How do you manage dependencies in Maven?
3. What is a Maven repository and what are its types?
4. Explain the concept of Maven lifecycle phases.

They are three types

1. Default

Compile: it is used to run the source code

Validate: it is used to validate the code before compile

Test: it is used test unit test

Package: package is used store file in war/jar/ear files

Deploy: it is used to deploy the file

1. Clean

Pre clean: before the file insert clean document

Clean: clean the documents

Post clean: after the file insert clean document

1. Site

Pre site: it is used to delete file

Site: delete the documents

Post site: after the delete the document

1. What are Maven goals and how do they differ from phases?
2. How do you create a Maven project?
3. What is a Maven plugin and how is it used?

* Maven plugin are to perform the specific task

1. How do you handle versioning in Maven projects?
2. Explain the PEM file in maven?
3. when we generate jar/war/ear file in target?

* It is a container that is used to store the file in jar/war/ear

1. what is home directory in maven?
2. where will be build files stored?
3. what is meant by build tool?

* Transform file into the source code into the deployment format

1. Explain the process of building in maven?

Step1: install the jdk in maven

Step2:create the project file

Step3:create the dependence to the file pom.xml

Step4:store the file in jar/war/ear

Step5:run the file

1. Does maven support all types of projects to build?

No , Maven will not support the all project files it support only java files

* It supports build web application projects
* It supports python , ruby , c++ etc

1. what is the difference between compile & validate?

Compile: it is used to run the source code

Validate: it is used to validate the code before compile

1. can you create only one jar file or can we create multiple,explain?
2. What is Git and why is it used?

* Git is a version control system
* It is used deployed the project files
* Git is a open source
* In git we can create the new repository
* We can access the files for other repository

1. Explain the difference between Git and other version control systems.

|  |  |  |
| --- | --- | --- |
| Git | Github | Gitlab |
| Git is version control system | Github is version control system | Gitlab is a version control system |
| Git is a local repository | Github is a remote repository | Gitlab is a remote repository |
| In git user is the host | Github server is the host | Gitlab is as github used to collebration |
| It is used to change the code | It is used to change the code using commands | Changes are made |
| Can access within the local | Can access the project files | Can access the project file |

1. How do you initialize a Git repository?

Step1:initialize the git repository

Create the new repository

Step2:we need to send the file to local repository to remote repository

Step3:

We need to create empty repository

git add

step4:commit the file

git commit -m

step5:establish the connection between local to remote

git remote origin remote url

step6:push the file

git push -u origin branch name

1. What is the purpose of the .gitignore file?

* The purpose of git ignore is used to ignore the file
* By using git ignore it ignore the file inside the repository

1. How do you stage changes in Git?
2. What is the difference between git commit and git commit -m?

Commit: it is used commit the files

Commit -m: it is used to commit the file and send message

1. How do you create a new branch in Git?

Step1:create a new branch

git newbranch

step2:switch to new branch

git checkout newbranch

step3:check the status of branch

git status

1. What is the difference between git merge and git rebase?
2. How do you resolve merge conflicts in Git?

* It is used to resolve the file from local repository to the remote repository
* It is used to merge the main branch

1. What is the purpose of git stash?
2. Explain the use of git pull and git fetch.

* It is used to fetch the childish repository
* It is used fetch the local repository to the remote repository and merge to the main branch