JENKINS

Jenkins is a Java-based open-source automation platform with plugins designed for continuous integration.

It is used to continually create and test software projects, making it easier for developers and DevOps engineers to integrate changes to the project and for consumers to get a new build.
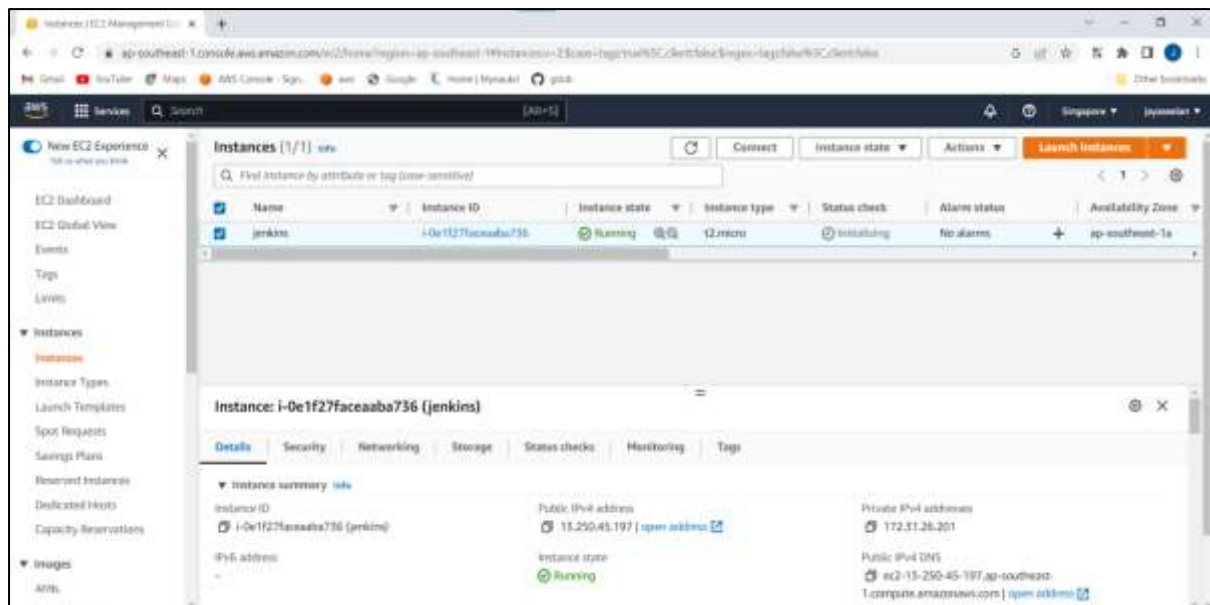
Jenkins support all cloud platform

- 2000 Pluggins available in Jenkins
- Jenkins default port nymber:8080
- Jenkins default path ---> /etc
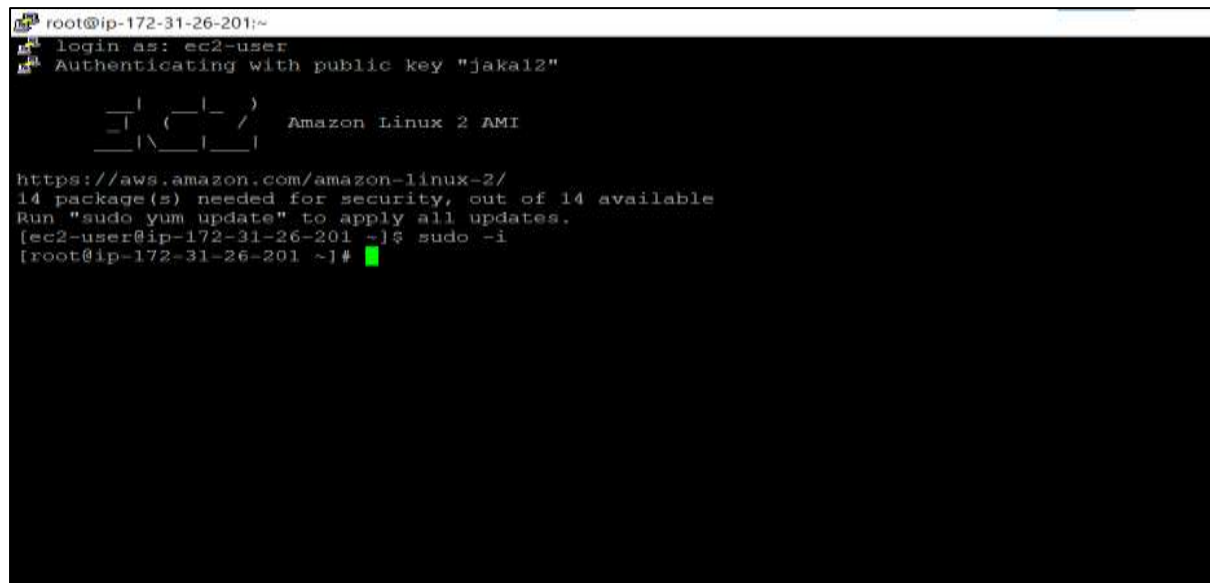- Jenkins job save directory ---->var/lib/Jenkins/workspace

Steps To Create Jenkins

Step1: launch ec2 linux server

Security group(all traffic)---->storage(30gb)

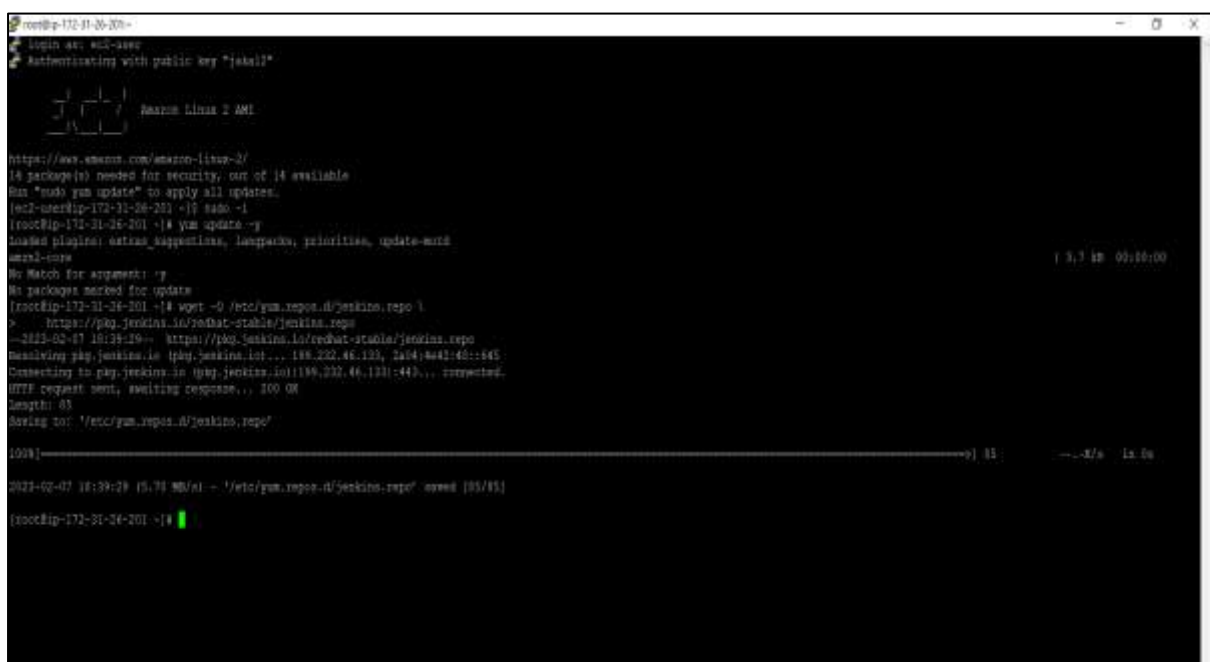**Step2:**login server and switch to root user(sudo –i)

Step3: Java And Jenkins Install

---->Jenkins repo add:

  # yum update –y

  # wget -O /etc/yum.repos.d/jenkins.repo \

   https://pkg.jenkins.io/redhat-stable/jenkins.repo

------> Import a key file from Jenkins-CI to enable installation from the package:

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

sudo yum upgrade

----->Install Java:

#amazon-linux-extras install java-openjdk11 -y

---->Install jenkins:

   # yum install jenkins -y

systemctl enable Jenkins

systemctl start Jenkins

systemctl status jenkins

Now server public ip:8080 put chrome --->13.250.45.197:8080
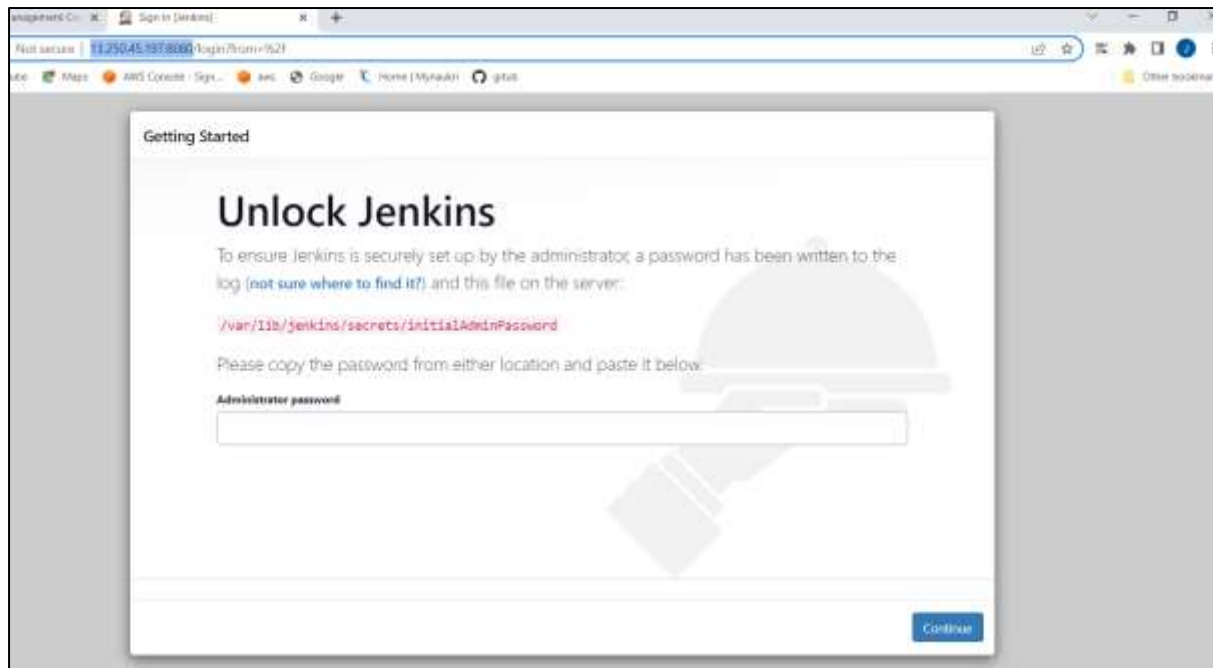
copy this path from jenkins page /var/lib/jenkins/secrets/initialAdminPassword

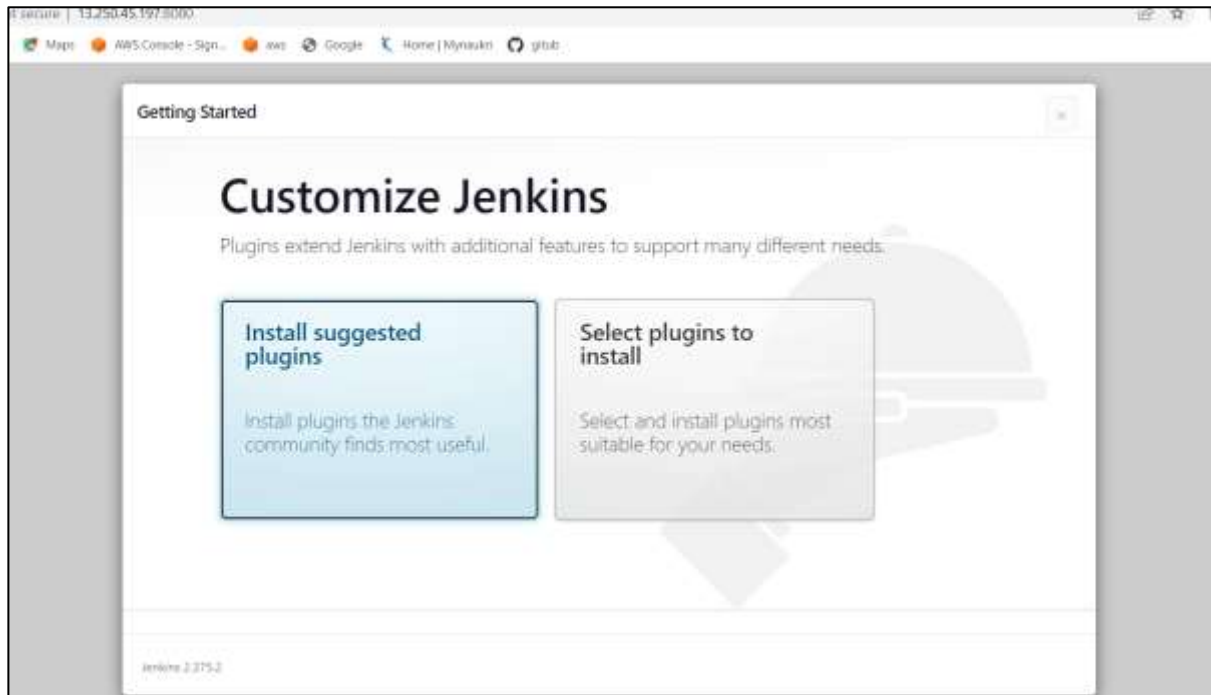# cat /var/lib/jenkins/secrets/initialAdminPassword

copy this password and paste to jenkins and click continue.

Select insall suggested plugins
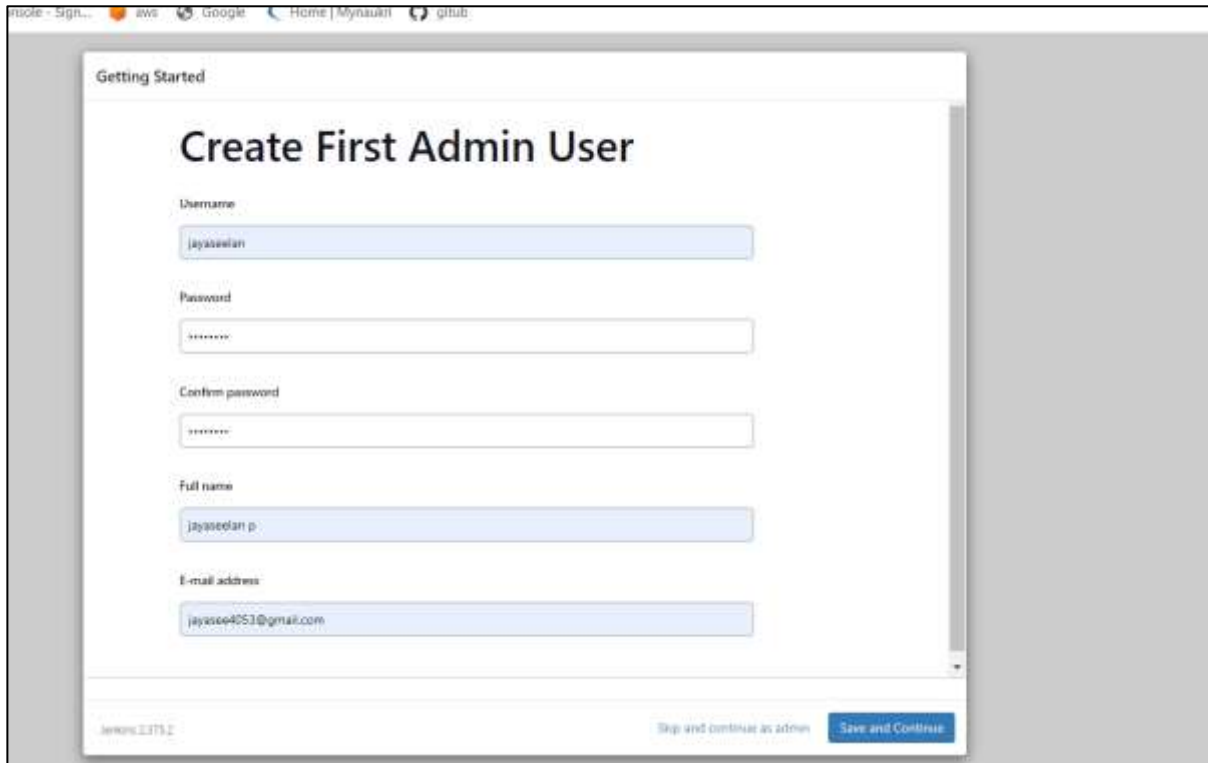
Jenkins started for all components are install to wait 5 min
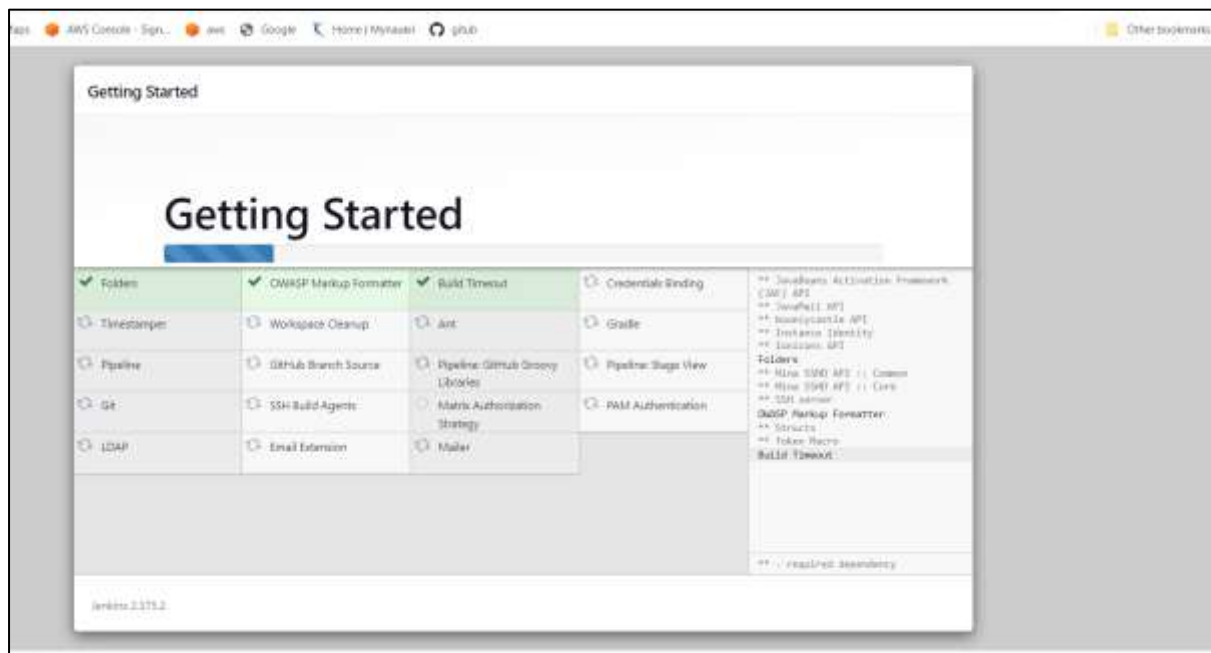
Step4: Now Set Username And Password For This Admin User

