# Jenkin assignment

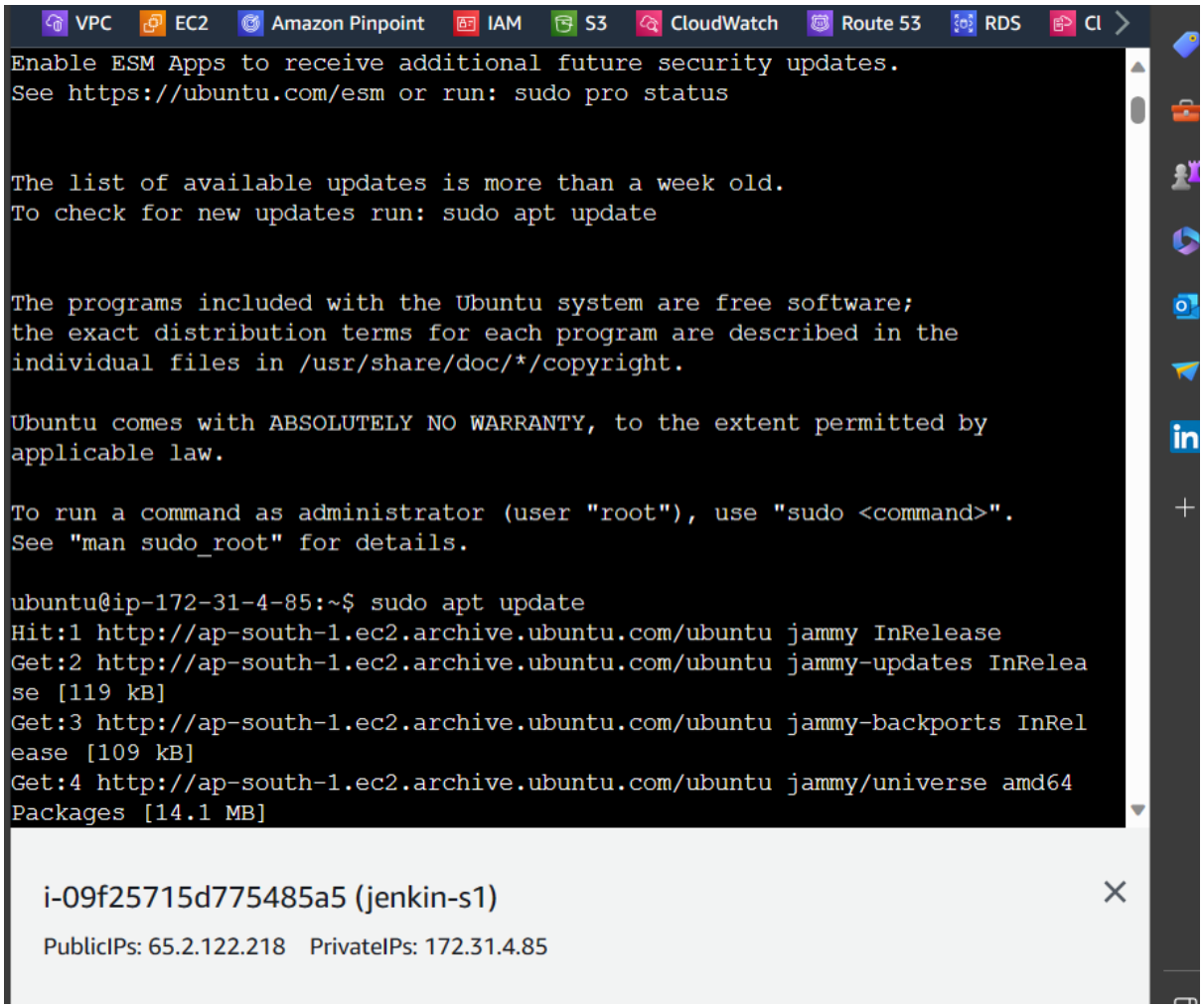
# Test:1

Tasks To Be Performed:

1. Trigger a pipeline using Git when push on develop branch

2. Pipeline should pull Git content to a folder

Sudo apt update



Then install java

sudo apt install openjdk-11-jdk -y

Linux (jenkins.io)

curl -fsSL https://pkg.jenkins.io/debian/jenkins.io-2023.key | sudo tee \

/usr/share/keyrings/jenkins-keyring.asc > /dev/null

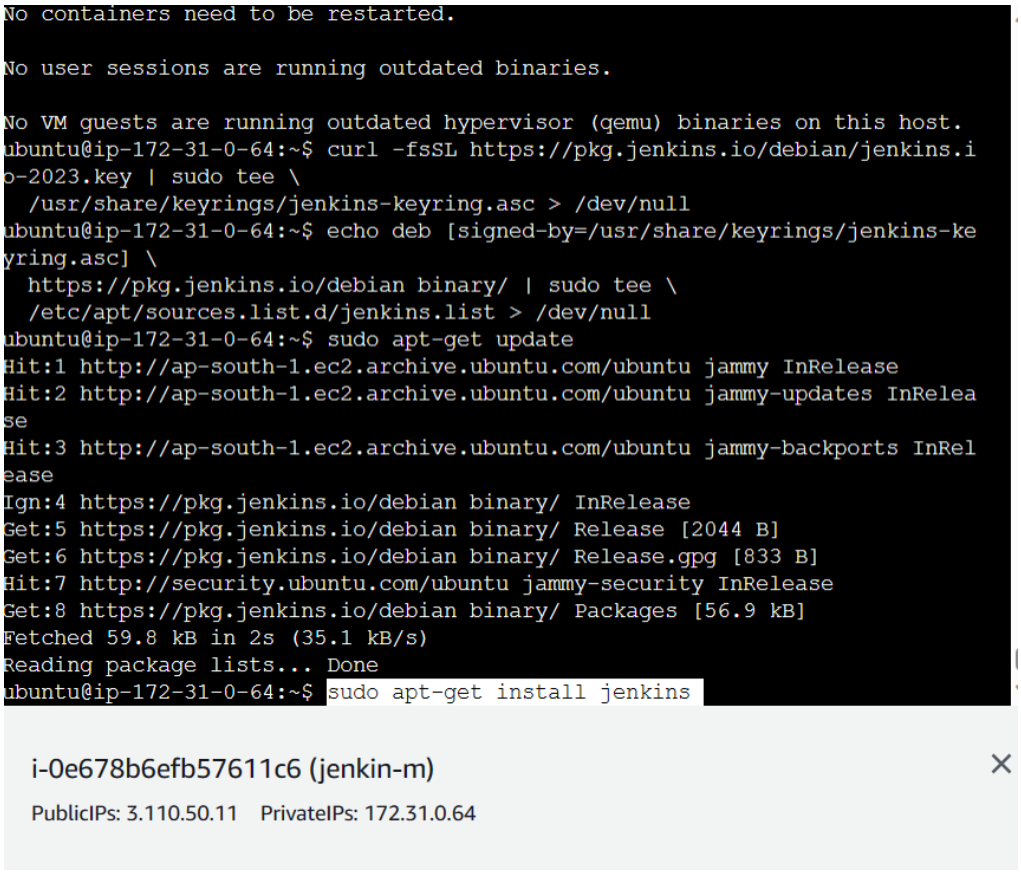
echo deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc] \

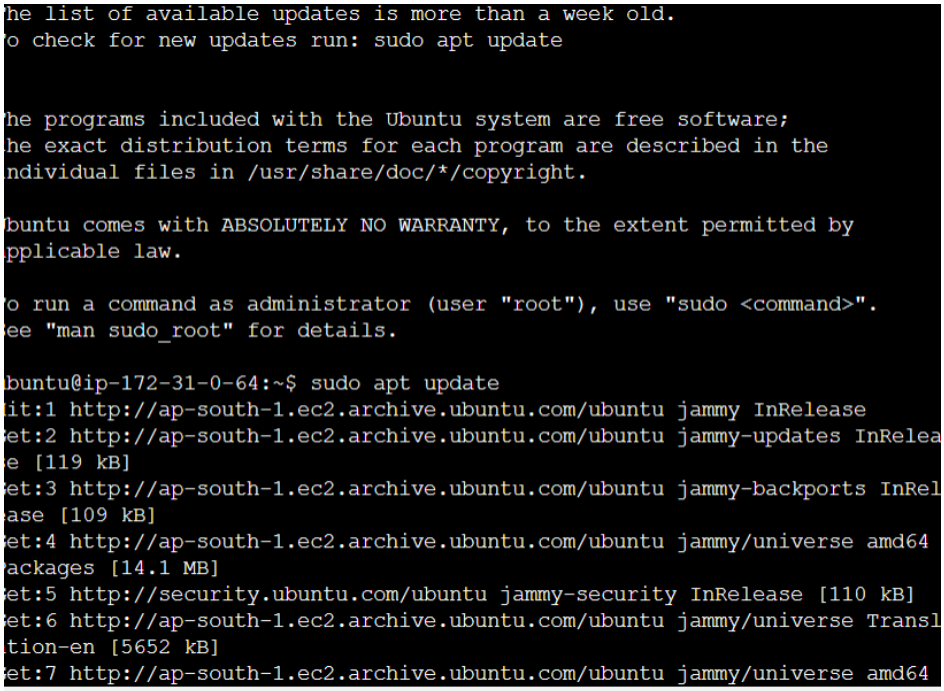
https://pkg.jenkins.io/debian binary/ | sudo tee \

