Install jenkins

```
#!/bin/bash

sudo yum update -y


# Install Java

sudo amazon-linux-extras install -y epel

sudo amazon-linux-extras install -y java-openjdk17

sudo wget -O /etc/yum.repos.d/jenkins.repo https://pkg.jenkins.io/redhat-stable/jenkins.repo

sudo rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io.key

sudo yum install -y epel-release

sudo yum install -y java-17-openjdk-devel

sudo /usr/sbin/alternatives --config java <<< '1'


# Install Maven

sudo wget http://repos.fedorapeople.org/repos/dchen/apache-maven/epel-apache-maven.repo -O /etc/yum.repos.d/epel-apache-maven.repo

sudo sed -i s/\$releasever/6/g /etc/yum.repos.d/epel-apache-maven.repo

sudo yum install -y apache-maven


# Install git

sudo yum install git -y


# Install Jenkins

sudo yum install -y jenkins

sudo systemctl start jenkins
```

sudo systemctl enable jenkins

sudo java -version

sudo mvn –-version

sudo git version

install docker

#!/bin/bash

sudo yum update -y

sudo yum install -y docker git

sudo systemctl start docker

sudo systemctl enable docker

sudo usermod -aG docker ec2-user

sudo docker version

To get jenkins password

Dockerfile

FROM node:16.14.0-alpine AS build

```
RUN npm i -g @angular/cli@13.1.0

WORKDIR /app

COPY package.json package-lock.json ./

RUN npm install

COPY . .

RUN ng build --prod


FROM nginx

COPY --from=build /app/dist/myapp/ /usr/share/nginx/html/
```

Jenkinsfile

```
node {
    stage('Initialize')
  {
     def dockerHome = tool 'mydocker'
     env.PATH = "${dockerHome}/bin:${env.PATH}"
  }
  stage('Clone repository') {
     git credentialsId: 'git', branch:'main' , url: 'https://github.com/chirag627/assisted-4-phase-5.git'
  }


  stage('Build image') {
```

```
      dockerImage = docker.build("chirag627/myangularapp:latest")
    }

 stage('Push image') {
       withDockerRegistry([ credentialsId: "f5c22d86-f591-40e0-b461-c38c715491a2", url: "" ]) {
       dockerImage.push()
       }
    }
}
```

Init docker Swarm on master

```
docker swarm init --advertise-addr <private-ip-of-master>
```

To check the status of workers

```
docker node ls
```

To create replicas

```
docker service create --name myapp1 --replicas 5 -p 80:80 chirag627/myangularapp
```

To check which replica running on which instance

```
docker service ps myapp1
```