Username:jayaseelan

Password:jaya1234

It's sown ur Jenkins url

Finally Jenkins will open.

Step5:create 2 jobs developer and tester

Dashboard --->new item --->job name(developer)--->click
Freestyle project --->ok
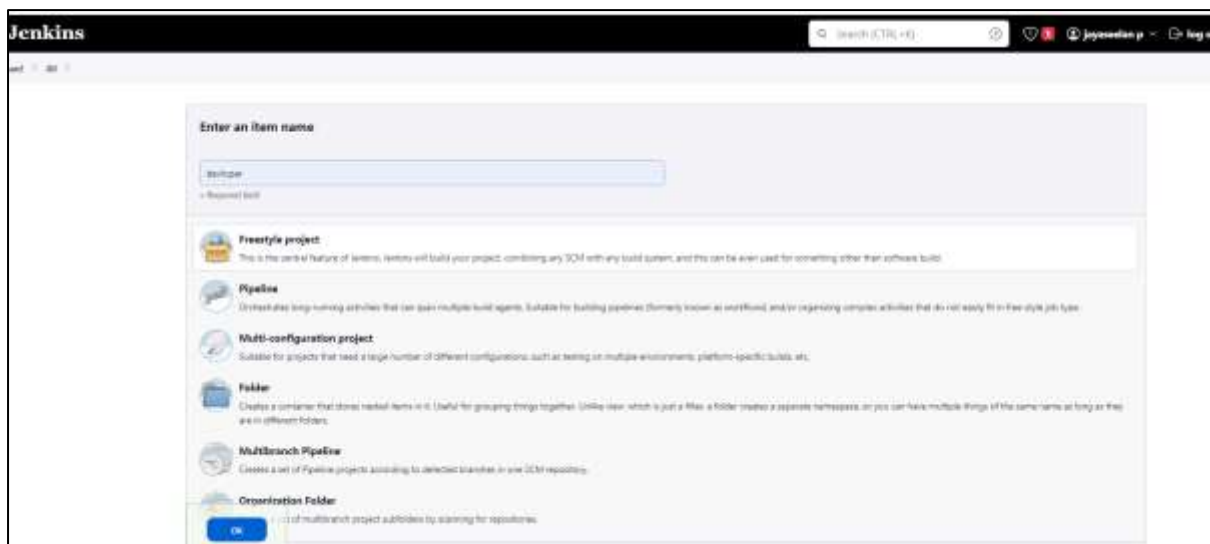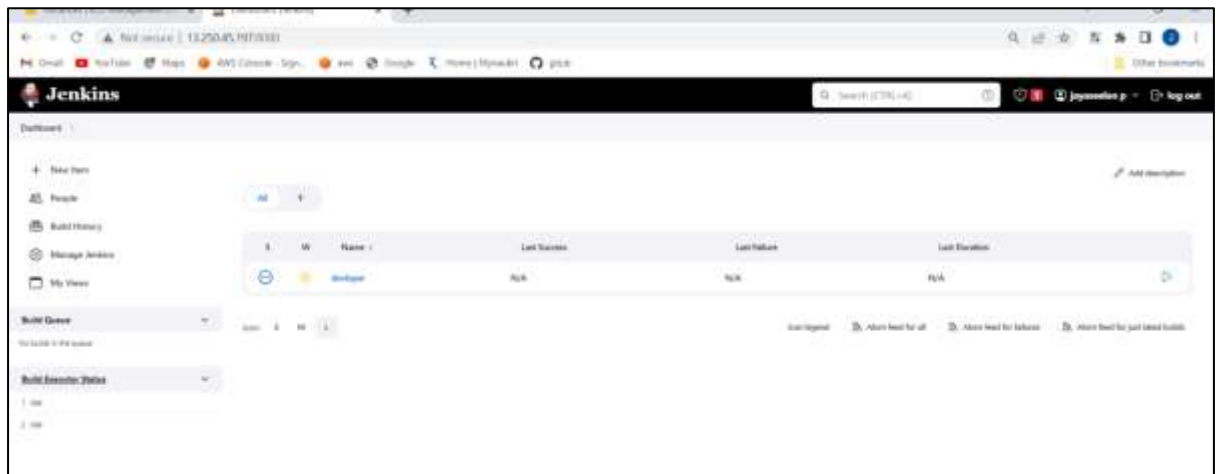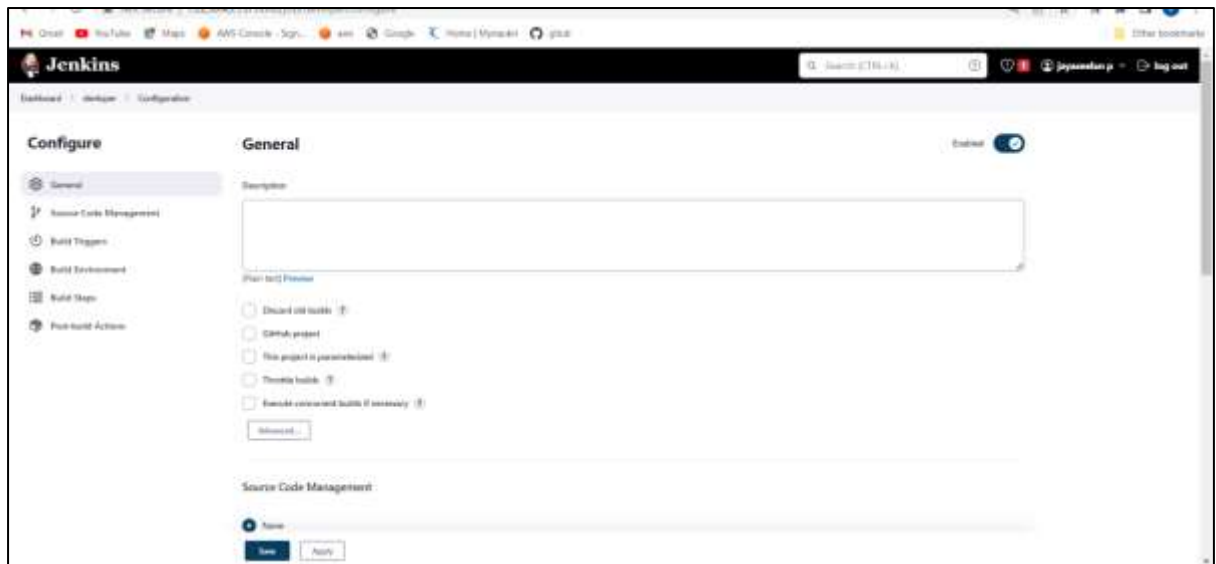
Next page --->save

Developer job created..