/etc/apt/sources.list.d/jenkins.list > /dev/null

sudo apt-get update

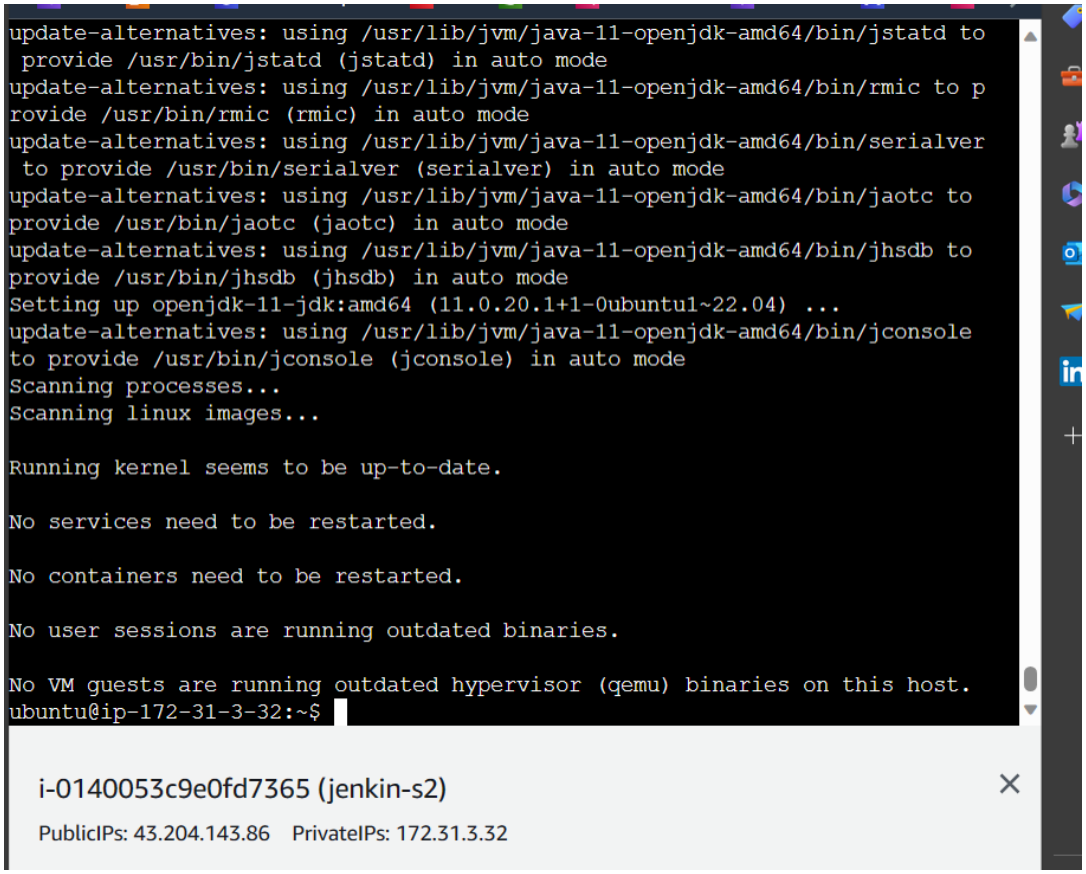
sudo apt-get install jenkins

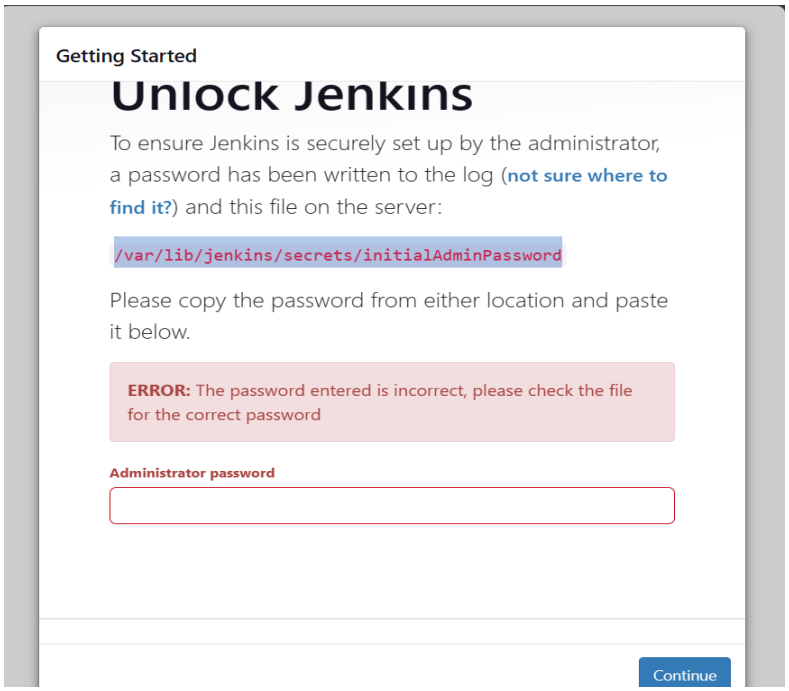


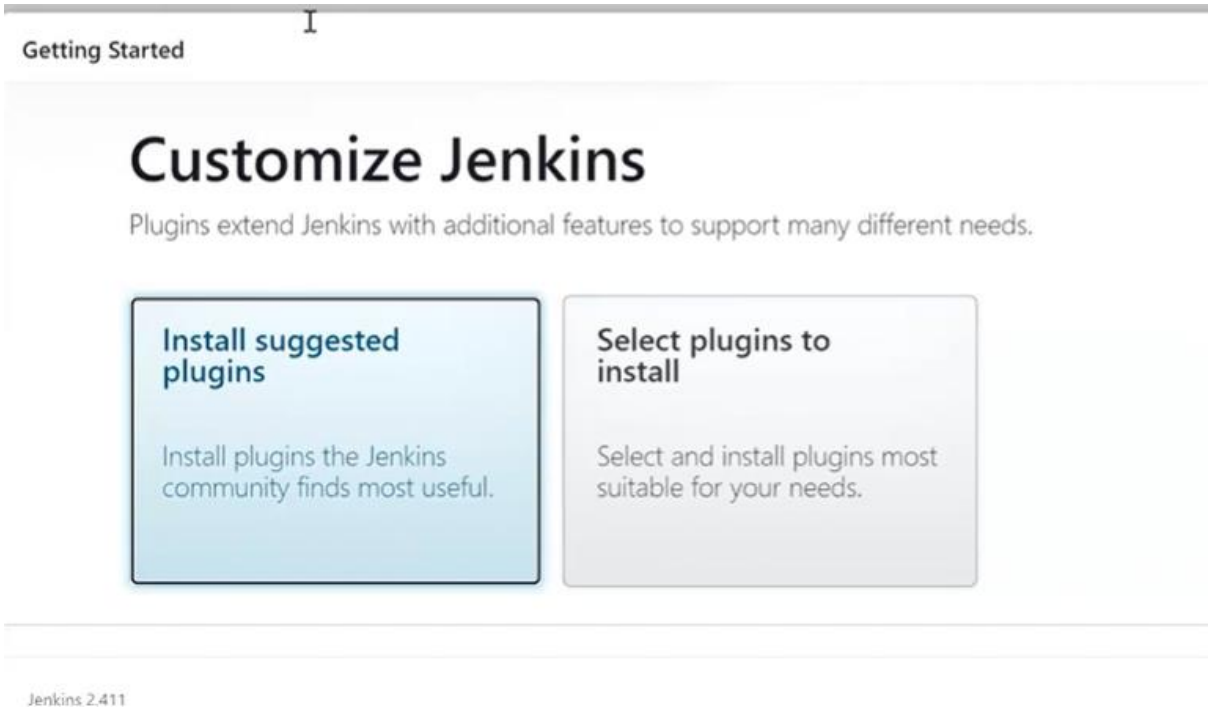


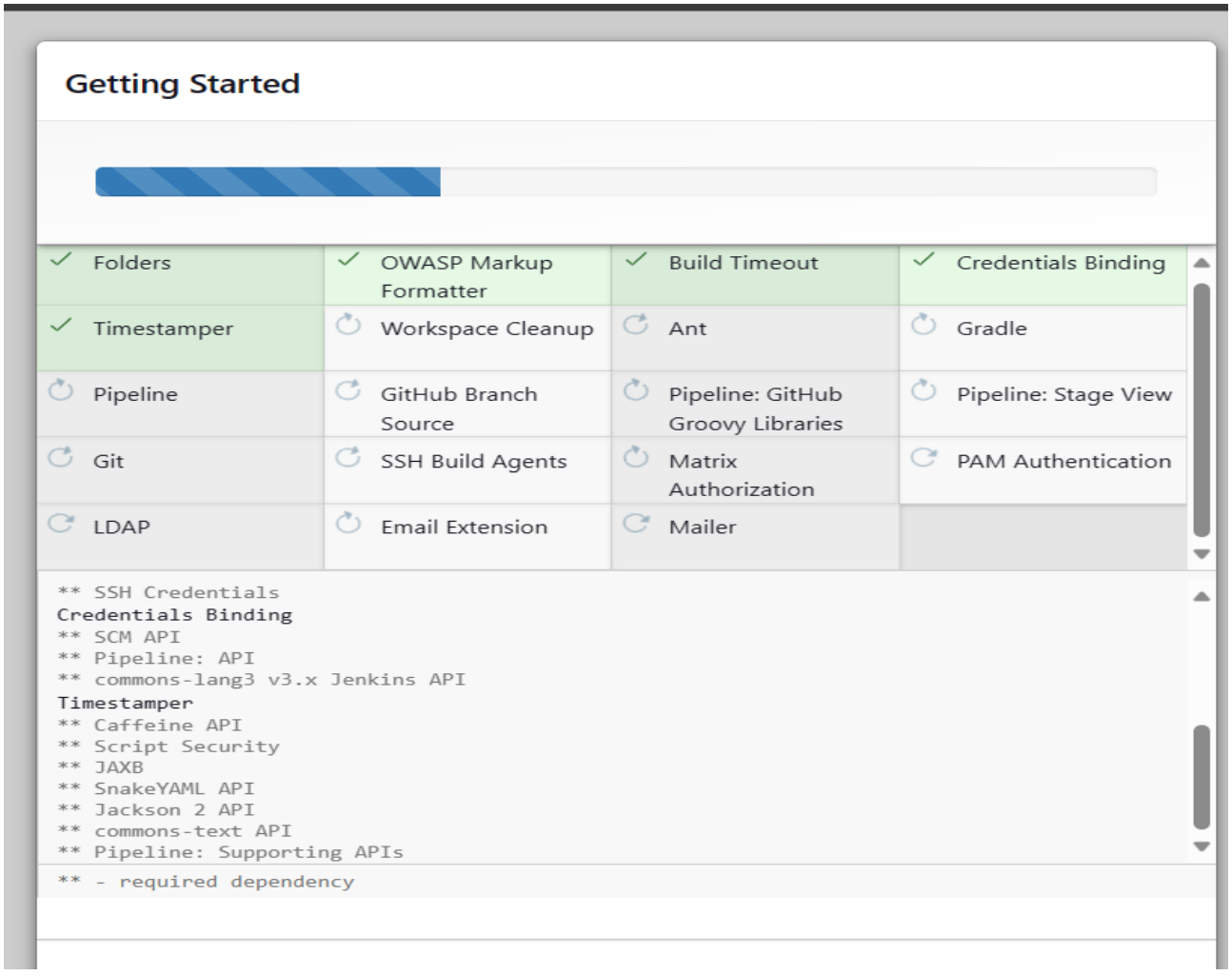

i-0e678b6efb57611c6 (jenkin-m)

