Module 5: Ansible Assignment

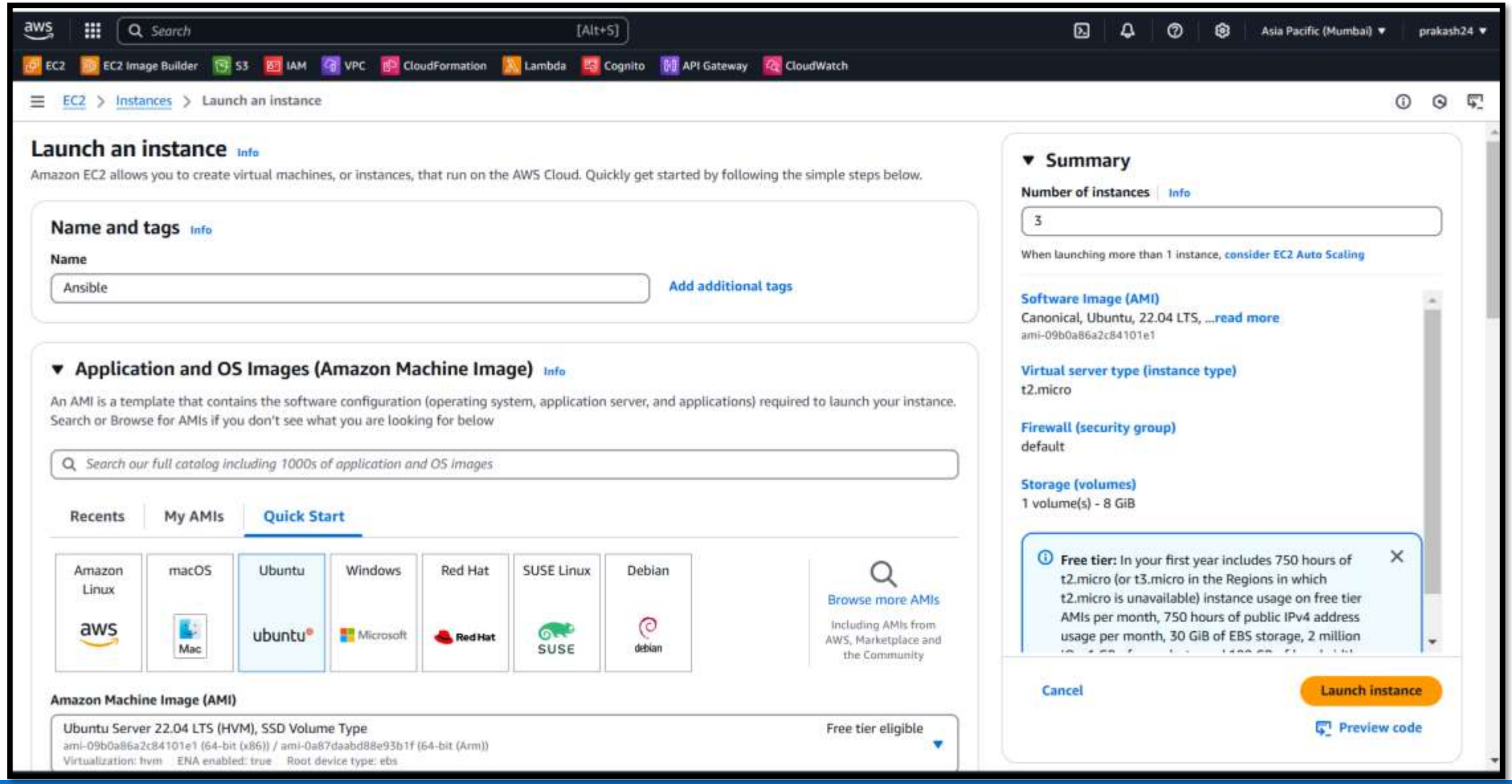
Module 5: Ansible Assignment - 1