Now create tester job

Dashboard --->new item --->job name(tester)--->click Freestyle
project --->ok

Next page --->save
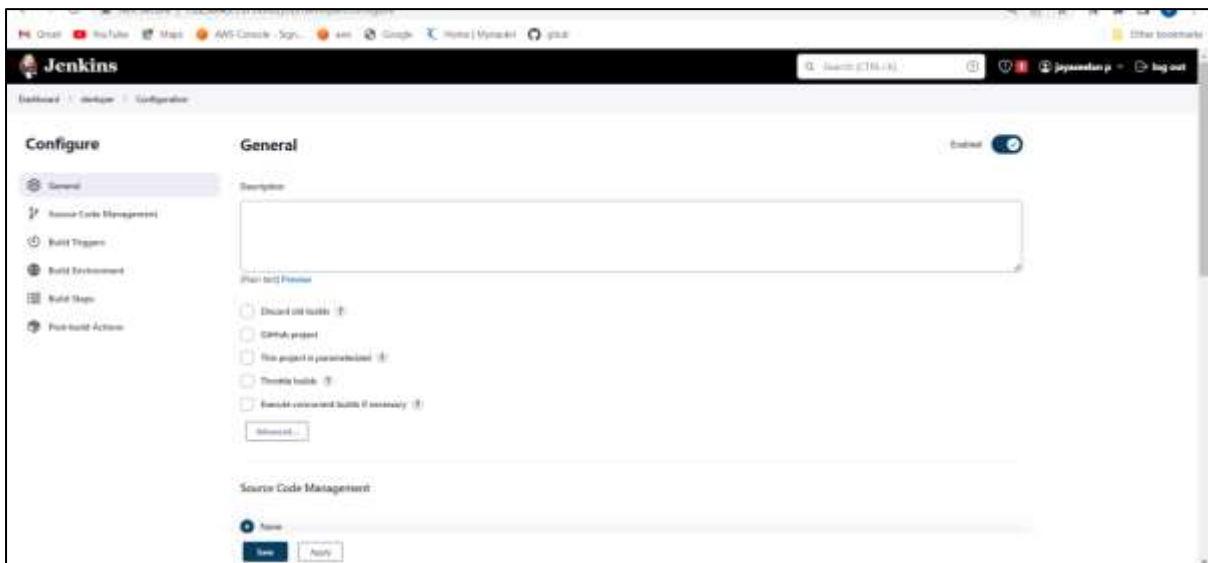
developer and tester jobs can created.
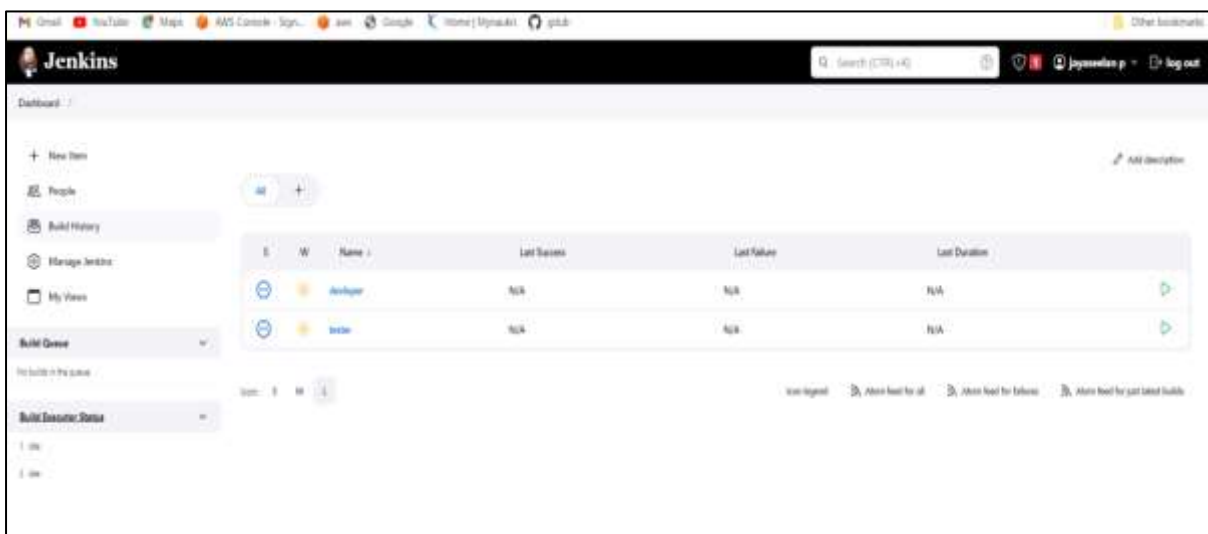
Step6:create two users
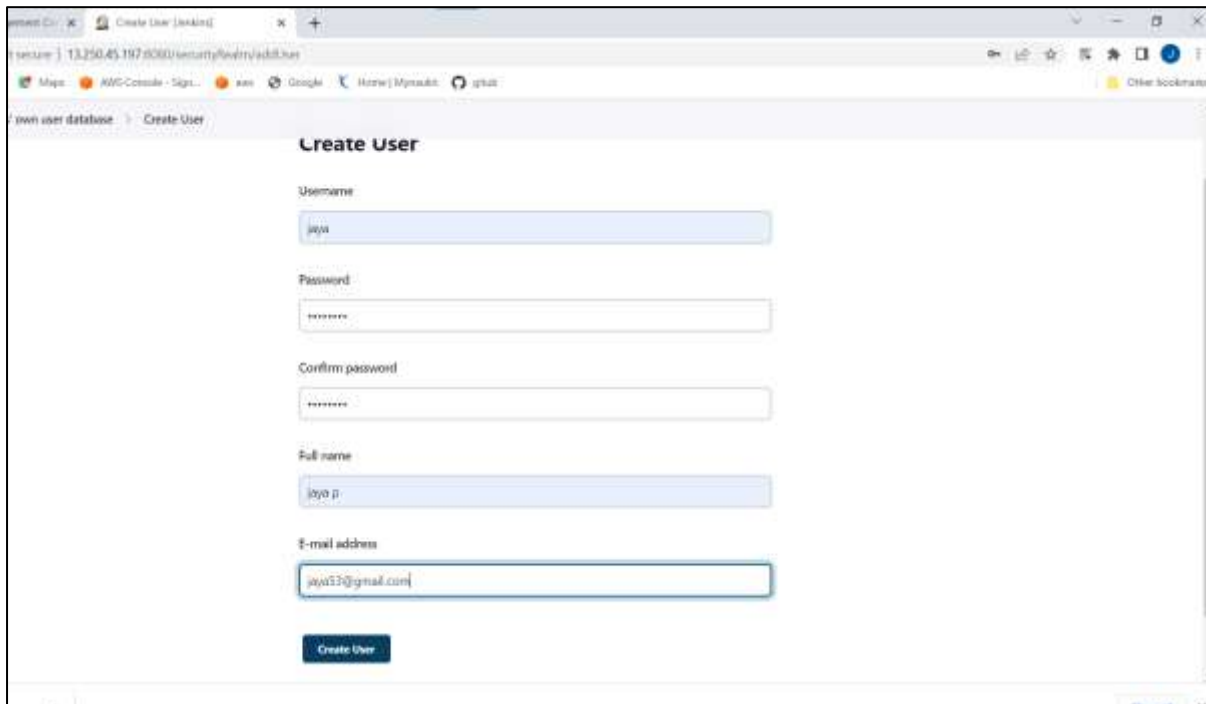
Create 1st user(**seelan**)--->Dashboard--->manage Jenkins ----
>manage users--->create users---> give