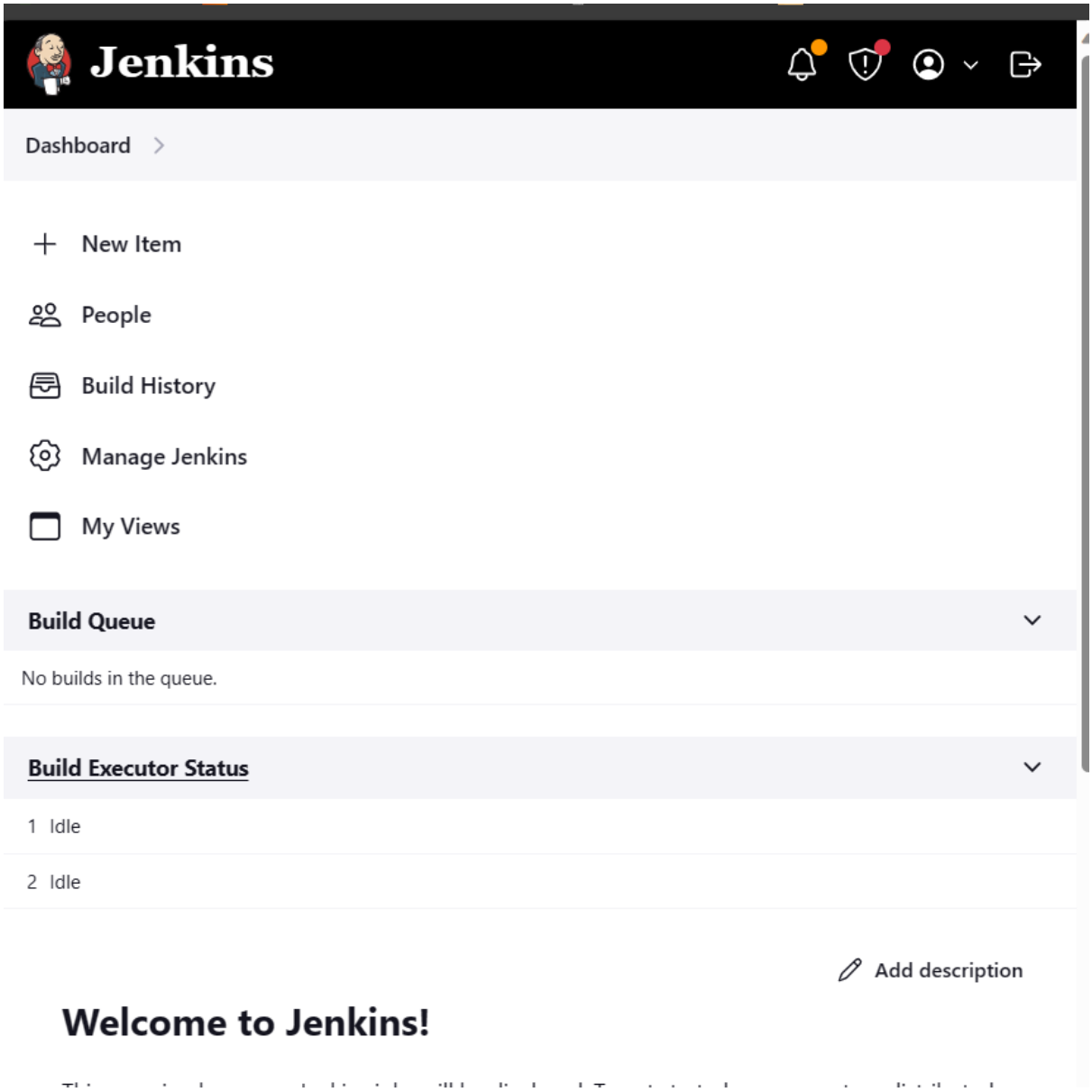
PublicIPs: 3.110.50.11 PrivateIPs: 172.31.0.64

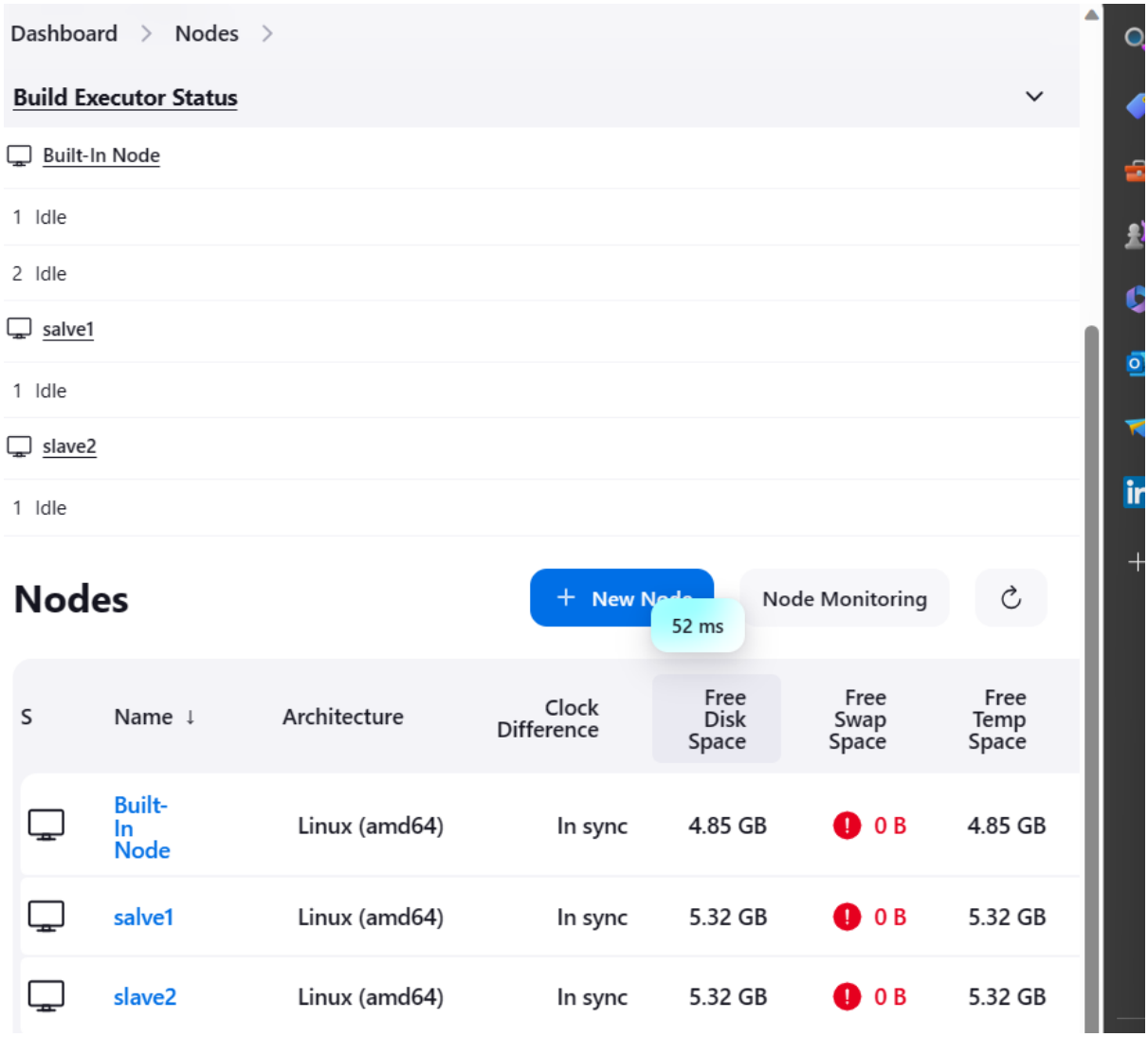

update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jstatd to provide /usr/bin/jstatd (jstatd) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/rmic to provide /usr/bin/rmic (rmic) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/serialver to provide /usr/bin/serialver (serialver) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jaotc to provide /usr/bin/jaotc (jaotc) in auto mode
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jhsdb to provide /usr/bin/jhsdb (jhsdb) in auto mode
Setting up openjdk-11-jdk:amd64 (11.0.20.1+1-0ubuntu1~22.04) ...
update-alternatives: using /usr/lib/jvm/java-11-openjdk-amd64/bin/jconsole to provide /usr/bin/jconsole (jconsole) in auto mode
Scanning processes...
Scanning linux images...
Running kernel seems to be up-to-date.
No services need to be restarted.
No containers need to be restarted.
No user sessions are running outdated binaries.
No VM guests are running outdated hypervisor (qemu) binaries on this host.
ubuntu@ip-172-31-3-32:~$
i-0140053c9e0fd7365 (jenkin-s2)
PublicIPs: 43.204.143.86 PrivateIPs: 172.31.3.32