Tasks To Be Performed:

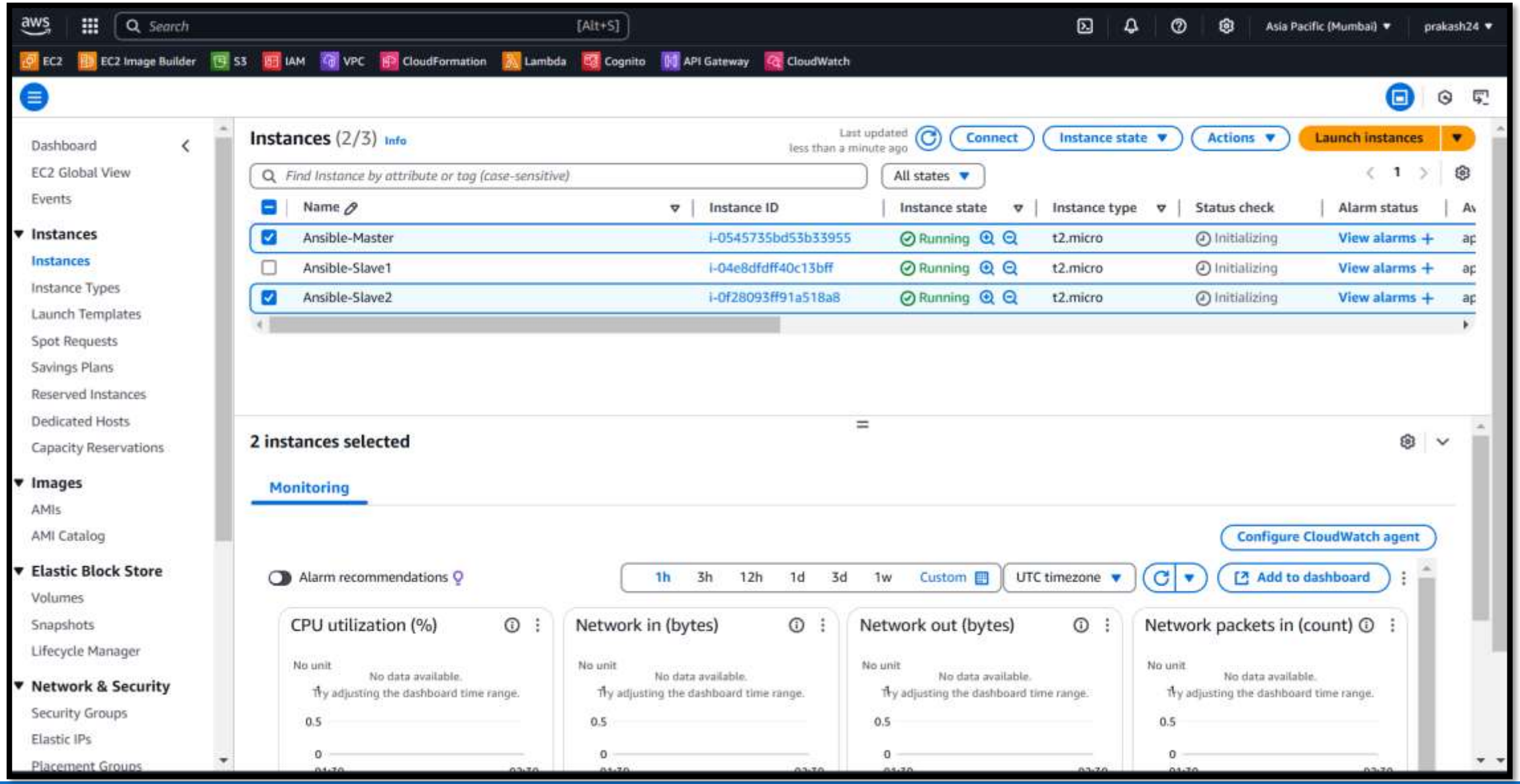
1. Setup Ansible