

## **LAB PROGRAM-08 (PART A)**

1. mvn archetype:generate -DgroupId=com.example -DartifactId=demo -  
DarchetypeArtifactId=maven-archetype-quickstart -  
DinteractiveMode=false

2. cd demo

3. git init

4. git add .

5. git commit -m "Initial commit"

6. Go to your github account create one repository name "program8"

7. (On your github account you'll get one url) copy and paste this command from there-

git remote add origin <your-repo-url>

8. git push -u origin main

{ if error comes the check

a) git status

If it shows you are in master branch ,change it to main by using command

b) git branch -M main

c) git push -u origin main }

9. Open jenkins (in your browser run this - <http://localhost:8080>)

If this does not run directly on your browser the,

Go to command prompt(open in administrator)

Type- java -jar (path of jenkins.war from your c drive)

10. Open jenkins provide your username and password

Go to dashboard :

a) Click on new item

b) Enter a project name (MavenCI)

- c) Select “**Pipeline**” Click **OK**
- d) Scroll Down to the **Pipeline** Section
- e) Set the Definition to **Pipeline Script**
- f) Inside that box ,put this code-

```
pipeline {
  agent any
  tools {
    maven 'Apache Maven 3.9.9'
  }
  stages {
    stage('Checkout') {
      steps {
git branch: 'main', url:'https://github.com/Sakshi-03012004/program8.git'
      }
    }
    stage('Build') {
      steps {
        bat ' mvn clean install '
      }
    }
    stage('Archive Artifacts') {
      steps {
        archiveArtifacts artifacts: 'target/*.jar', allowEmptyArchive: true
      }
    }
  }
}
```

}

g) Click Save (at the bottom)

h) Click Build Now

i) Console Output.(it should show `Finished: SUCCESS`)

## PART-B

### Open ubuntu

1. vi hosts.ini

Inside that write code -

`[local]`

`localhost ansible_connection=local`

2. Vi deploy.yml

Inside that write code -

```
- name: Deploy artifact locally
hosts: local
tasks:
  - name: Copy JAR file from Jenkins to deploy directory
    copy:
      src:/mnt/c/Users/ASUS/.jenkins/workspace/mavenCI/target/demo-1.0-SNAPSHOT.jar
      dest: /mnt/c/Users/ASUS/deployed/demo-1.0-SNAPSHOT.jar
```

To find the source and destination -

- Open Jenkins.
- Go to your Maven job → Build History → Workspace.
- Navigate to the **target/** folder and confirm the **JAR** file exists
- then in the **src path** provide your project name which you have given in your jenkins project (example-mavenCI)
- Go to your system directory (example=asus) and create a folder named **deployed manually if it does not exist.**

copy the `demo-1.0-SNAPSHOT.jar` file into it.

`/mnt/` is used because as the forward slash does not work in the unix system

3. `ansible-playbook -i hosts.ini deploy.yml`

4. To check whether it exist ,run:

`ls /mnt/c/Users/ASUS/deployed`

It should give-

`demo-1.0-SNAPSHOT.jar`