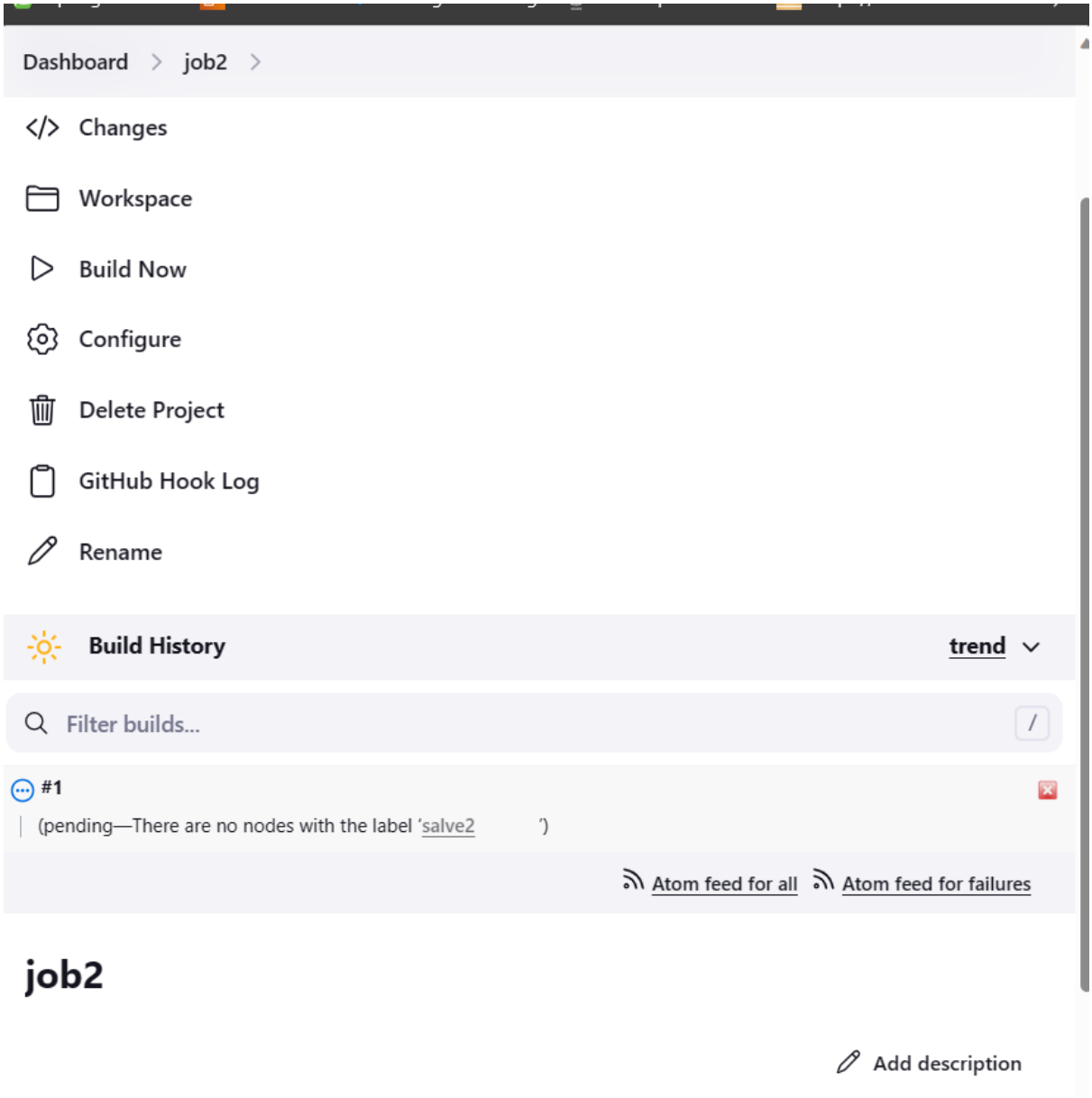

Getting Started
Unlock Jenkins
To ensure Jenkins is securely set up by the administrator, a password has been written to the log (not sure where to find it?) and this file on the server:
/var/lib/jenkins/secrets/initialAdminPassword
Please copy the password from either location and paste it below.
ERROR: The password entered is incorrect, please check the file for the correct password
Administrator password
Continue


Getting Started
Customize Jenkins
Plugins extend Jenkins with additional features to support many different needs.
Install suggested plugins
Install plugins the Jenkins community finds most useful.
Select plugins to install
Select and install plugins most suitable for your needs.
Jenkins 2.411


Getting Started
Folders
OWASP Markup Formatter
Build Timeout
Credentials Binding
Timestamper
Workspace Cleanup
Ant
Gradle
Pipeline
GitHub Branch Source
Pipeline: GitHub Groovy Libraries
Pipeline: Stage View
Git
SSH Build Agents
Matrix Authorization
PAM Authentication
LDAP
Email Extension
Mailer
** SSH Credentials
Credentials Binding
** SCM API
** Pipeline: API
** commons-lang3 v3.x Jenkins API
Timestamper
** Caffeine API
** Script Security
** JAXB
** SnakeYAML API
** Jackson 2 API
** commons-text API
** Pipeline: Supporting APIs
** - required dependency


Jenkins
Dashboard
New Item
People
Build History
Manage Jenkins
My Views
Build Queue
No builds in the queue.
Build Executor Status
1 Idle
2 Idle
Add description
Welcome to Jenkins!


Dashboard
Nodes
Build Executor Status
Built-In Node
1 Idle
2 Idle
salve1
1 Idle
slave2
1 Idle
Nodes
New Node
Node Monitoring
52 ms
S
Name
Architecture
Clock Difference
Free Disk Space
Free Swap Space
Free Temp Space
Built-In Node
Linux (amd64)
In sync
4.85 GB
0 B
4.85 GB
salve1
Linux (amd64)
In sync
5.32 GB
0 B
5.32 GB
slave2
Linux (amd64)
In sync
5.32 GB
0 B
5.32 GB


Dashboard
job2
Changes
Workspace
Build Now
Configure
Delete Project
GitHub Hook Log
Rename
Build History
trend
Filter builds...
/
#1
(pending—There are no nodes with the label 'salve2 ')
Atom feed for all
Atom feed for failures
job2
Add description


Dashboard > job1 > #1 > Console Output

Status

Changes

Console Output

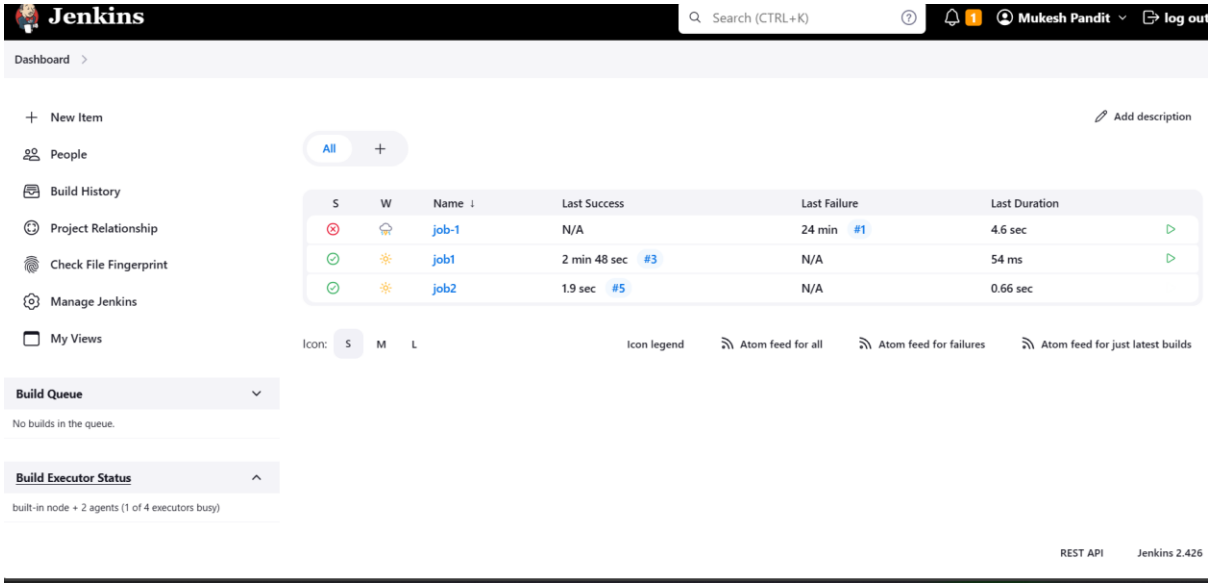
View as plain text

Edit Build Information

Delete build '#1'

# Console Output

```
Started by user Mukesh Pandit
Running as SYSTEM
Building remotely on salve in workspace /home/ubuntu/jenkins/workspace/job1
Finished: SUCCESS
```


Jenkins
Search (CTRL+K)
1
Mukesh Pandit
log out
Dashboard
New Item
People
Build History
Project Relationship
Check File Fingerprint
Manage Jenkins
My Views
Add description
All
S
W
Name ↓
Last Success
Last Failure
Last Duration
job-1
N/A
24 min #1
4.6 sec
job1
2 min 48 sec #3
N/A
54 ms
job2
1.9 sec #5
N/A
0.66 sec
Icon: S M L
Icon legend
Atom feed for all
Atom feed for failures
Atom feed for just latest builds
Build Queue
No builds in the queue.
Build Executor Status
built-in node + 2 agents (1 of 4 executors busy)
REST API
Jenkins 2.426

# Assignment 2

## Test :2

Tasks To Be Performed:

1. Add 2 nodes to Jenkins master

2. Create 2 jobs with the following jobs:

 a. Push to test

 b. Push to prod

3. Once a push is made to test branch, copy Git files to test server

 4. Once a push is made to master branch, copy Git files to prod server

Let creat ec2 istance master and slave

Connect with java jdk +Jenkins to push the job

sudo apt-get install openjdk-11-jdk -y

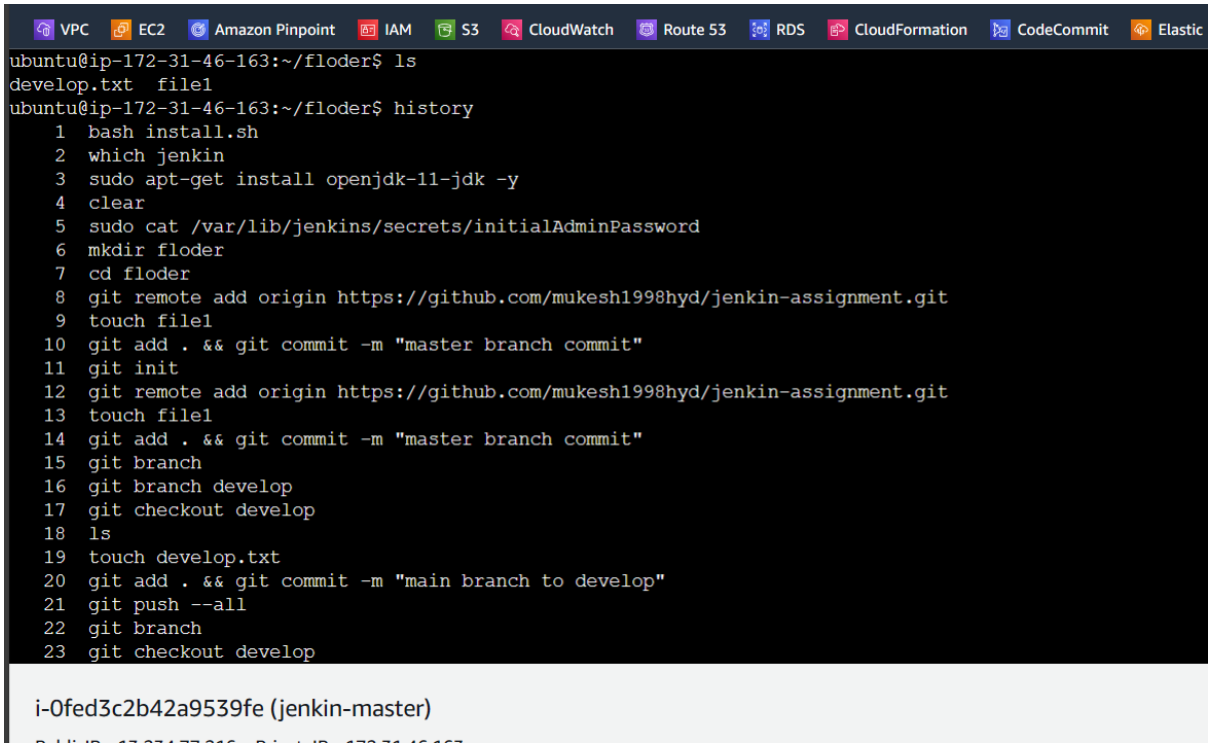
sudo apt-get install openjdk-11-jdk -y

---

---

Nano install jenkin .sh

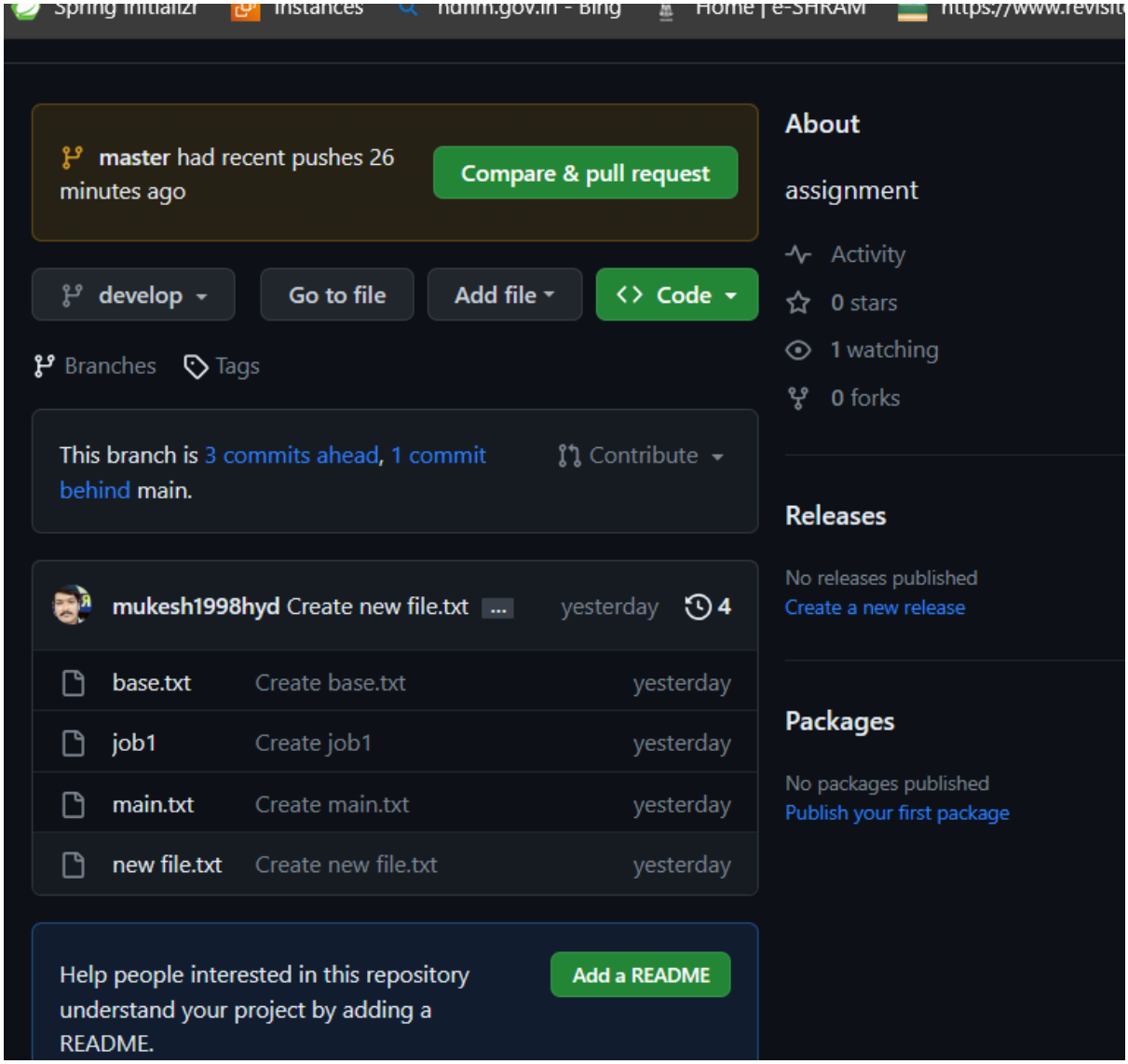
```
curl -fsSL https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key | sudo tee \
  /usr/share/keyrings/jenkins-keyring.asc > /dev/null
echo deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc] \
  https://pkg.jenkins.io/debian-stable binary/ | sudo tee \
  /etc/apt/sources.list.d/jenkins.list > /dev/null
sudo apt-get update
sudo apt-get install Jenkins -y
```

