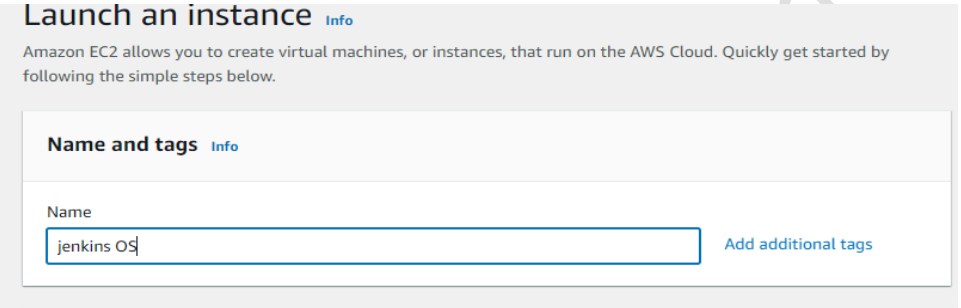
Jenkins installation in AWS

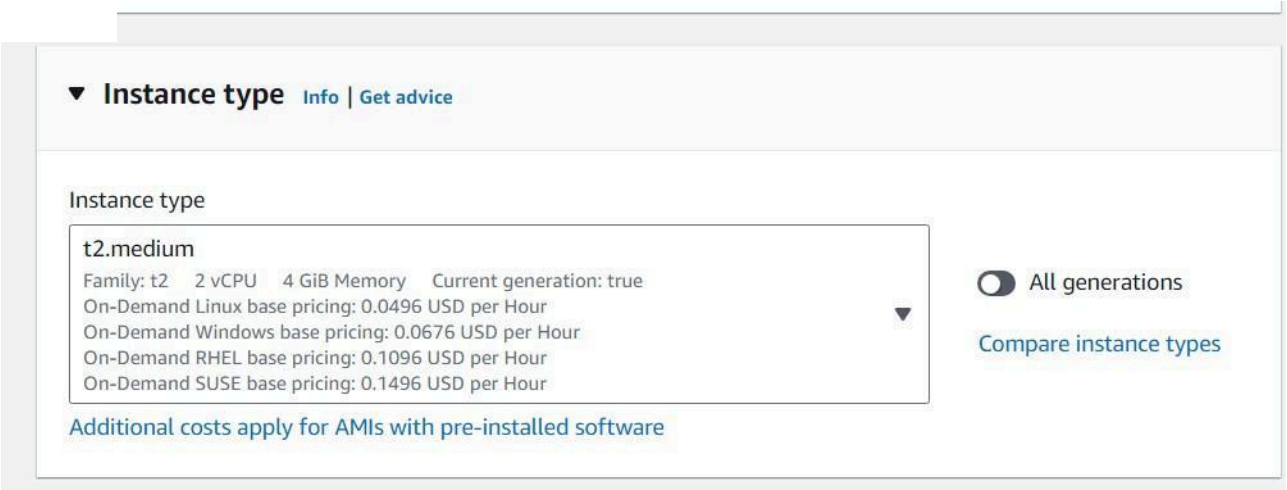
Step 1 :-

Create an instance in AWS cloud with AWS linux

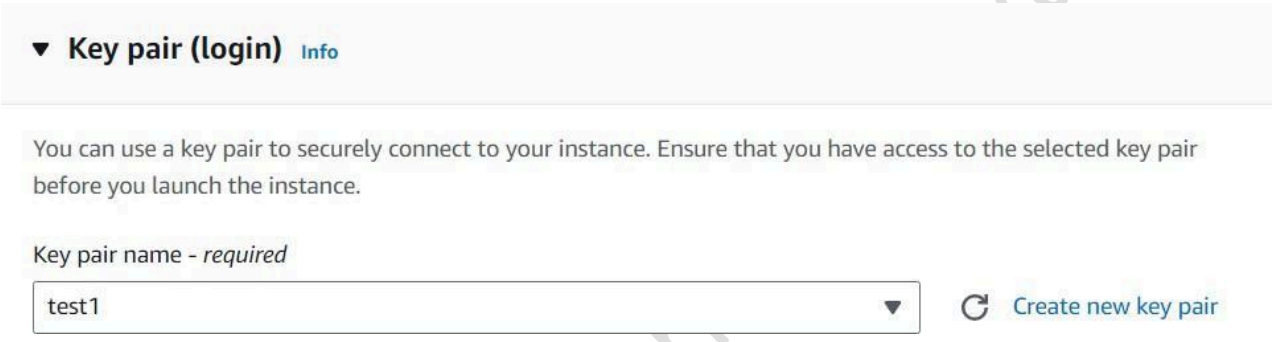


AWS linux image

Select instance type . As Jenkins is little heavy use t2.medium.