cluster with 3 nodes
2. On slave 1 install Java
3. On slave 2 install MySQL server

Do the above tasks using Ansible Playbooks

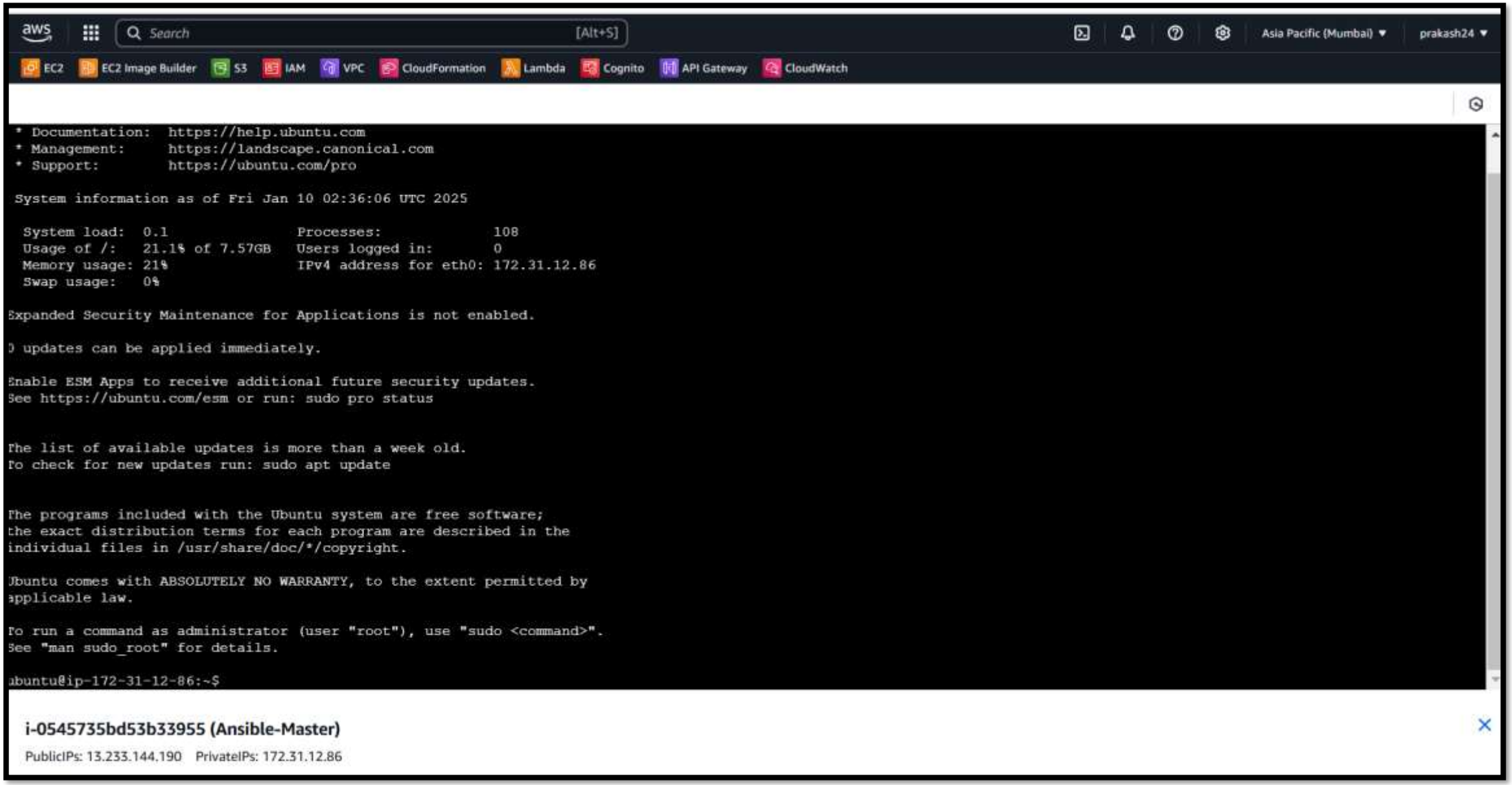
