Project – 4 :

**Source code :**

**STEP:1** CREATE AWS UBUNTU INSTANCE WITH PORT NO:8080

1. Prepare AWS Instance(Ubuntu Server 22.04 LTS (HVM), SSD Volume Type)

2. Security : Add port no: 80 with Custom TCP Rule

3. Download .pem Key and connect using Moba x-term

open moba x-term

> cd d: //here d: is my drive

> cd phase-5 //phase-5 is a folder inside d: driver where .pen key is available

>goto> aws >instance>choose your instance>connect>ssh>copy example key

**STEP:2** DOCKER INSTALLATION ON UBUNTU OS

>sudo apt-get update

>sudo apt-get install ca-certificates curl gnupg lsb-release

>sudo mkdir -p /etc/apt/keyrings

>curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo gpg --dearmor -o /etc/apt/keyrings/docker.gpg

>echo "deb [arch=$(dpkg --print-architecture) signed-by=/etc/apt/keyrings/docker.gpg] https://download.docker.com/linux/ubuntu $(lsb\_release -cs) stable" | sudo tee /etc/apt/sources.list.d/docker.list > /dev/null

>sudo apt-get update

>sudo apt-get install docker-ce docker-ce-cli containerd.io docker-compose-plugin

TO VERIFY THE INSTALLTION

> sudo docker -v

output: Docker version 20.10.18, build b40c2f6

**STEP:3** INSTALL JDK

> sudo apt-get update

> sudo apt install default-jdk -y

**STEP:4** INSTALL MAVEN

> sudo apt-get update

> sudo apt install maven -y

**STEP:5** INSTALL JENKINS

>curl -fsSL https://pkg.jenkins.io/debian-stable/jenkins.io.key | sudo tee /usr/share/keyrings/jenkins-keyring.asc > /dev/null

>echo deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc] https://pkg.jenkins.io/debian-stable binary/ | sudo tee /etc/apt/sources.list.d/jenkins.list > /dev/null

>sudo apt-get update

>sudo apt-get install jenkins

1. TO START WITH JENKINS

> sudo service jenkins start

> sudo service jenkins status

CONNECT: goto> AWS>EC2>Copy Public IP:8080 on browser hit enter

2. TO GENERATE SECRET PASSWORD

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

---to deal with permission denied error----

> sudo chmod 777 /var/run/docker.sock

In Jenkins page :

Enter the password and install suggested plugins.

Enter login details and start your Jenkins.

In dashboard :

* new item > give project name > click on pipeline project > click ok .
* give description > add link to the pipeline .

link : : https://github.com/Nikunj-Java/SpringBootDockerApp.git

click on apply and save . then give build now.











