Title: Jenkins Installation on AWS EC2

1. Launch EC2 Instance:-

- OS: Amazon Linux 2
- Instance Type: t2.micro (Free Tier eligible)
- Storage: Minimum 8 GB
- Security Group (Inbound Rules):
- SSH (Port 22) – for terminal access
- HTTP (Port 80) – optional
- Custom TCP Rule (Port 8080) – for Jenkins

2. Connect to EC2 via SSH

```
ssh -i "your-key.pem" ec2-user@<your-ec2-public-ip>
```

3. Install Java (Required for Jenkins)

```
sudo yum update -y

sudo amazon-linux-extras install java-openjdk11 -y
```

4. Add Jenkins Repository and Install Jenkins

```
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-2023.key


sudo yum upgrade -y

sudo yum install jenkins -y
```

5. Start and Enable Jenkins

```
sudo systemctl enable jenkins

sudo systemctl start jenkins
```

6. Open Port 8080 in EC2 Security Group

- Go to the AWS EC2 Console
- Navigate to Security Groups → Inbound Rules

- Add a new Custom TCP Rule:
- Port Range: 8080
- Source: 0.0.0.0/0 (or your IP for restricted access)

7. Access Jenkins in Browser

Visit:

```
http://<your-ec2-public-ip>:8080
```

8. Unlock Jenkins

Get the initial admin password:

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

Paste this password into the browser setup wizard.

Jenkins is now installed and ready to use