username(**seelan)**,password(**seelan1234**) and mail
id(**seelan53@gmail.com**)
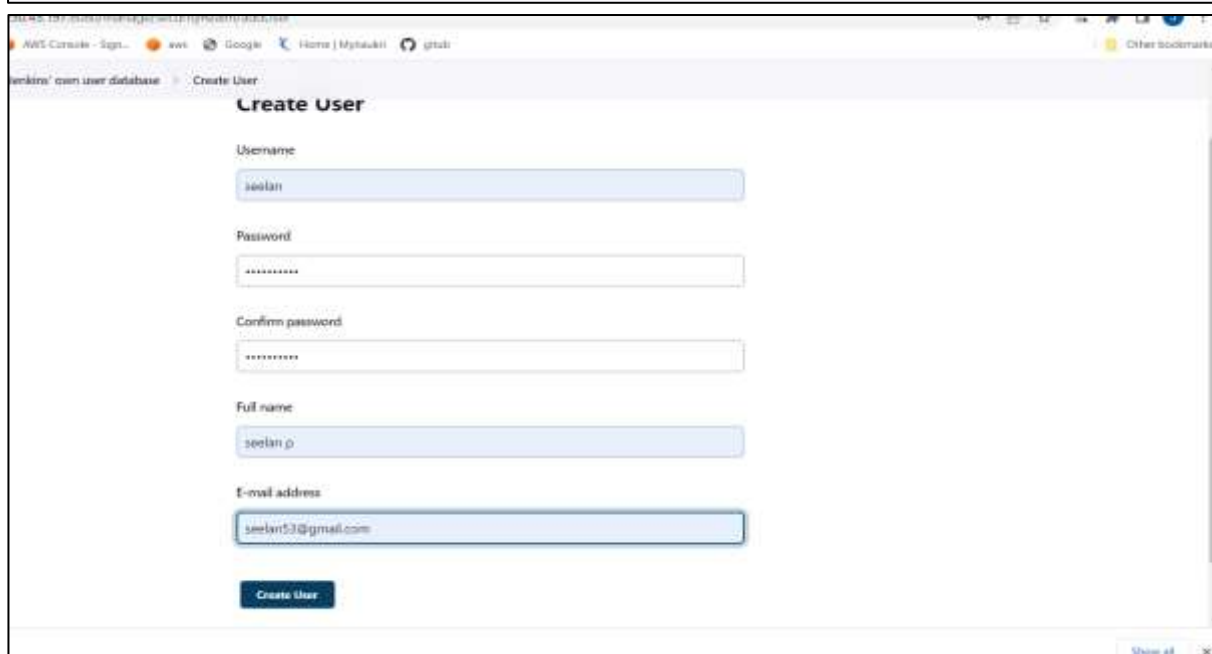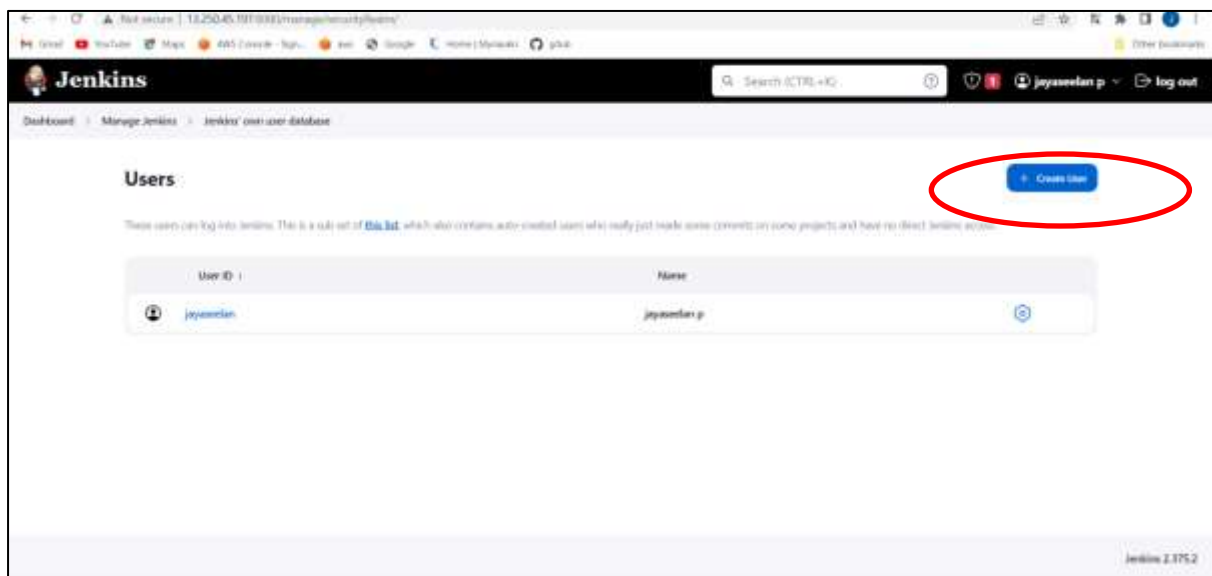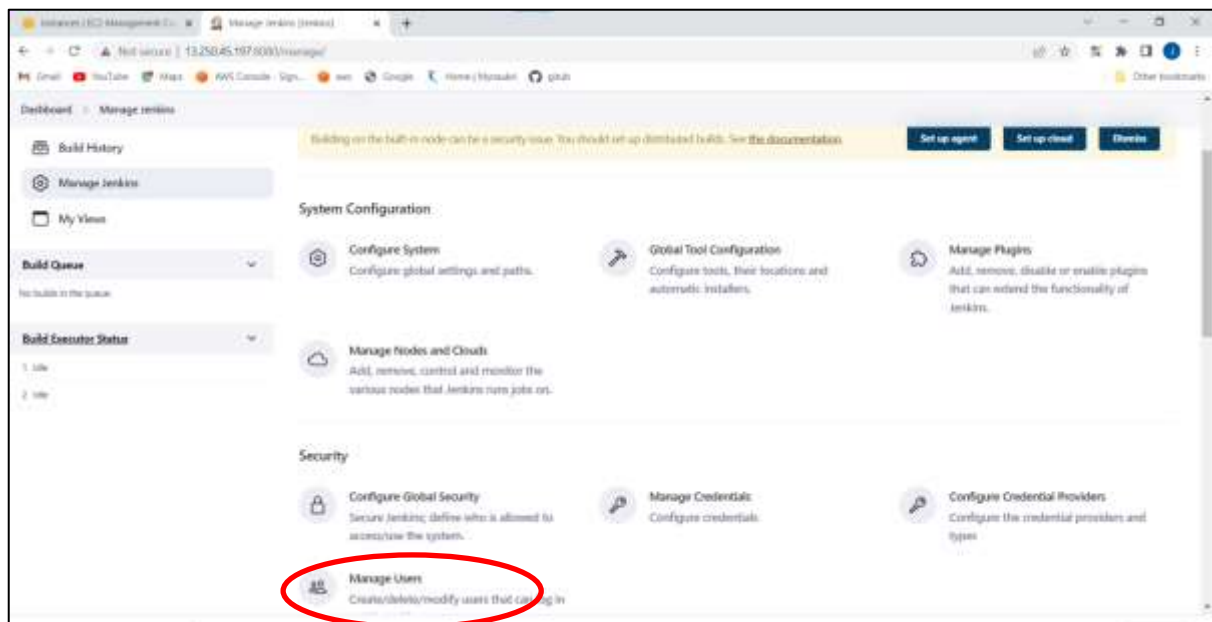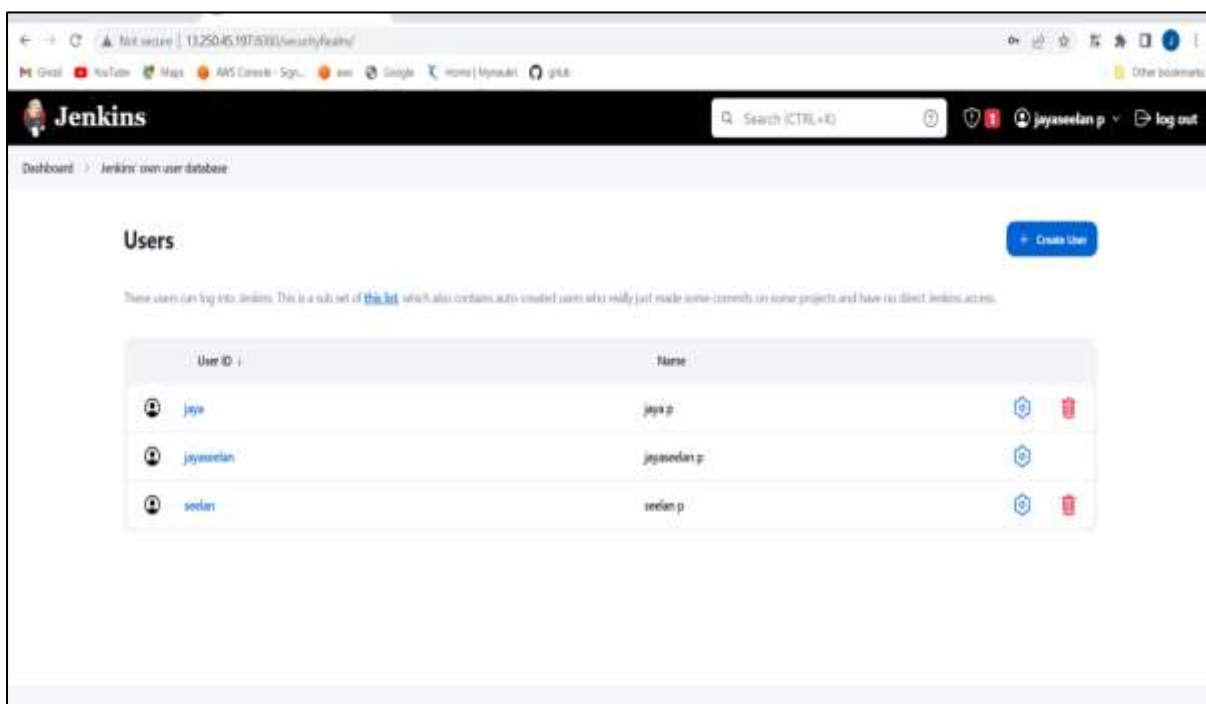
Create 2nd user(**jaya**)--->Dashboard--->manage Jenkins ---->-
manage users--->create users---> give

username(**jaya**),password(**jaya1234**) and mail
id(**jaya53@gmail.com**)

Two users created..