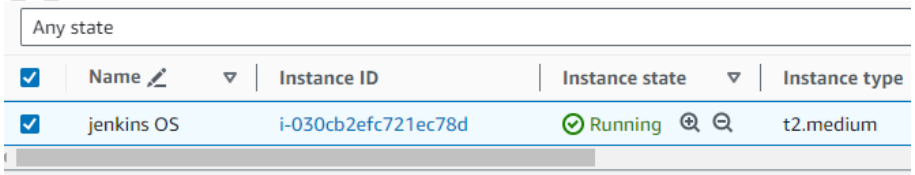


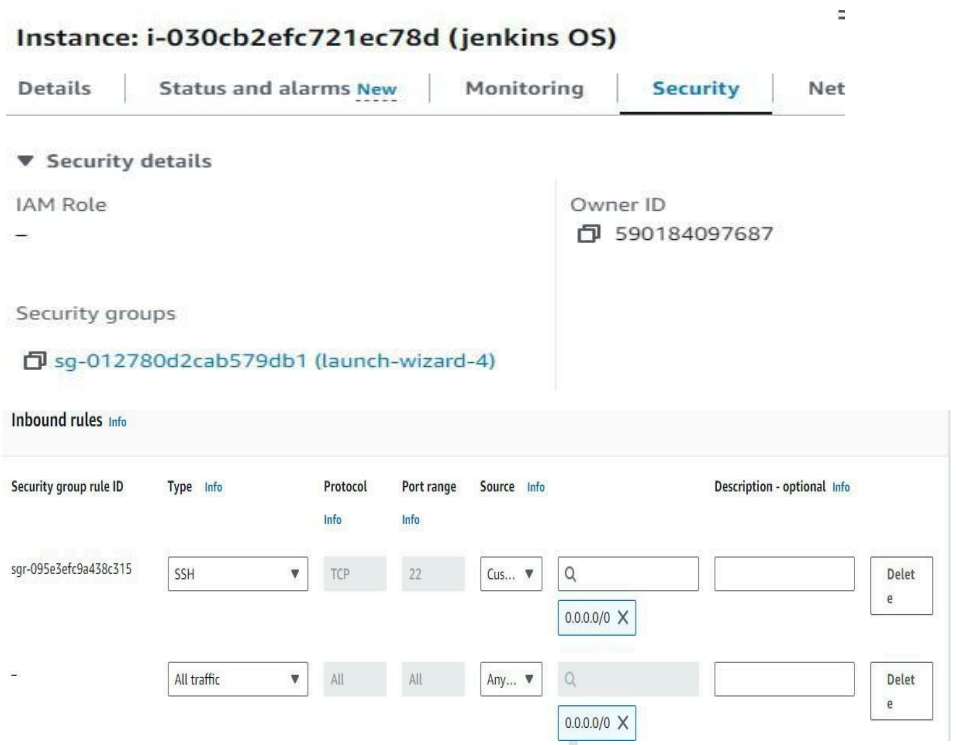
Select key pair –



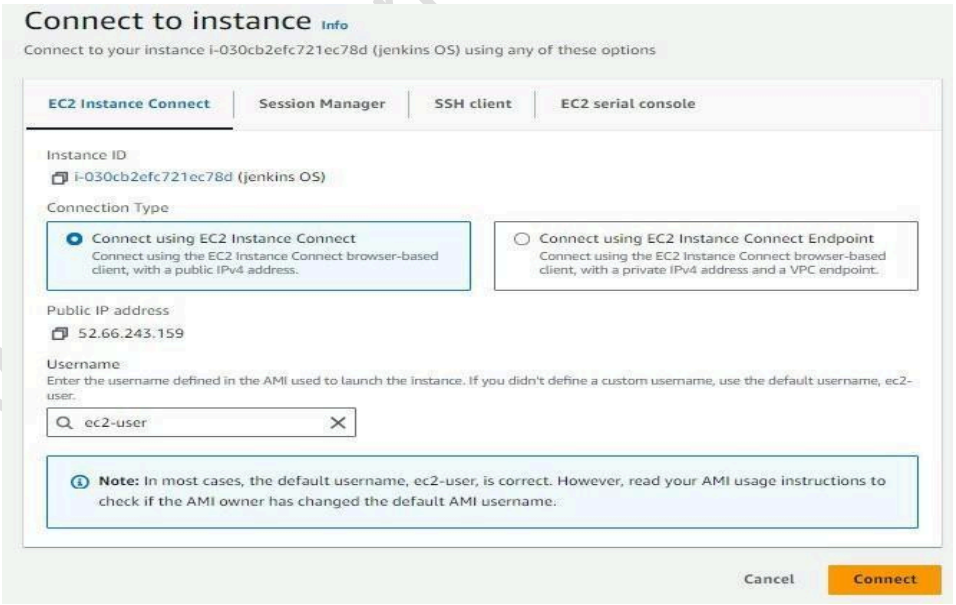
Launch instance

Go to the security groups and allow All traffic and IPv4





Then go and connect the instance



Step :-2
Give the root power sudo su - root

```
[ec2-user@ip-172-31-4-188 ~]$ sudo su -
Last login: Sat May  4 09:53:59 UTC 2024 on pts/1
[root@ip-172-31-4-188 ~]#
```

Step 3:-
Install java

yum install java-17-amazon-corretto -y

```
[root@ip-172-31-4-188 ~]# yum install java-17-amazon-corretto -y
Last metadata expiration check: 0:02:13 ago on Sat May  4 09:53:51 2024.
Dependencies resolved.
================================================================================
 Package                 Arch    Version                  Repository    Size
================================================================================
Installing:
 java-17-amazon-corretto  x86_64 1:17.0.11+9-1.amzn2023.1 amazonlinux 187 k
Installing dependencies:
```

Check java

version java

--version

```
[root@ip-172-31-4-188 ~]# java --version
openjdk 17.0.11 2024-04-16 LTS
OpenJDK Runtime Environment Corretto-17.0.11.9.1 (build 17.0.11+9-LTS)
OpenJDK 64-Bit Server VM Corretto-17.0.11.9.1 (build 17.0.11+9-LTS, mixed mode, sharing)
[root@ip-172-31-4-188 ~]#
```