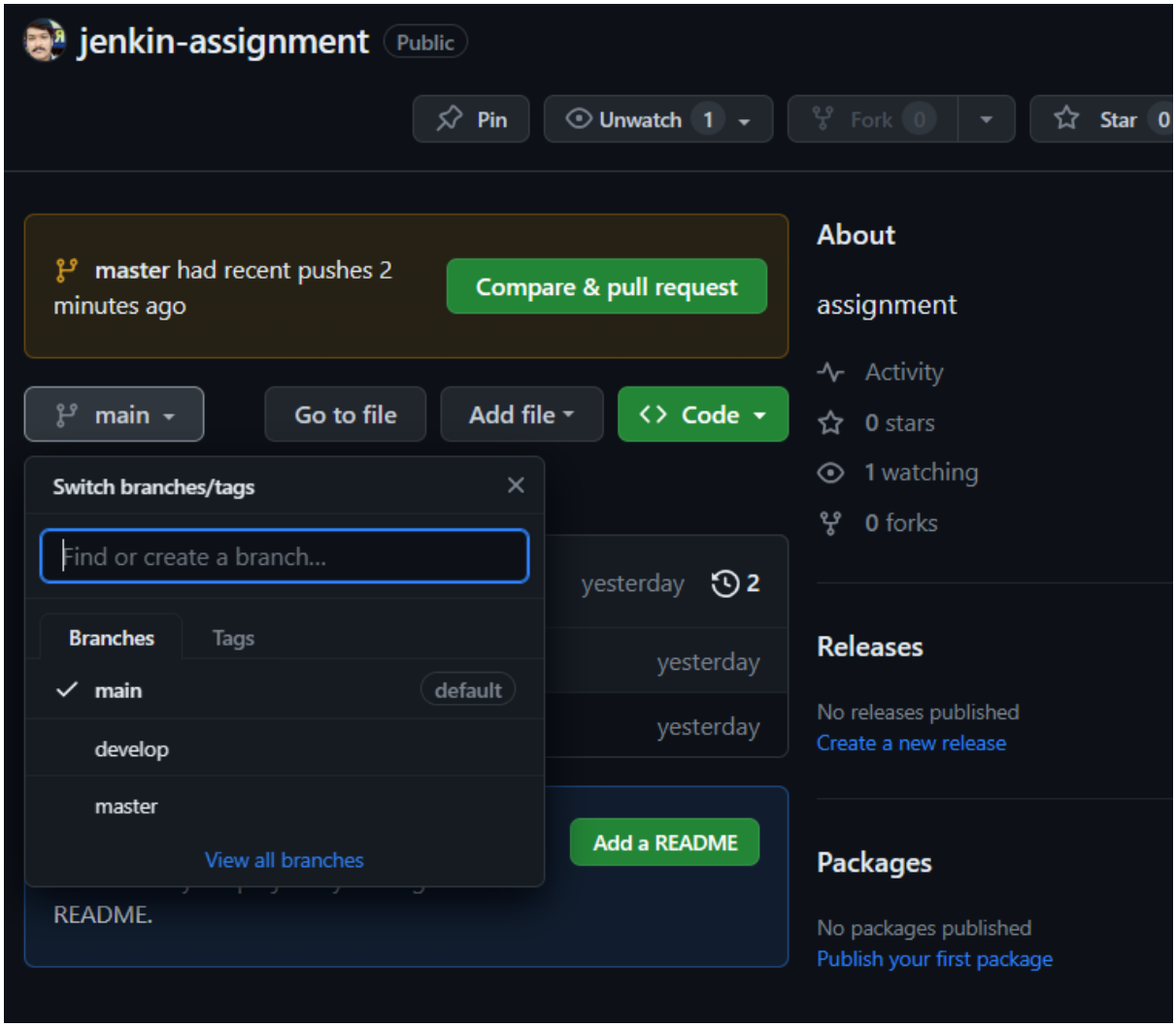


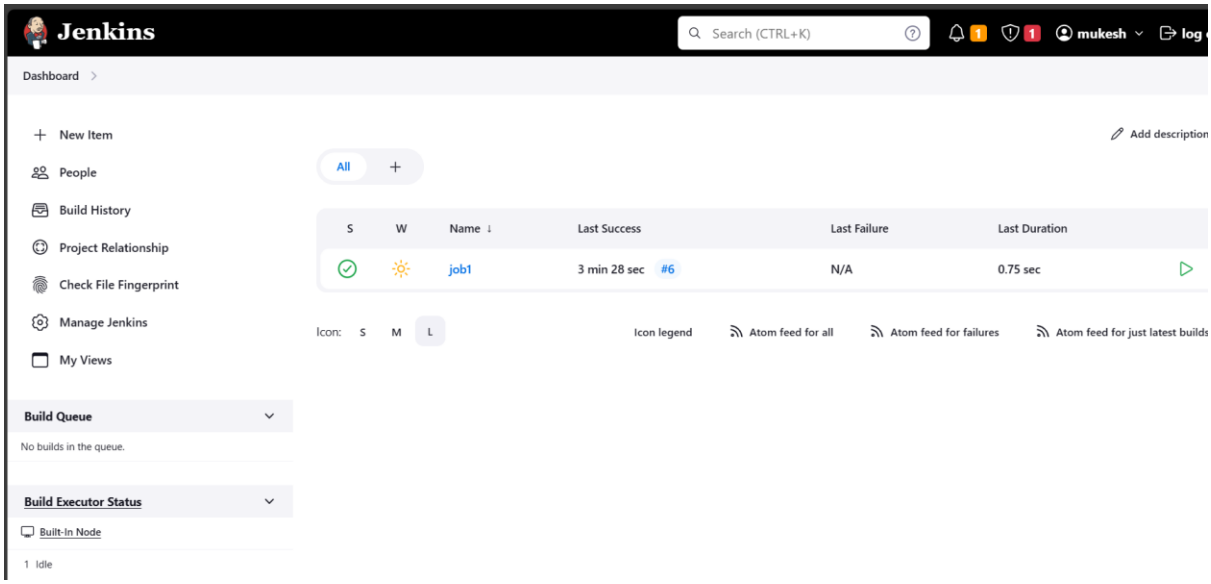

Checkout

Jenlins master

Commit the file of floder


master had recent pushes 26 minutes ago
Compare & pull request
develop
Go to file
Add file
Code
Branches
Tags
This branch is 3 commits ahead, 1 commit behind main.
Contribute
mukesh1998hyd Create new file.txt
yesterday
4
base.txt
Create base.txt
yesterday
job1
Create job1
yesterday
main.txt
Create main.txt
yesterday
new file.txt
Create new file.txt
yesterday
Help people interested in this repository understand your project by adding a README.
Add a README
About
assignment
Activity
0 stars
1 watching
0 forks
Releases
No releases published
Create a new release
Packages
No packages published
Publish your first package

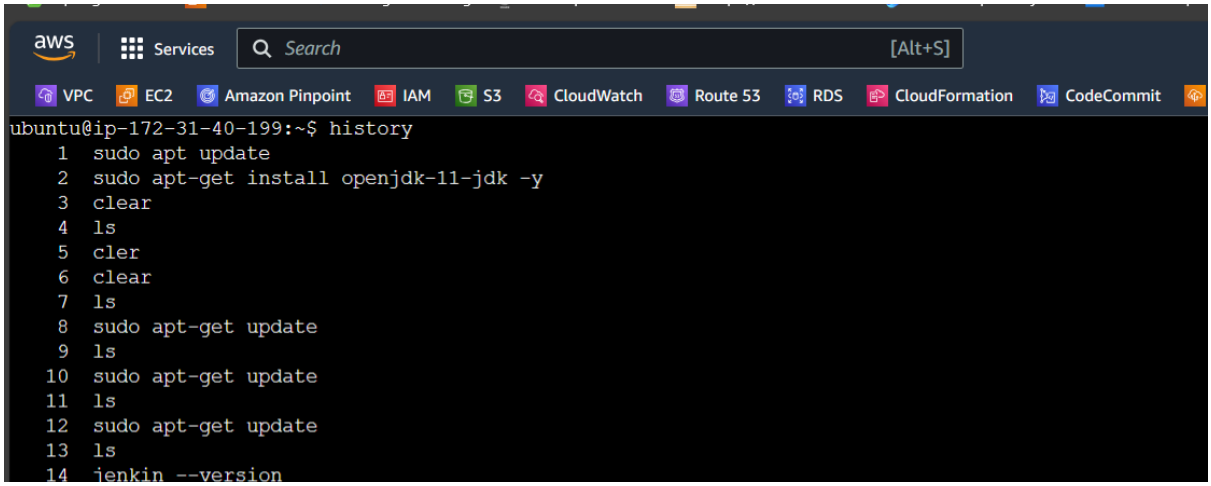


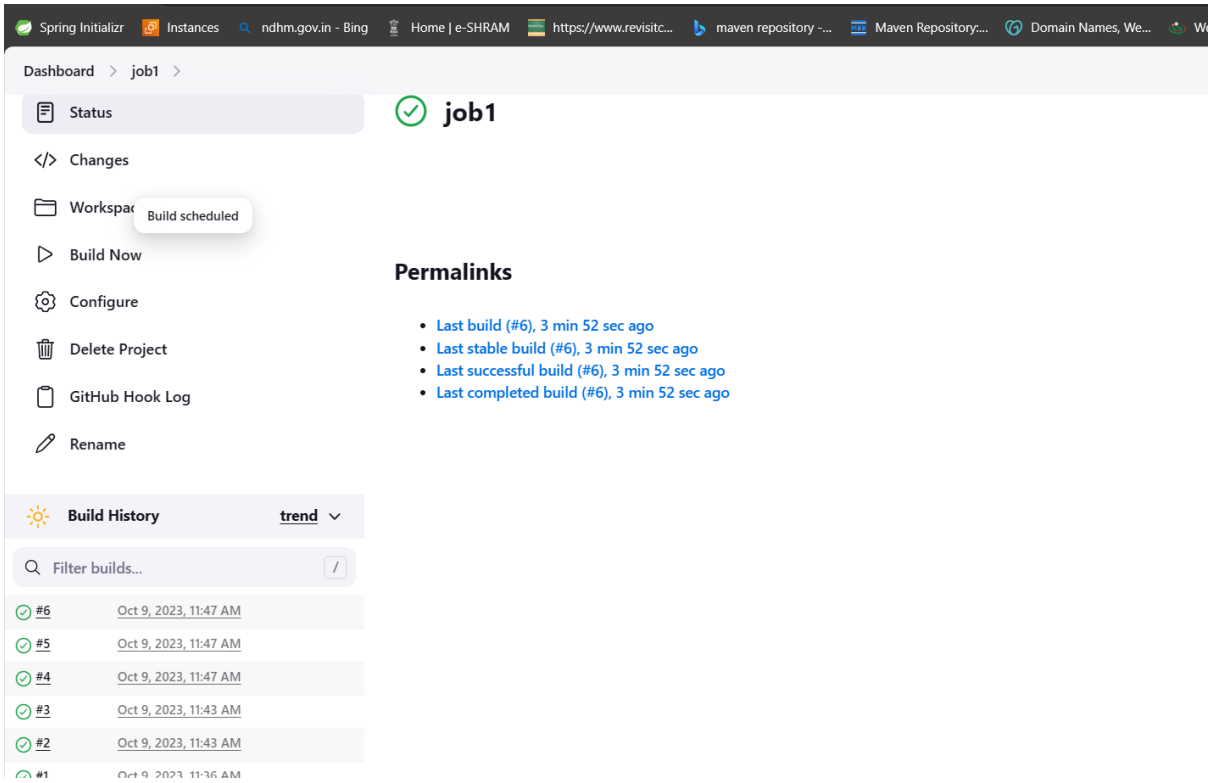




Then creat the job and slave file

Push all  in master

Checkout



# Project 1

# Capstone project

You have been hired as a Sr. DevOps Engineer in Abode Software. They want to implement DevOps Lifecycle in their company. You have been asked to implement this lifecycle as fast as possible. Abode Software is a product-based company and their product is available on this GitHub link.

https://github.com/hshar/website.git

Following are the specifications of the lifecycle

: 1. Install the necessary software on the machines using a configuration management tool

2. Git workflow has to be implemented

3. CodeBuild should automatically be triggered once a commit is made to master branch or develop branch. a. If a commit is made to master branch, test and push to prod b. If a commit is made to develop branch, just test the product, do not push to prod

4. The code should be containerized with the help of a Dockerfile. The Dockerfile should be built every time there is a push to GitHub. Use the following pre-built container for your application: hshar/webapp The code should reside in '/var/www/html'

5. The above tasks should be defined in a Jenkins Pipeline with the following jobs:

a. Job1 : build

b. Job2 : test

c. Job3:prod

let create a master :git ,anisble,Jenkins,docker,java

connect to slaves1 : java,docker (anisble use)

slaves2 : java ,docker(anisble use)