Step7:install plugins

Dashboard--->manage Jenkins ---->available plugins---->search(Role-based Authorization Strategy)--->click box ---->install without restart
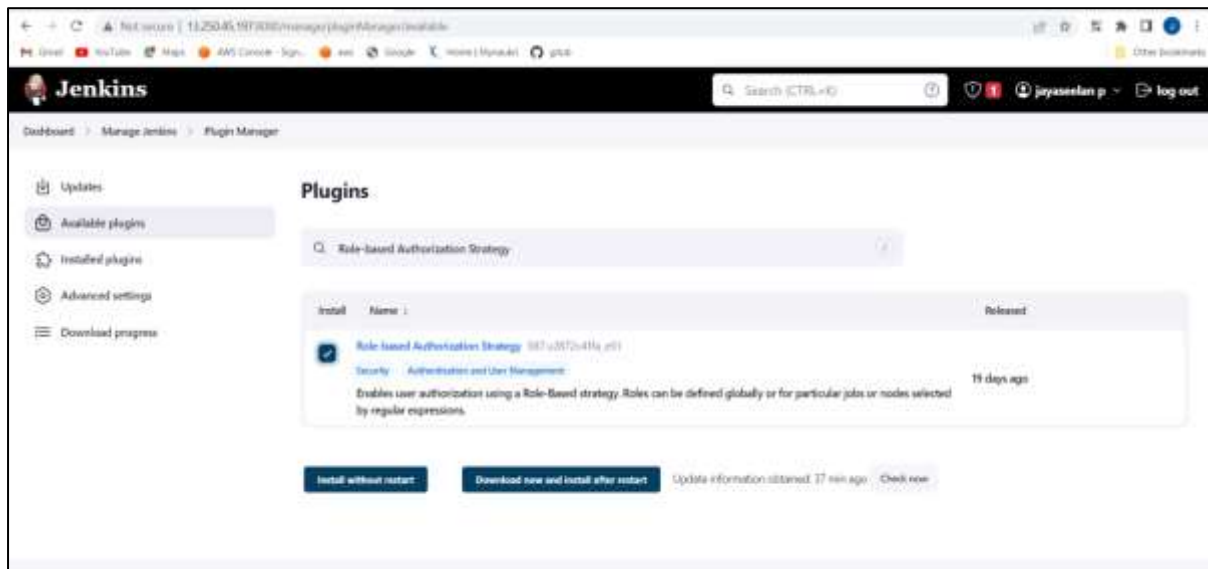
Step8:Configure Global Securuty

Dashboard--->manage Jenkins--->security--->configure global security--->authorization---->select role-based strategy--->save
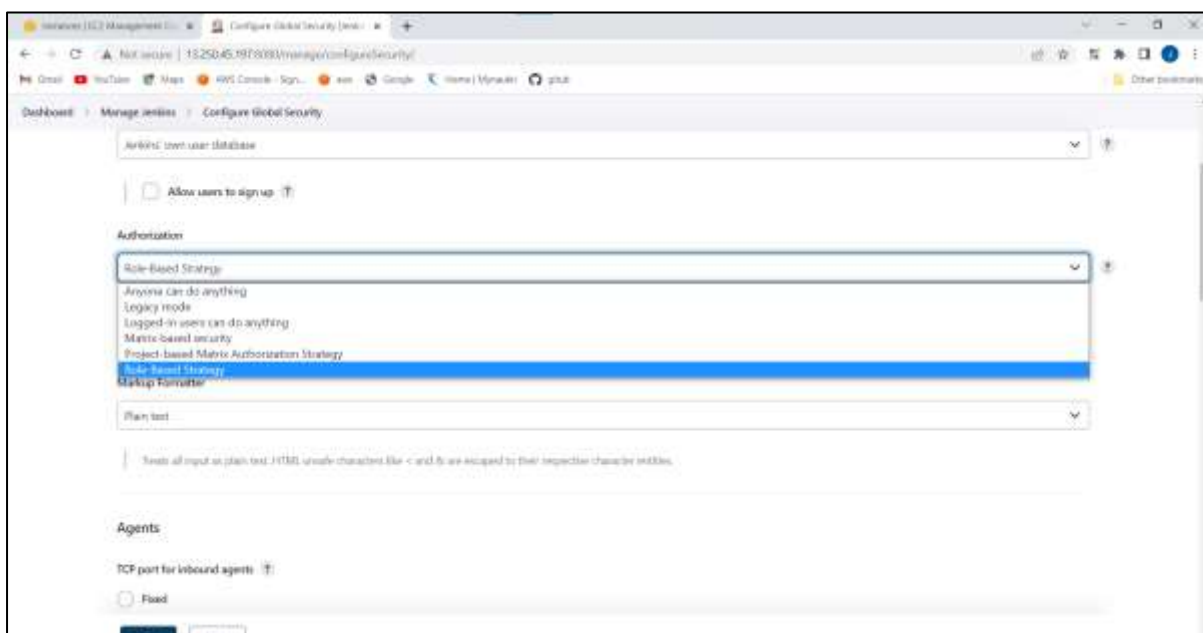
Now shown manage and assign roles
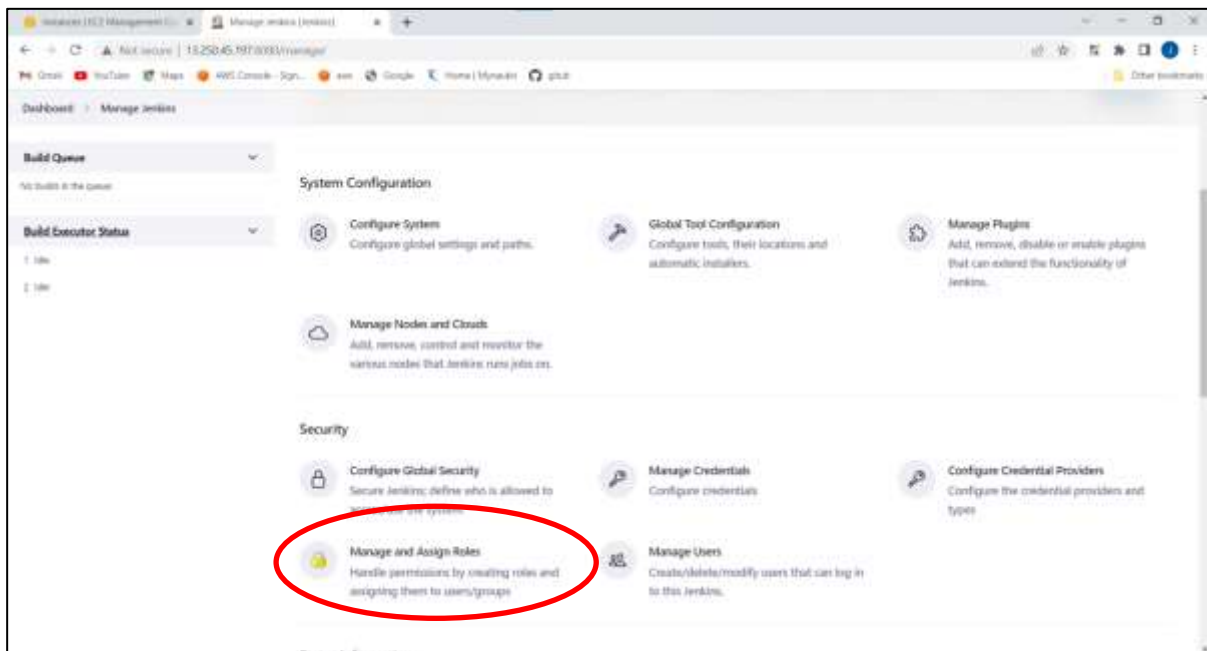
Step9:Manage Global Role And Item Role for developer and tester
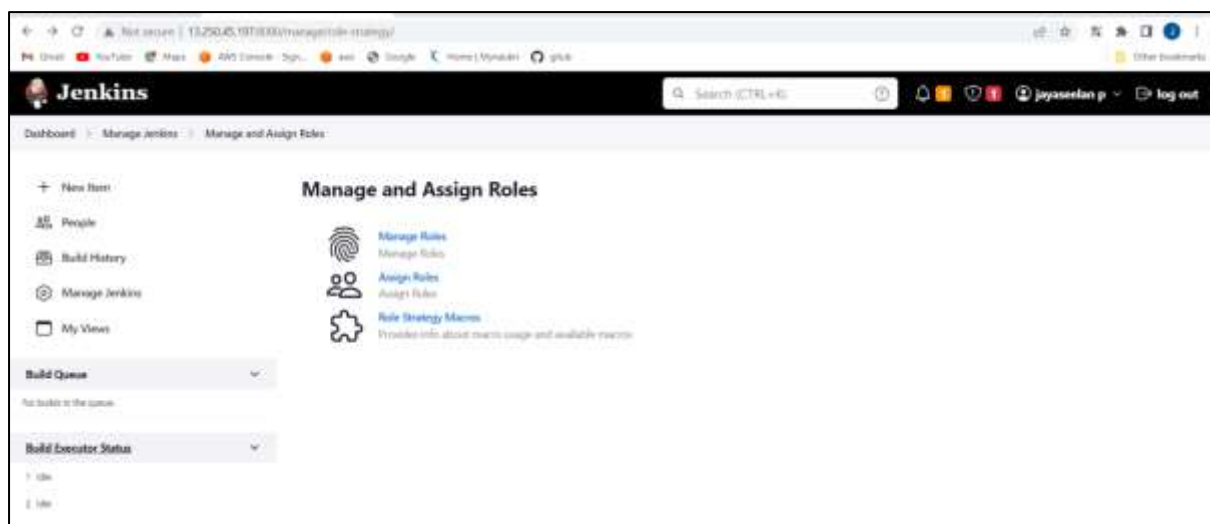
Manage role---->global role--->Role to add (employee)--->add -->-permission (read) only give
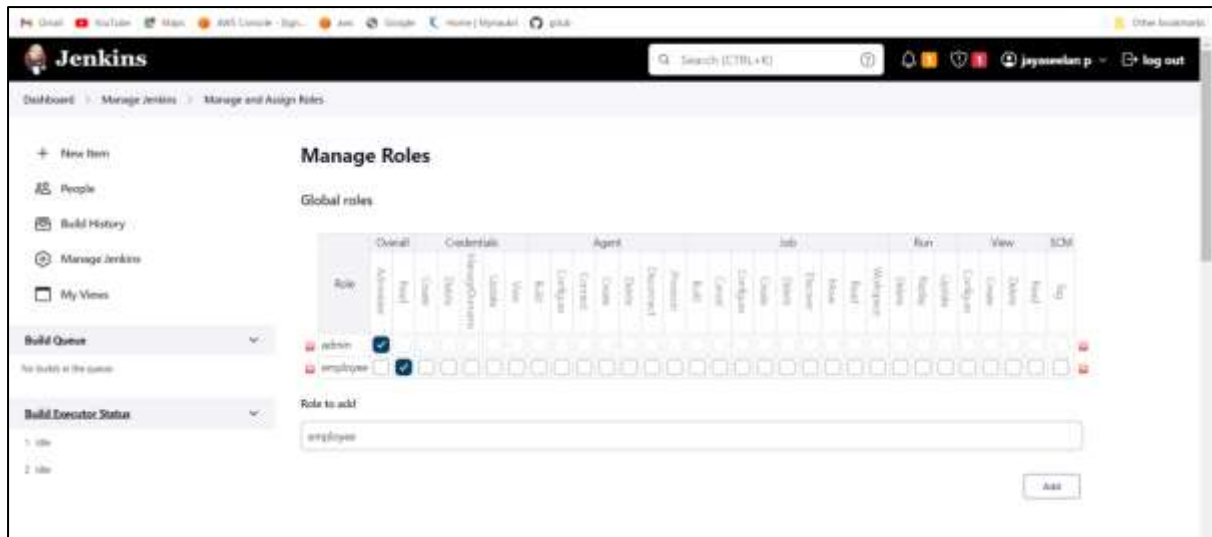
Global role assignd..

