**Jenkins automation project part-1**

* **Steps:(create one ec2 instance and edit inbound rules in security)**

1. Sign in into AWS console
2. Click on EC2
3. Click on instances
4. Click on launch instance
5. Enter instance name “Jenkins”
6. Select amazon Linux
7. Select t3 medium
8. Click on create new key pair-enter key pair name(jenkins\_key)-click on create key pair-.pem key downloaded in download folder.
9. Click on launch instance
10. Instance created successfully.
11. Go to Jenkins instance
12. Click on security
13. Move the courser to the down- on the left side click on security groups below blue color link
14. One window will be open - click on edit inbound rules.
15. Click on add rule
16. Click on dropdown arrow under type
17. It shows so many ports- click on all traffic
18. Click on drop down arrow under source
19. It shows 4 options- click on anywhere ipv4
20. Click on save rules.
21. Successfully added edit rules.

* **Connect with gitbash:**

1. Go to file explorer
2. Click on downloads
3. It shows .pem key
4. Right click on the workspace
5. Click on new
6. Click on folder
7. Enter file name (jenkins\_key pair)
8. Enter-folder created
9. Copy the .pem key file and paste into jenkins\_key pair folder.
10. Open the folder
11. Right click
12. Click on show more options
13. Click on gitbash here.
14. Go to jenkins instance
15. Click on connect
16. 3rd and example url copy and paste into the git bash (one after one)

* **Commands execution on linux server:**
* Prerequisites for jenkins automation project-git,java,maven, and jenkins)

1. Ececute Sudo su(switching to the root user)
2. sudo dnf install -y java-17-amazon-corretto (install java by using this command)
3. yum install -y git (install git)
4. sudo wget <http://repos.fedorapeople.org/repos/dchen/apache-maven/epel-apache-maven.repo> -O /etc/yum.repos.d/epel-apache-maven.repo
5. sudo sed -i s/\$releasever/6/g /etc/yum.repos.d/epel-apache-maven.repo
6. sudo yum install -y apache-maven
7. sudo wget -O /etc/yum.repos.d/jenkins.repo <https://pkg.jenkins.io/redhat-stable/jenkins.repo>
8. sudo rpm --import <https://pkg.jenkins.io/redhat-stable/jenkins.io.key>
9. sudo alternatives --config java (it shows two versions 17 and 23 with 1 and 2 numbers - enter 1- 17 th version of java installed)
10. sudo yum install nginx (install nginx)
11. yum install jenkins –y (install jenkins)
12. sudo rpm --import <https://pkg.jenkins.io/redhat/jenkins.io-2023.key>
13. rpm -q gpg-pubkey --qf "%{NAME}-%{VERSION}-%{RELEASE} %{SUMMARY}\n"
14. sudo yum install -y jenkins
15. sudo systemctl enable jenkins
16. sudo systemctl start jenkins
17. sudo systemctl status jenkins
18. cat /var/lib/jenkins/secrets/initialAdminPassword
19. Go to ec2 jenkins instance
20. Copy the public ip of jenkins instance
21. Paste it in the google with :8080
22. Click enter
23. Jenkins dashboard displayed
24. Go to git bash copy the administrator password and paste it on the jenkins dashboard.
25. Click enter
26. Click on select installed plugins
27. Jenkins plugins will be installed (wait few minutes)
28. Click on finish and continue
29. One window will be displayed – enter username,password,confirmpassword,email
30. Click on save and continue
31. Welcome to jenkins window displayed.