1) **Create a Maven project**

   mvn archetype:generate -DgroupId=com.example -DartifactId=MyMavenApp –

   DarchetypeArtifactId=maven-archetype-quickstart -DinteractiveMode=false

2) **Go inside the newly created project**

   cd MyMavenApp

3) **Package the newly created project**

   mvn package

4) **Open pom.xml and type the following code (after version tag (or) after name tag)**

   <properties>

       <maven.compiler.source>6</maven.compiler.source>

       <maven.compiler.target>1.6</maven.compiler.target>

   </properties>

5) **Again package the project using the command** mvn package

6) **See the list of options that can be used with git by typing**

   git

7) **Add your email by typing**

   git config - - global user.email "Github email"

8) **Add your name by typing**

   git config - - global user.name "Github username"

9) Initialize the Git repository

git init

10) Add pom.xml file

git add pom.xml

11) Add the source folder

git add src

12) Generate one SSH key

ssh-keygen -t ed25519 -C "Github email"

For enter file, don't give anything just press Enter

For enter passphrase, don't give anything just press Enter

For enter same passphrase again, don't give anything just press Enter

13) Display the contents of the public key file id_ed25519.pub

cat /home/student/.ssh/ id_ed25519.pub

14) Give a commit message

git commit -m "Your commit message"

15) Set the origin to your Github account and repository

git remote add origin git@github.com:<Github username>/<repository name>

16) Set push to Github for saving code to Github repository

git config - - global push.autoSetupRemote true

17) Push code to Github repository

git push origin main

18) git pull - - rebase origin main   (Execute this command if previous command fails)

19) git branch -M main   (Execute this command if step 17 fails)

20) git push -u origin main (Execute this command if step 17 fails)

21) git remote set-url origin git@github.com:<Github username>/<repository name> (in case you accidentally did step 15 more than once)

22) Then, see the status of Jenkins by typing the following command

    sudo systemctl status jenkins

    (If you get a green symbol, it means Jenkins is active/running)

23) Type localhost:8080 in the browser and enter

    Username : admin
    Password :   The password which you get after typing the command

    sudo cat /var/lib/jenkins/secrets/initialAdminPassword

24) Click on "New Item" -> Enter an item name like MavenCI

25) Select Pipeline and click on Ok

26) Scroll down and enter the pipeline script as mentioned in Google classroom in the textarea. In the pipeline script, give your Git URL which ends with .git and put it inside the single quotes.

27) Click on Save

28) Click on "Build Now" and check if Build is successful or not.

    If build is successful, experiment is completed
    If build fails, check your pipeline script, correct it -> Click on Save -> Click on Build Now.