Step 4:-

Goto the url

https://www.jenkins.io/doc/book/installing/linux/#red-

hat-

centos Follow the steps

Step 5:-

wget -O /etc/yum.repos.d/jenkins.repo \
https://pkg.jenkins.io/redhat-stable/jenkins.repo

```
[root@ip-172-31-4-188 yum.repos.d]# wget -O /etc/yum.repos.d/jenkins.repo \
    https://pkg.jenkins.io/redhat-stable/jenkins.repo
--2024-05-04 10:08:07--  https://pkg.jenkins.io/redhat-stable/jenkins.repo
Resolving pkg.jenkins.io (pkg.jenkins.io)... 151.101.154.133, 2a04:4e42:24::6
45
Connecting to pkg.jenkins.io (pkg.jenkins.io)|151.101.154.133|:443... connect
ed.
HTTP request sent, awaiting response... 200 OK
Length: 85
Saving to: '/etc/yum.repos.d/jenkins.repo'

/etc/yum.repos.d/je 100%[=================>]      85  --.-KB/s    in 0s

2024-05-04 10:08:07 (6.57 MB/s) - '/etc/yum.repos.d/jenkins.repo' saved [85/8
5]

[root@ip-172-31-4-188 yum.repos.d]#
```

Step 6:

rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io-2023.key

```
[root@ip-172-31-4-188 yum.repos.d]# rpm --import https://pkg.jenkins.io/redhat-stable/jenkins.io-2023.key
[root@ip-172-31-4-188 yum.repos.d]#
```

Step 7:-

yum upgrade -y

```
[root@ip-172-31-4-188 yum.repos.d]# yum upgrade -y
Jenkins-stable                                  255 kB/s |  28 kB     00:00
Dependencies resolved.
Nothing to do.
Complete!
[root@ip-172-31-4-188 yum.repos.d]#
```

Step 8:-

yum install jenkins -y

```
[root@ip-172-31-4-188 yum.repos.d]# yum install jenkins -y
Last metadata expiration check: 0:01:08 ago on Sat May  4 10:10:33 2024.
Dependencies resolved.
================================================================================
 Package         Architecture   Version                Repository       Size
================================================================================
Installing:
 jenkins         noarch         2.440.3-1.1            jenkins          89 M
```

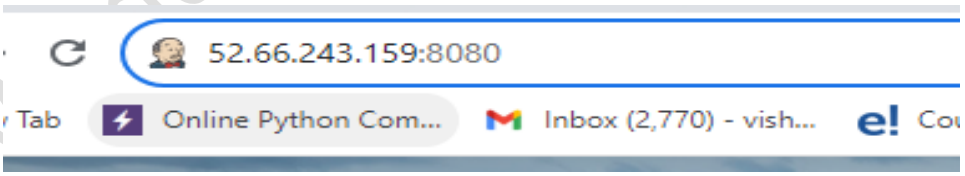
Step 9:-
systemctl start jenkins
systemctl enable Jenkins

```
[root@ip-172-31-4-188 yum.repos.d]# systemctl start jenkins
[root@ip-172-31-4-188 yum.repos.d]# systemctl enable jenkins
Created symlink /etc/systemd/system/multi-user.target.wants/jenkins.service →
 /usr/lib/systemd/system/jenkins.service.
[root@ip-172-31-4-188 yum.repos.d]#
```

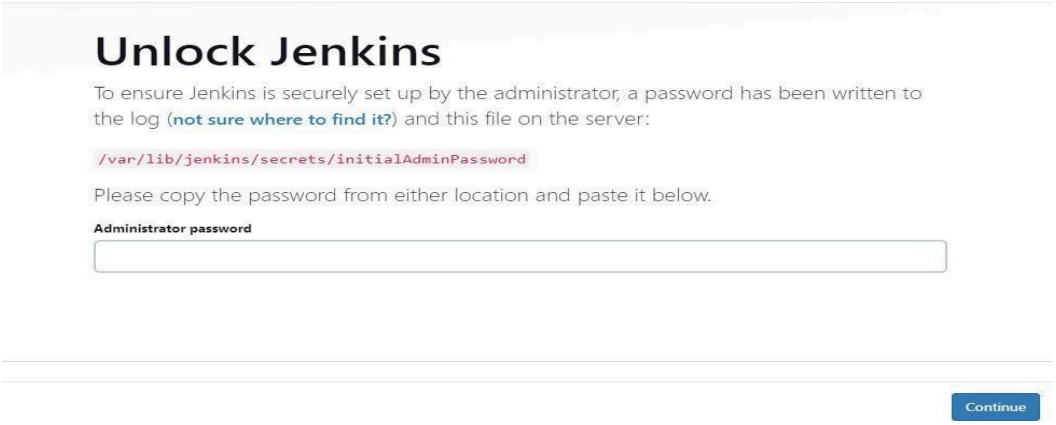
Step 10:-
systemctl status Jenkins

```
[root@ip-172-31-4-188 yum.repos.d]# systemctl status jenkins
● jenkins.service - Jenkins Continuous Integration Server
     Loaded: loaded (/usr/lib/systemd/system/jenkins.service; enabled; prese>
     Active: active (running) since Sat 2024-05-04 10:14:28 UTC; 1min 16s ago
   Main PID: 26262 (java)
      Tasks: 45 (limit: 4659)
     Memory: 1.2G
        CPU: 39.827s
     CGroup: /system.slice/jenkins.service
             └─26262 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/>
```