Launching 3 Ec2 Instance



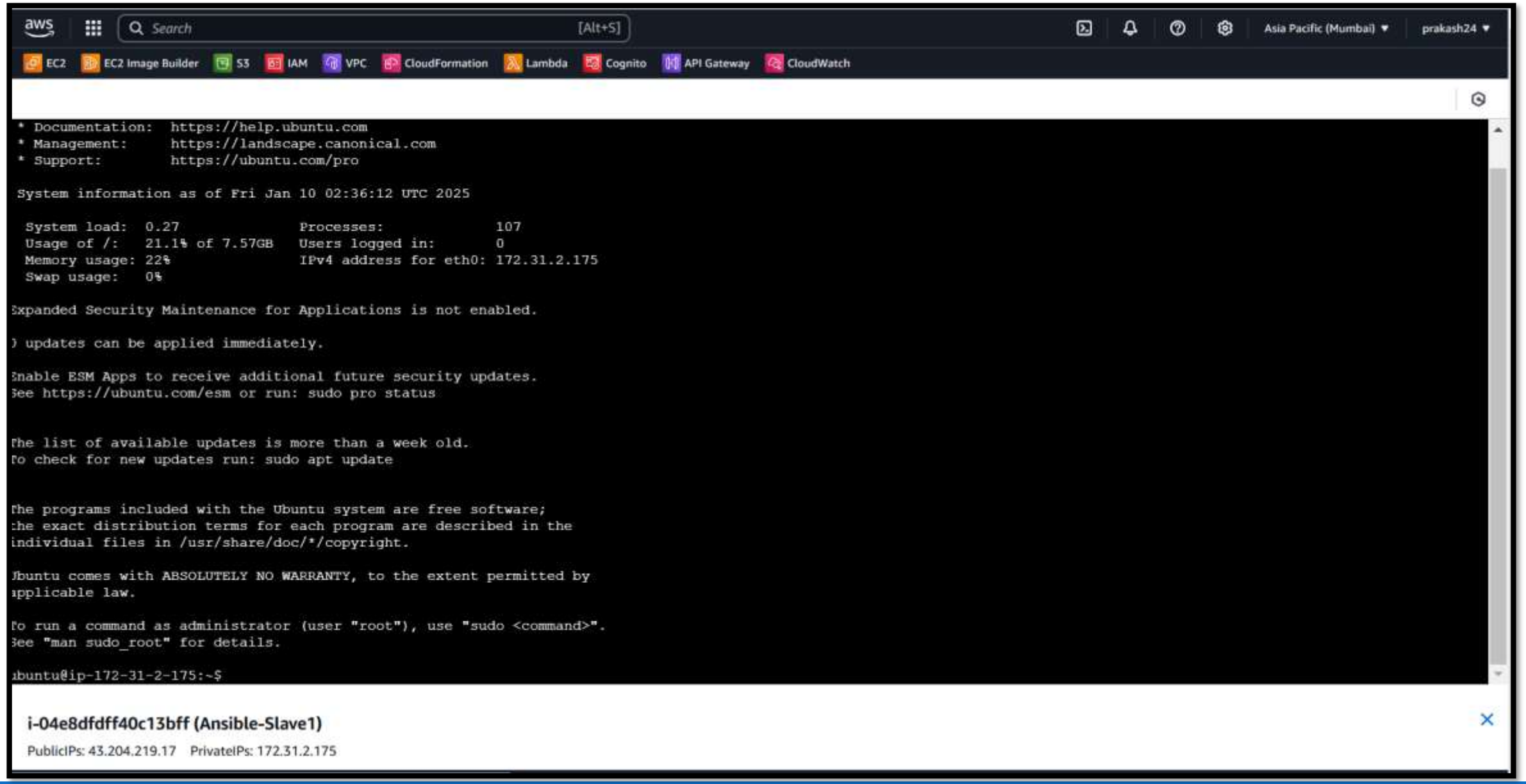
3 Instance 1- master & 2 slave