Now item role assign

Manage role---->item role--->Role to add 1.(developer)-------->-
pattern(dev.*)---->add -->-permission (all permission) give--->role
to add 2.(tester)---->pattern(test.*)---> add -->-permission (all
permission) give

Finally save.

Step10:Assign Global Role And Item Role for users

Dashboard--->manage Jenkins--->assign role

Global role--->user/group add--->1.user--->seelan --->add -->give employee permission---->2.user--->jaya --->add --> give employee permission

Dashboard--->manage Jenkins--->assign role
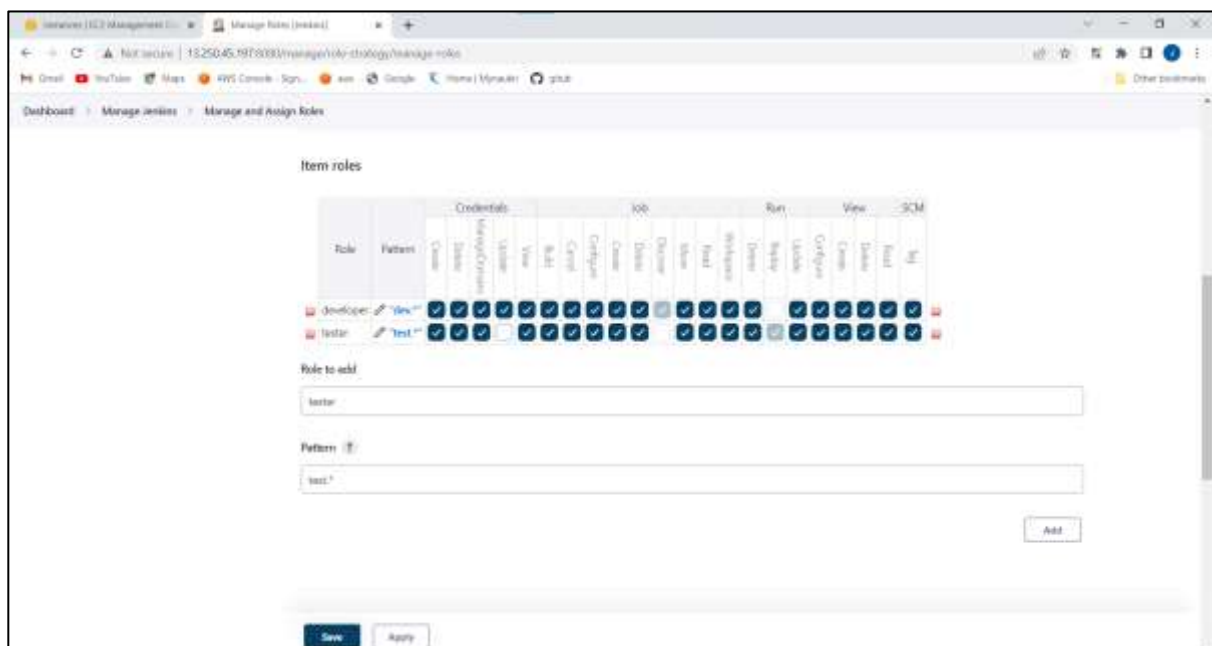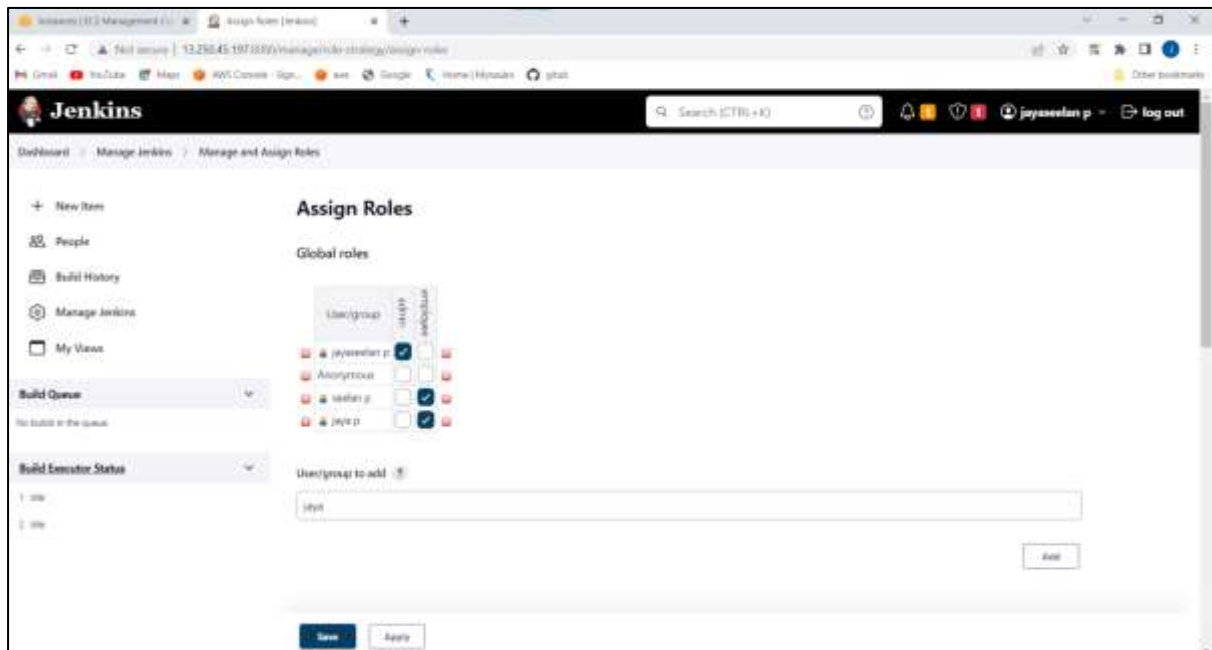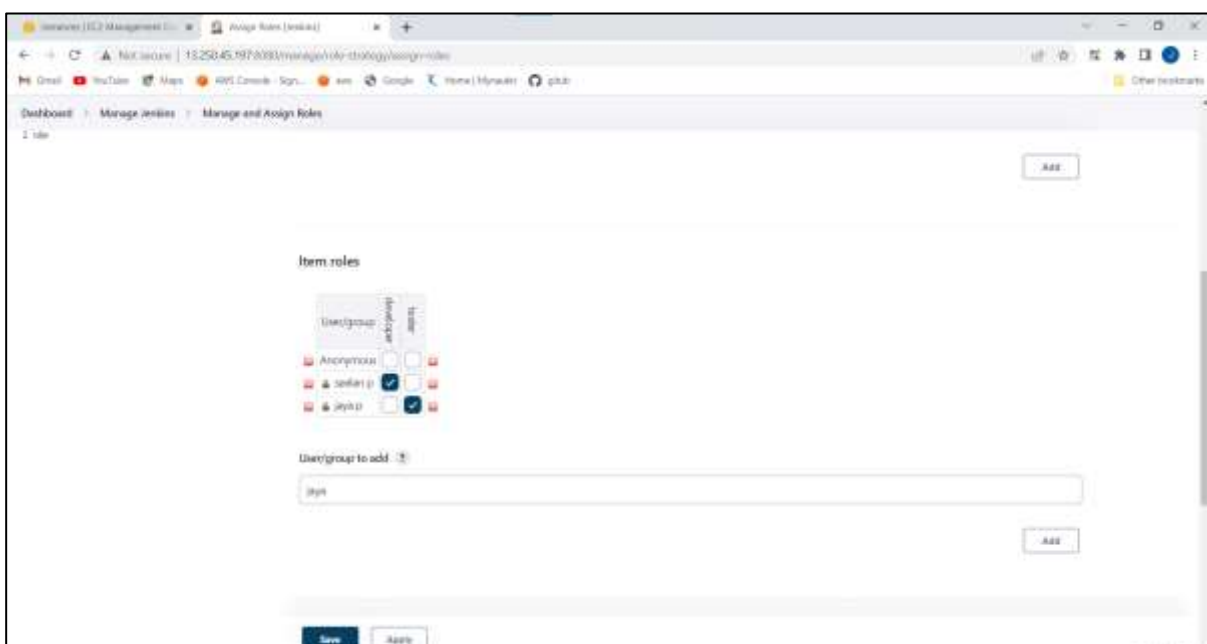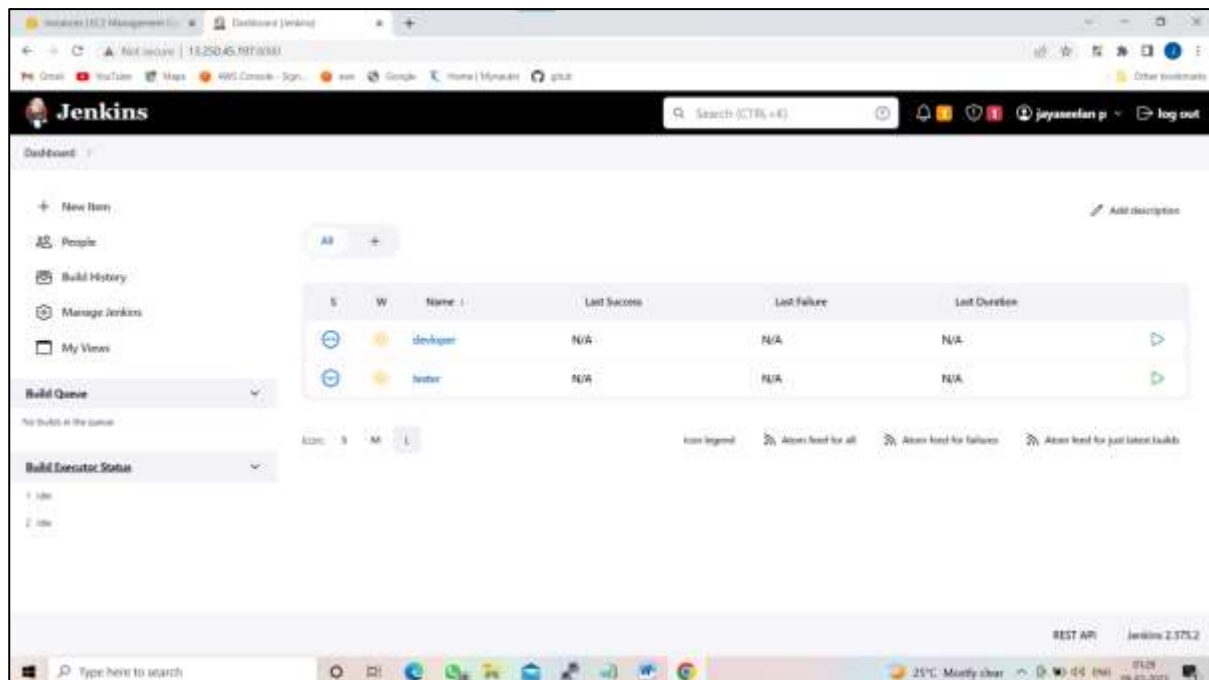
Item role---> user/group add--->1.user--->seelan --->add -->-assignd developer---->2.user--->jaya --->add --> assignd tester