Go to the browser and paste the public key of instance with 8080 port



public_ip_of_instance:8080
Now unlock the jenkins tool with password

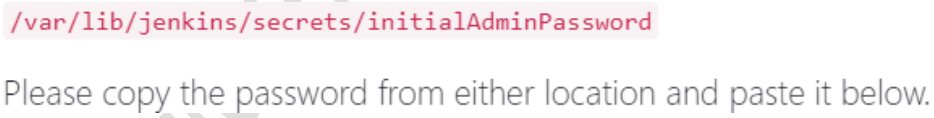


We have two ways to get password First is the see in status command

```
[root@ip-172-31-4-188 yum.repos.d]# systemctl status jenkins
● jenkins.service - Jenkins Continuous Integration Server
     Loaded: loaded (/usr/lib/systemd/system/jenkins.service; enabled; preset: disabled)
     Active: active (running) since Sat 2024-05-04 10:14:28 UTC; 5min ago
   Main PID: 26262 (java)
      Tasks: 47 (limit: 4659)
     Memory: 1.2G
        CPU: 43.354s
     CGroup: /system.slice/jenkins.service
             └─26262 /usr/bin/java -Djava.awt.headless=true -jar /usr/share/java/jenkins.war --webroot=/var/cache/jenkins/war --httpPort=8080

May 04 10:14:09 ip-172-31-4-188.ap-south-1.compute.internal jenkins[26262]: 4c231bf2d2cb4a19be8a66763e6c8063
May 04 10:14:09 ip-172-31-4-188.ap-south-1.compute.internal jenkins[26262]: This may also be found at: /var/lib/jenkins/secrets/initialAdminPassword
May 04 10:14:09 ip-172-31-4-188.ap-south-1.compute.internal jenkins[26262]: ************************************************************
May 04 10:14:09 ip-172-31-4-188.ap-south-1.compute.internal jenkins[26262]: ************************************************************
May 04 10:14:09 ip-172-31-4-188.ap-south-1.compute.internal jenkins[26262]: ************************************************************
May 04 10:14:28 ip-172-31-4-188.ap-south-1.compute.internal jenkins[26262]: 2024-05-04 10:14:28.412+0000 [id=31]        INFO        jenkins.InitReactorRunn>
May 04 10:14:28 ip-172-31-4-188.ap-south-1.compute.internal jenkins[26262]: 2024-05-04 10:14:28.425+0000 [id=24]        INFO        hudson.lifecycle.Lifecy>
May 04 10:14:28 ip-172-31-4-188.ap-south-1.compute.internal systemd[1]: Started jenkins.service - Jenkins Continuous Integration Server.
May 04 10:14:29 ip-172-31-4-188.ap-south-1.compute.internal jenkins[26262]: 2024-05-04 10:14:29.155+0000 [id=49]        INFO        h.m.DownloadService$Dow>
May 04 10:14:29 ip-172-31-4-188.ap-south-1.compute.internal jenkins[26262]: 2024-05-04 10:14:29.156+0000 [id=49]        INFO        hudson.util.Retrier#sta>
```