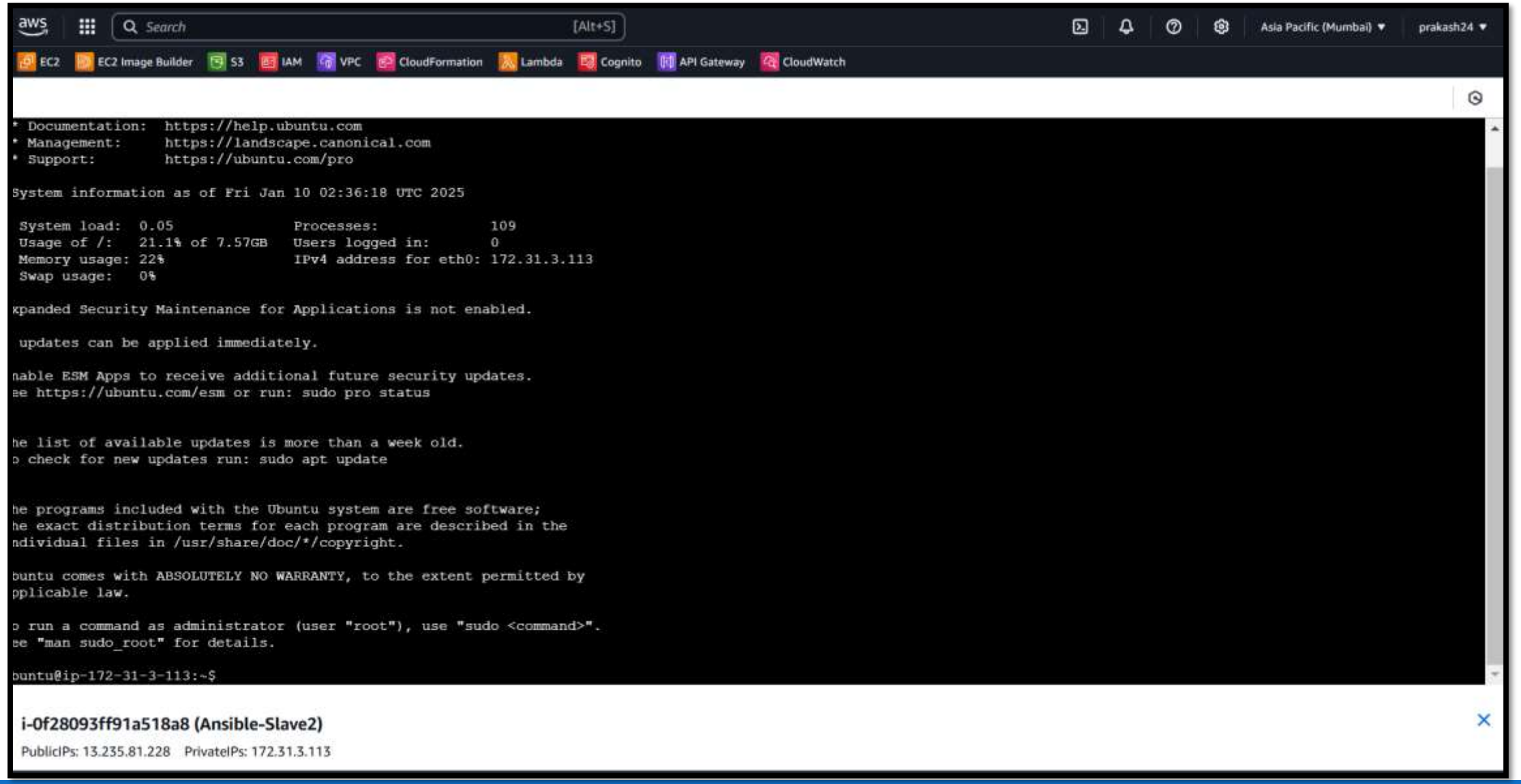
Ansible Master Slave



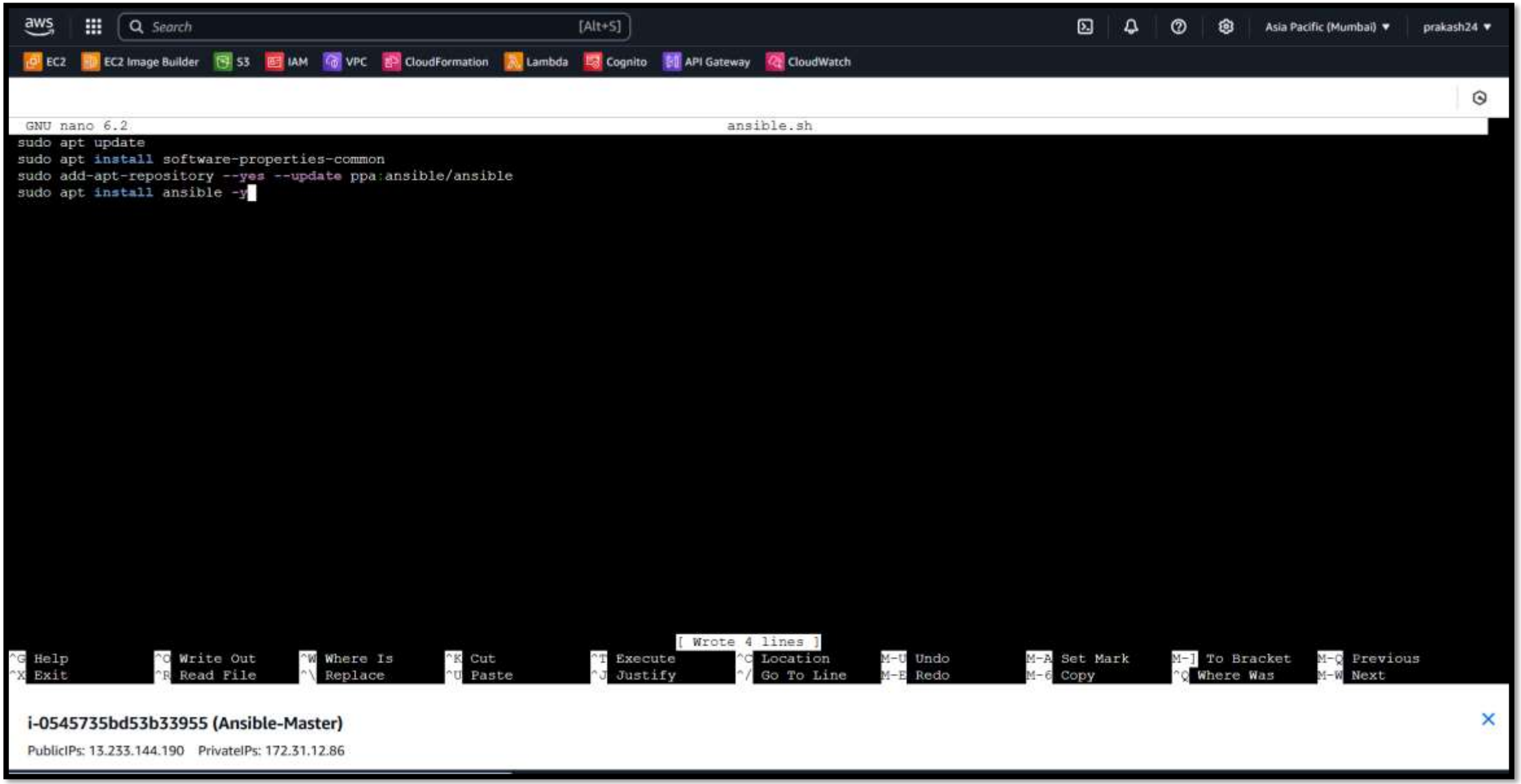