Ansible installation commands

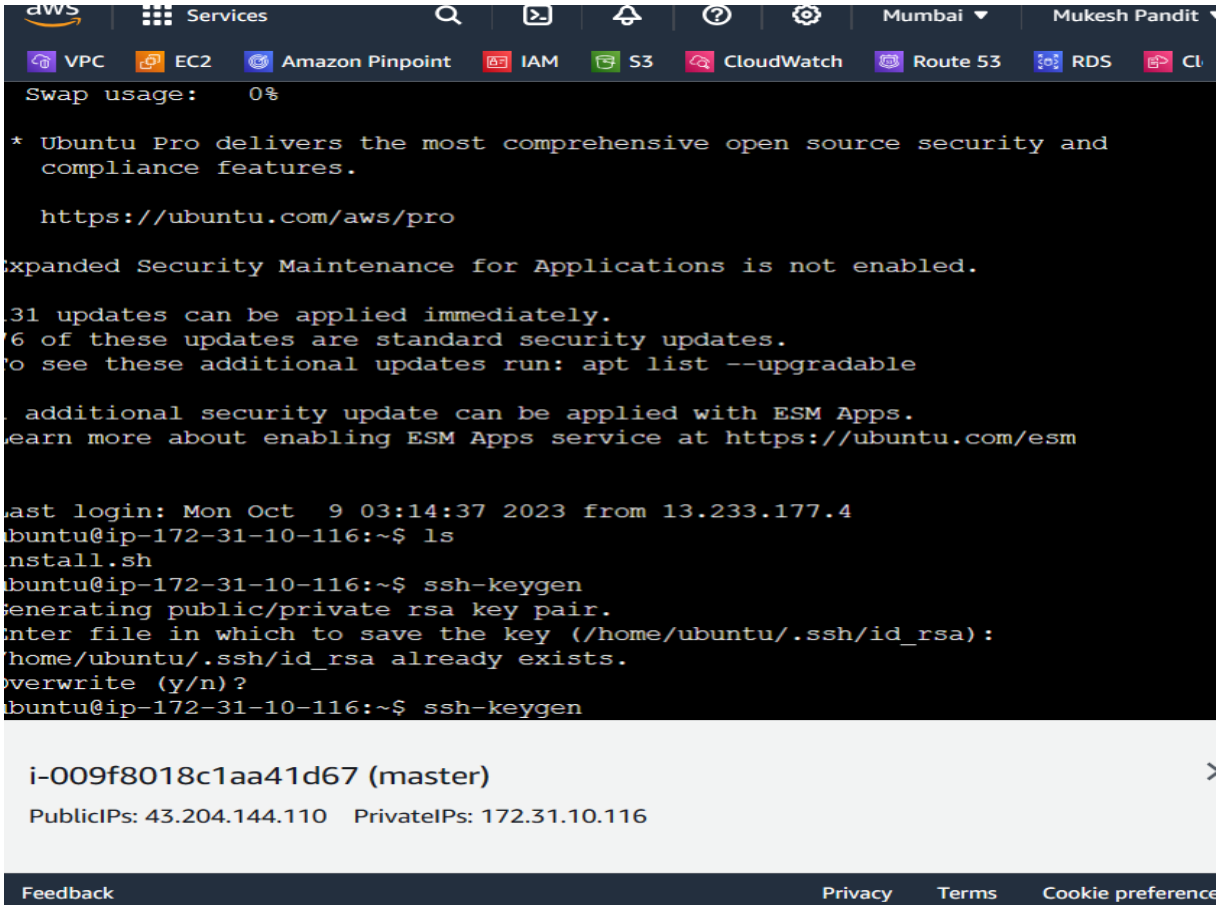
---

sudo apt update

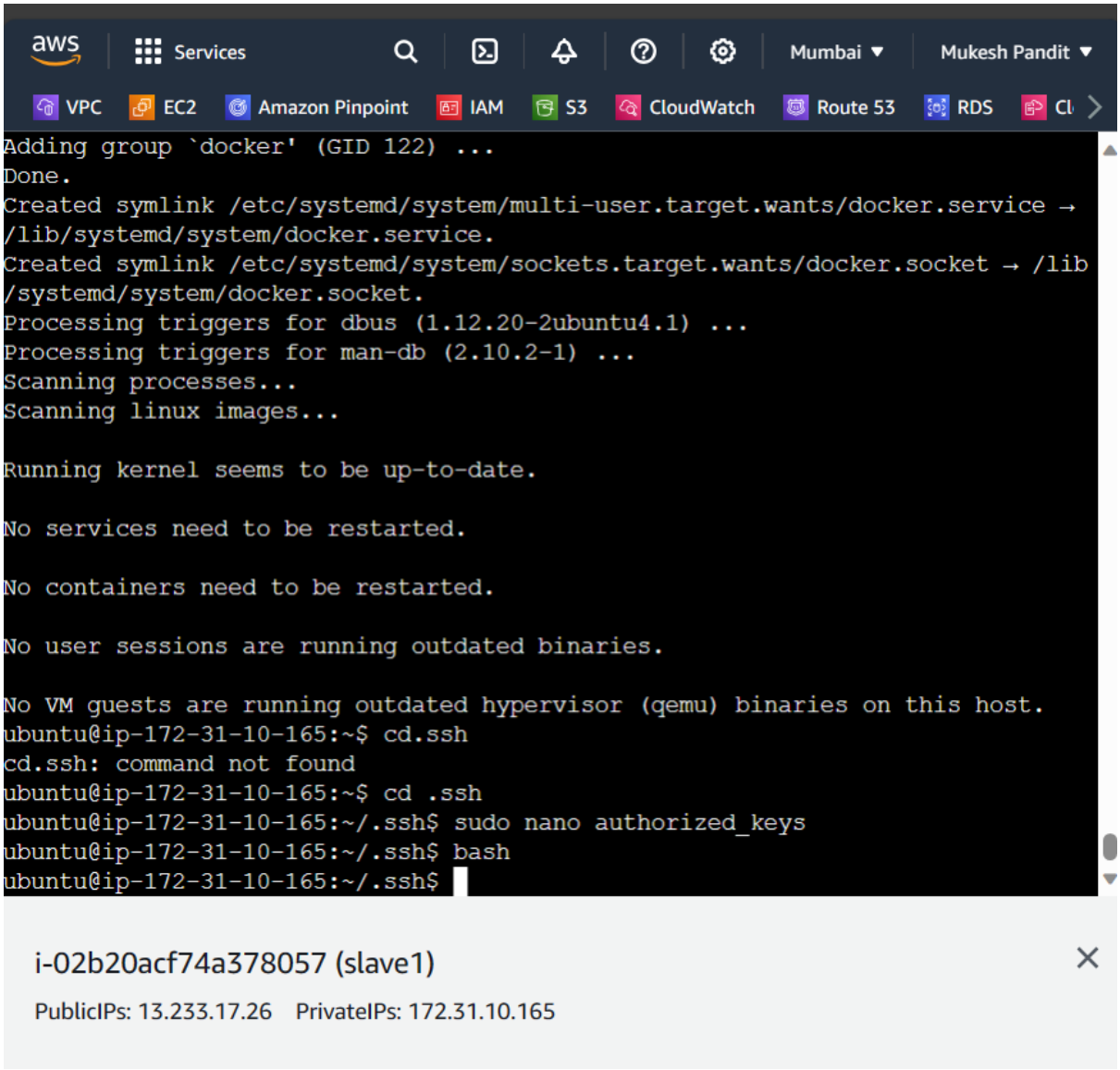
sudo apt install software-properties-common

sudo add-apt-repository --yes --update ppa:ansible/ansible

sudo apt install ansible


aws
Services
Mumbai
Mukesh Pandit
VPC
EC2
Amazon Pinpoint
IAM
S3
CloudWatch
Route 53
RDS
Swap usage: 0%
* Ubuntu Pro delivers the most comprehensive open source security and compliance features.
https://ubuntu.com/aws/pro
xpanded Security Maintenance for Applications is not enabled.
31 updates can be applied immediately.
6 of these updates are standard security updates.
o see these additional updates run: apt list --upgradable
additional security update can be applied with ESM Apps.
earn more about enabling ESM Apps service at https://ubuntu.com/esm
ast login: Mon Oct 9 03:14:37 2023 from 13.233.177.4
buntu@ip-172-31-10-116:~$ ls
nstall.sh
buntu@ip-172-31-10-116:~$ ssh-keygen
enerating public/private rsa key pair.
nter file in which to save the key (/home/ubuntu/.ssh/id_rsa):
home/ubuntu/.ssh/id_rsa already exists.
verwrite (y/n)?
buntu@ip-172-31-10-116:~$ ssh-keygen
i-009f8018c1aa41d67 (master)
PublicIPs: 43.204.144.110 PrivateIPs: 172.31.10.116
Feedback
Privacy
Terms
Cookie preference

Master1




Slave1 and slave 2 create EC2 instance

Some command to write install in slave1 and 2

(create file slave.sh and paste commands present below)

sudo apt-get update

sudo apt-get install openjdk-11-jdk -y

sudo apt-get install docker.io -y

(create file master.sh and paste commands present below)

(please check the latest jenkins installation commands if you are using weekly release commands)

sudo apt-get update

sudo apt-get install openjdk-11-jdk -y

sudo apt-get install docker.io -y

curl -fsSL https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key | sudo tee \

/usr/share/keyrings/jenkins-keyring.asc > /dev/null

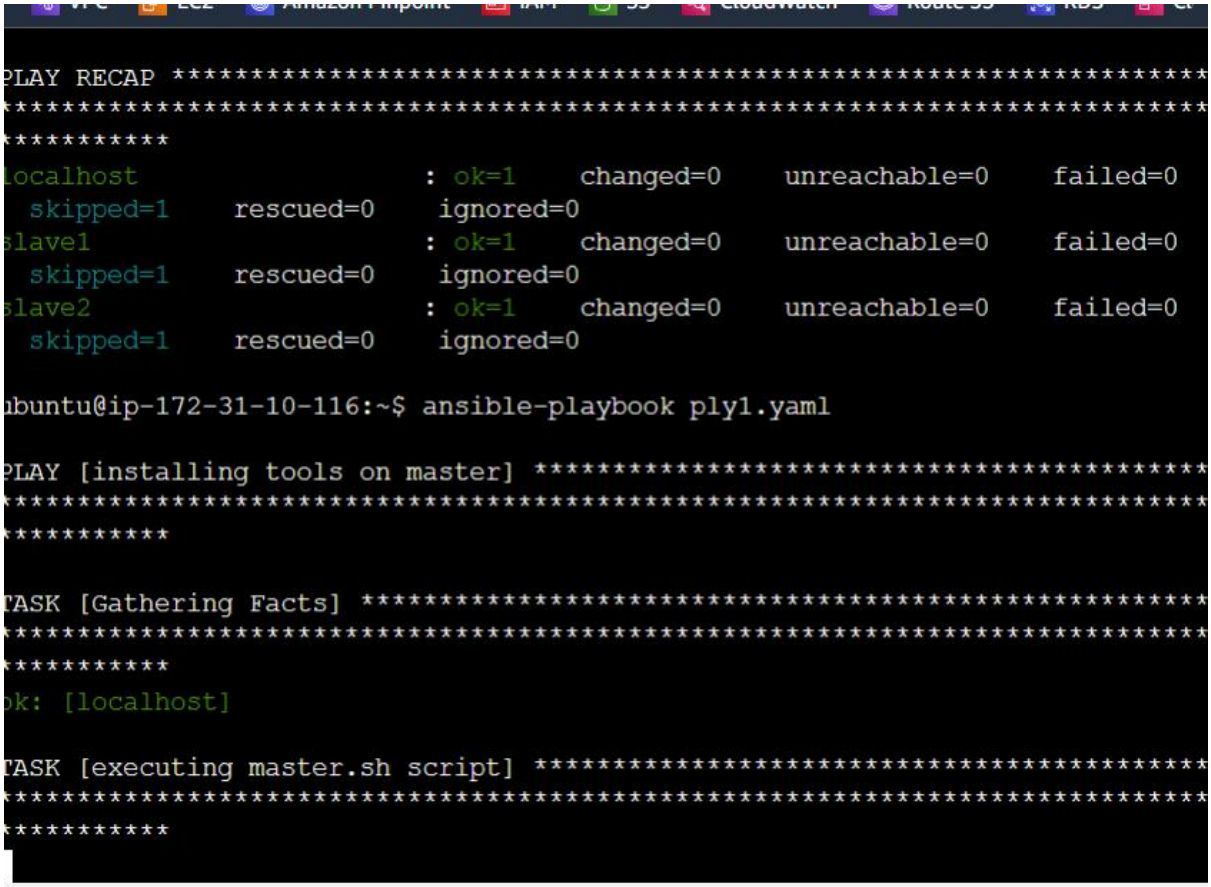
echo deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc] \