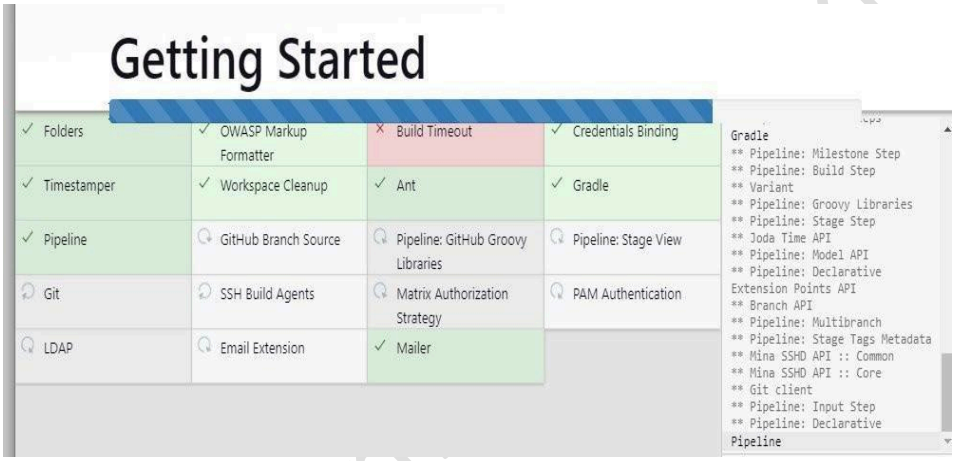
Second is goto the this folder with cat command



cat /var/lib/jenkins/secrets/initialAdminPassword

```
[root@ip-172-31-4-188 yum.repos.d]# cat /var/lib/jenkins/secrets/initialAdminPassword
4c231bf2d2cb4a19be8a66763e6c8063
[root@ip-172-31-4-188 yum.repos.d]#
```

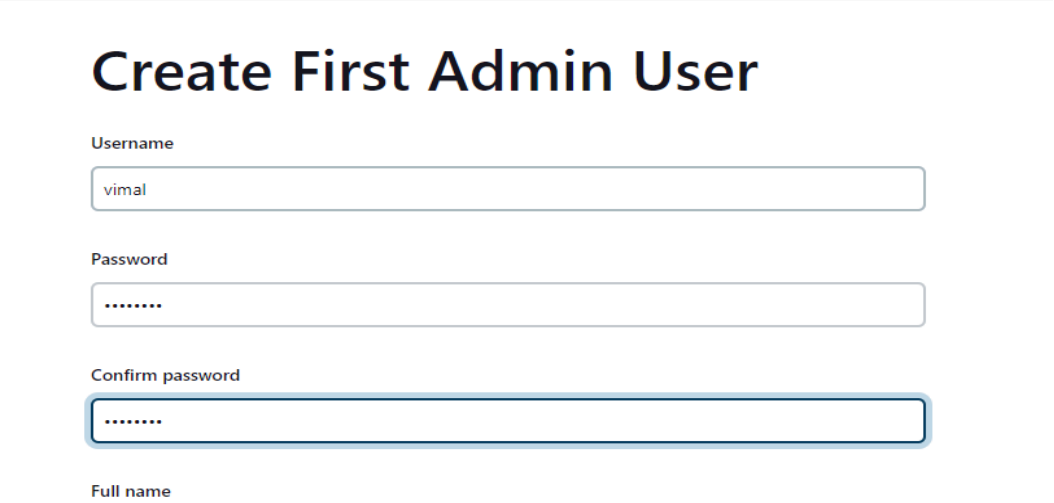
Step 11:- we need to install the plugins for that we click on install the plugins



Then fill the details

Username :- vimal

Password : root@123



Save and continue

rThen start Jenkins -