Save..

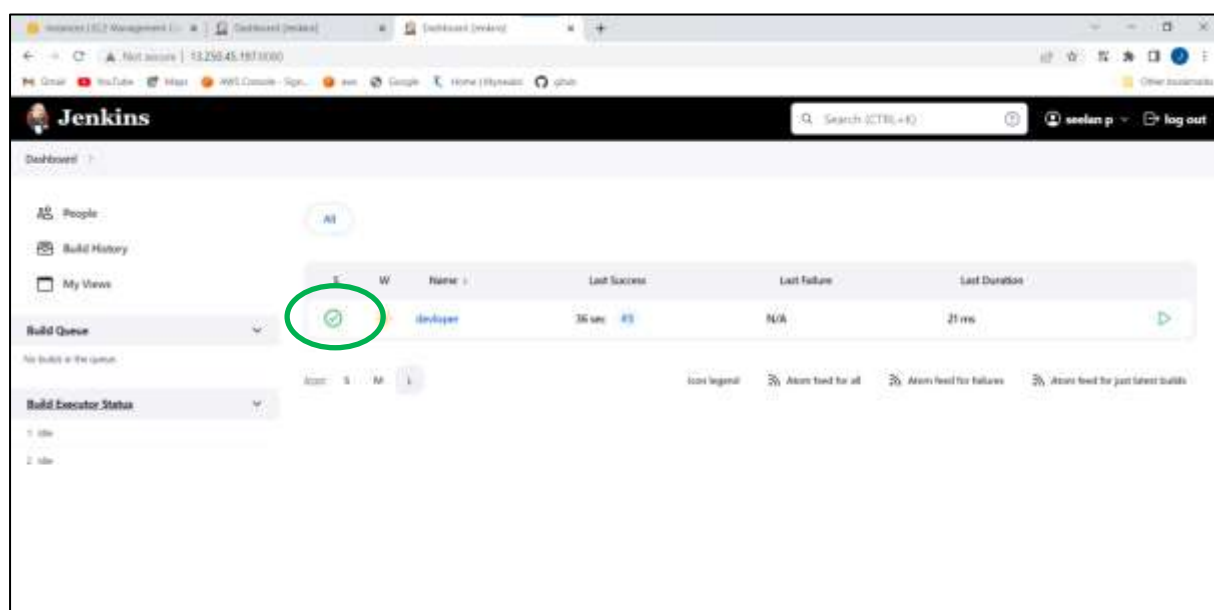Finally it shown developer and tester

Step11:now login seelan user

Public ip:8080 put another chrome page--->13.250.45.197:8080

Username:seelan

Password:seelan1234
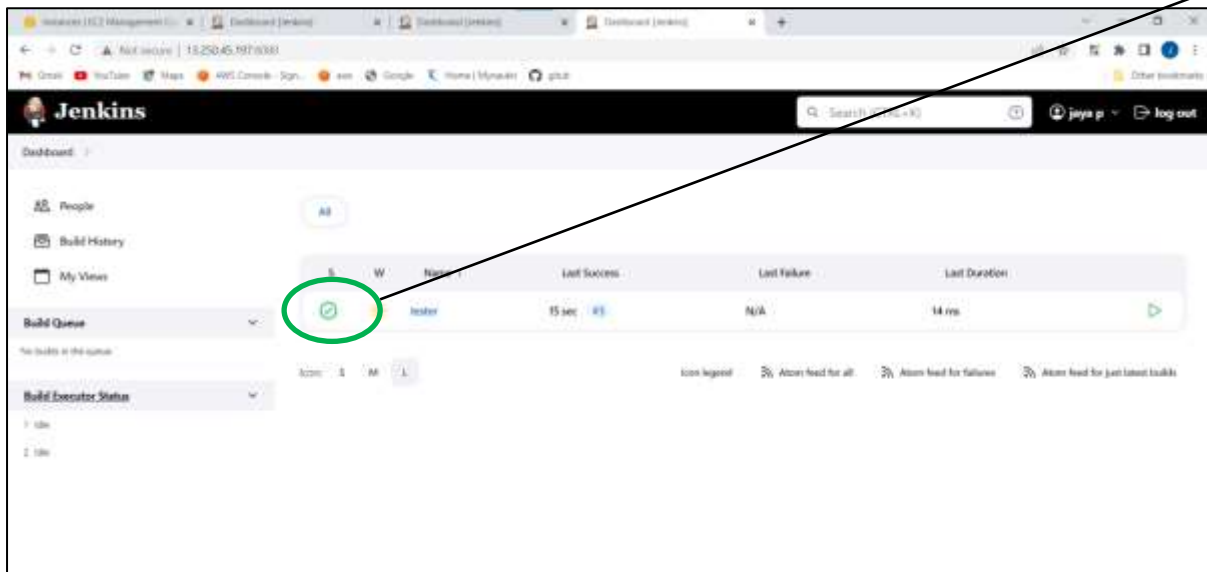
It will shown developer for seelan

Step12:now login jaya user

Public ip:8080 put another chrome page--->13.250.45.197:8080

Username:jaya

Password:jaya1234

This green tick shown only thi job is active

admin --->jayaseelan server--->both 2 jobs can saw