https://pkg.jenkins.io/debian-stable binary/ | sudo tee \

/etc/apt/sources.list.d/jenkins.list > /dev/null

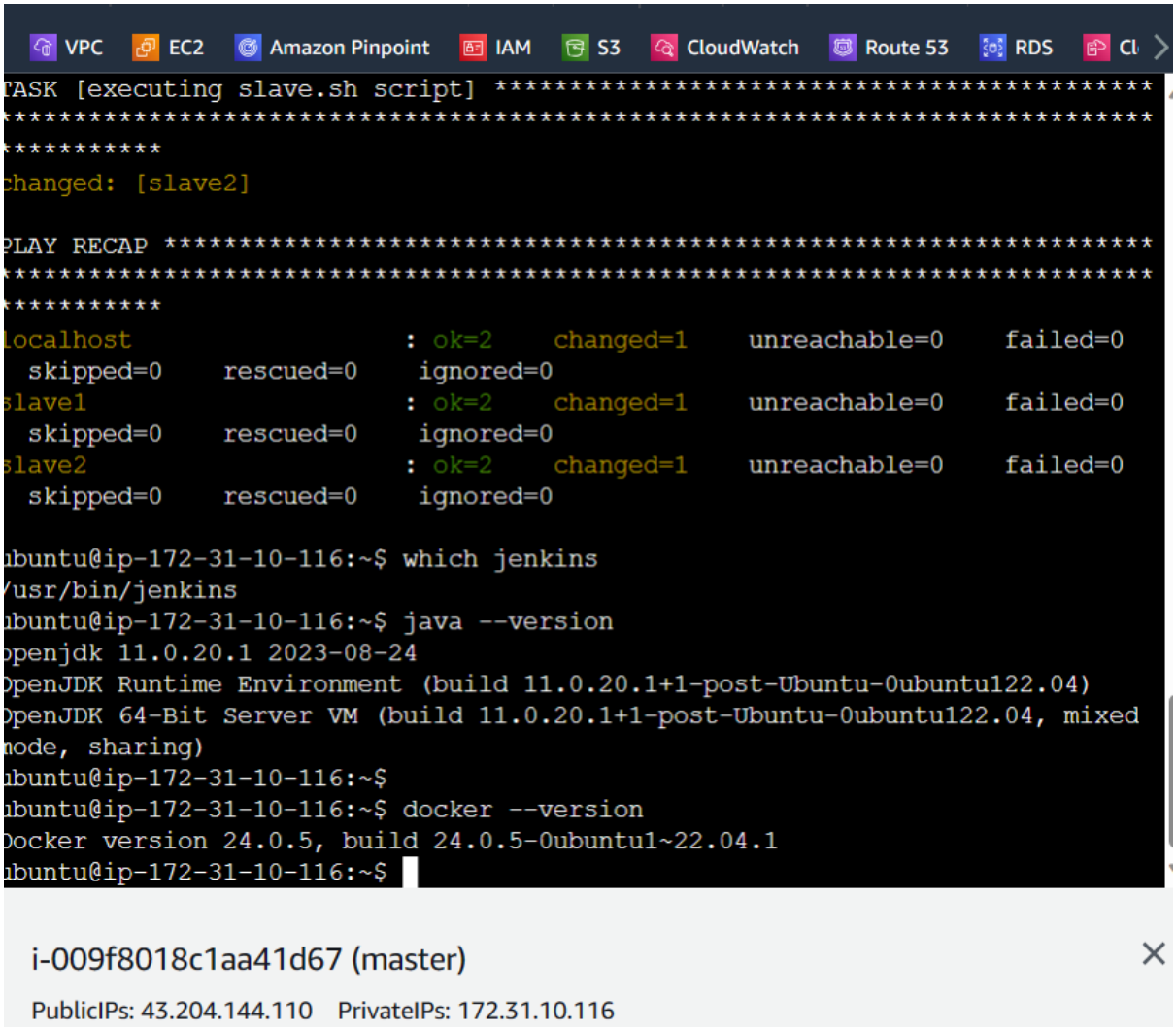
sudo apt-get update

sudo apt-get install jenkins -y




Install all yaml file

```
---
- name: installing tools on master
  hosts: localhost
  become: true
  tasks:
  - name: executing master.sh script
    script: master.sh
- name: installing tools on slaves
  hosts: slave1
  become: true
  tasks:
  - name: executing slave.sh script
    script: slave.sh
- name: installing tools on slaves
  hosts: slave2
  become: true
  tasks:
  - name: executing slave.sh script
    script: slave.sh
```




Check it all install successful in master,slave1 and slave2

Jenkins Execute shell commands:

==========

sudo  docker build . -t finalrelease

sudo docker run -itd -p 80:80 finalrelease

==========

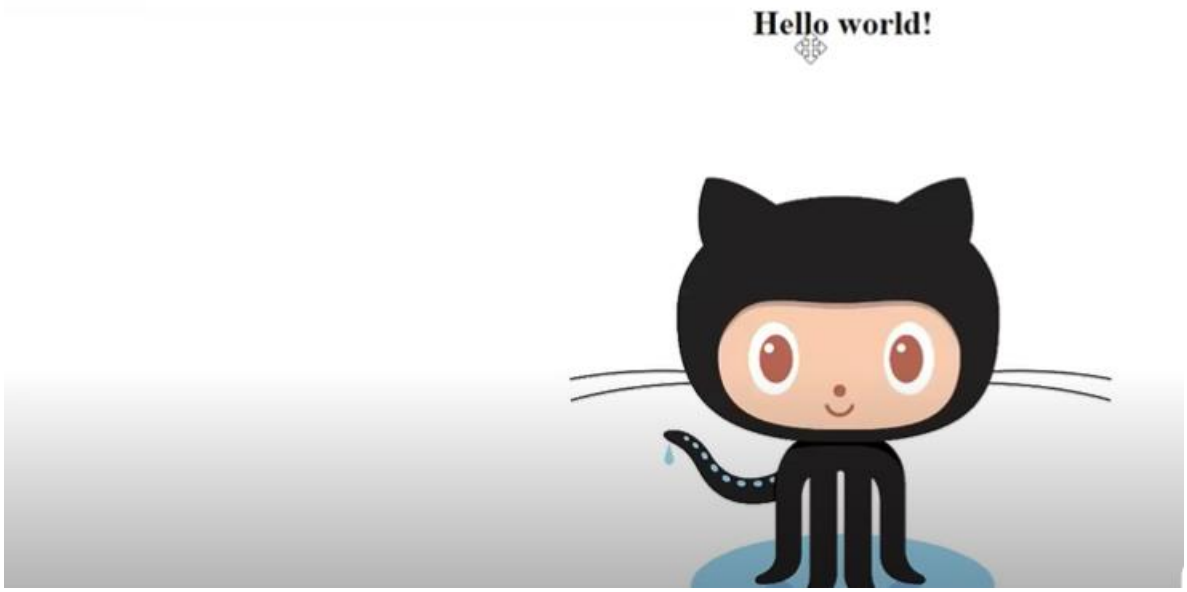
Running for second time:

==========

sudo docker rm -f $(sudo docker ps -a -q)

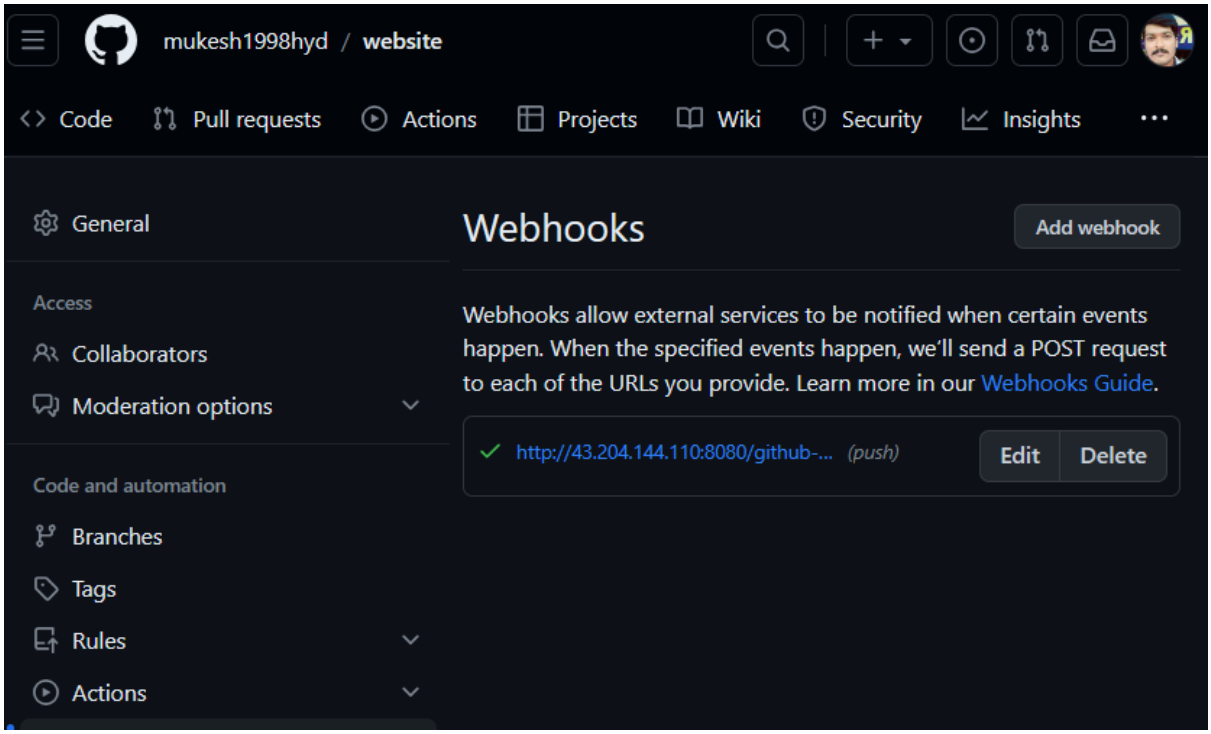
copy the ip address  then paste and

out put




Afterwords go github to webhook to instance

To manual setting



**********completed project **********