Ansible Slave-1



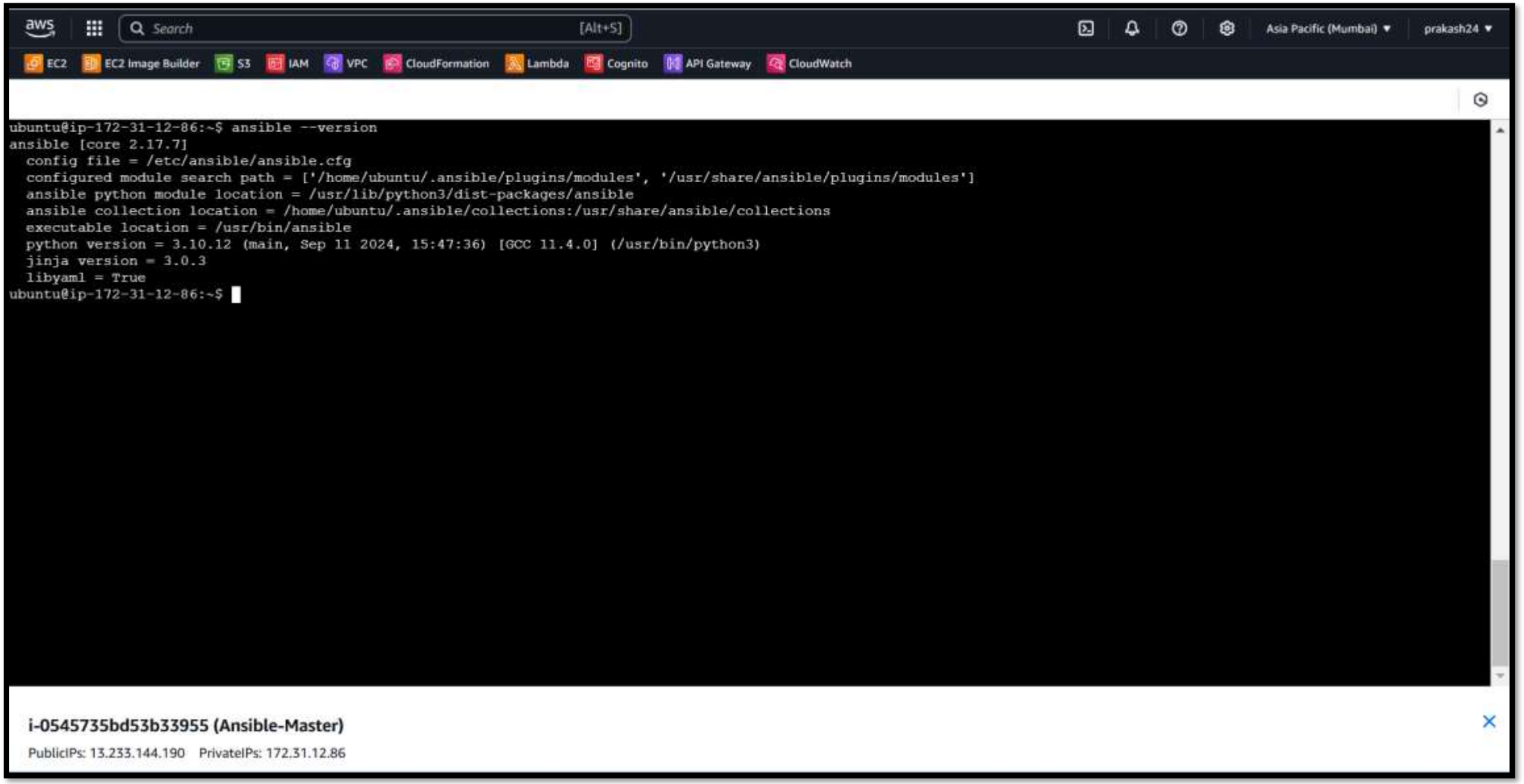
Ansible Slave-2



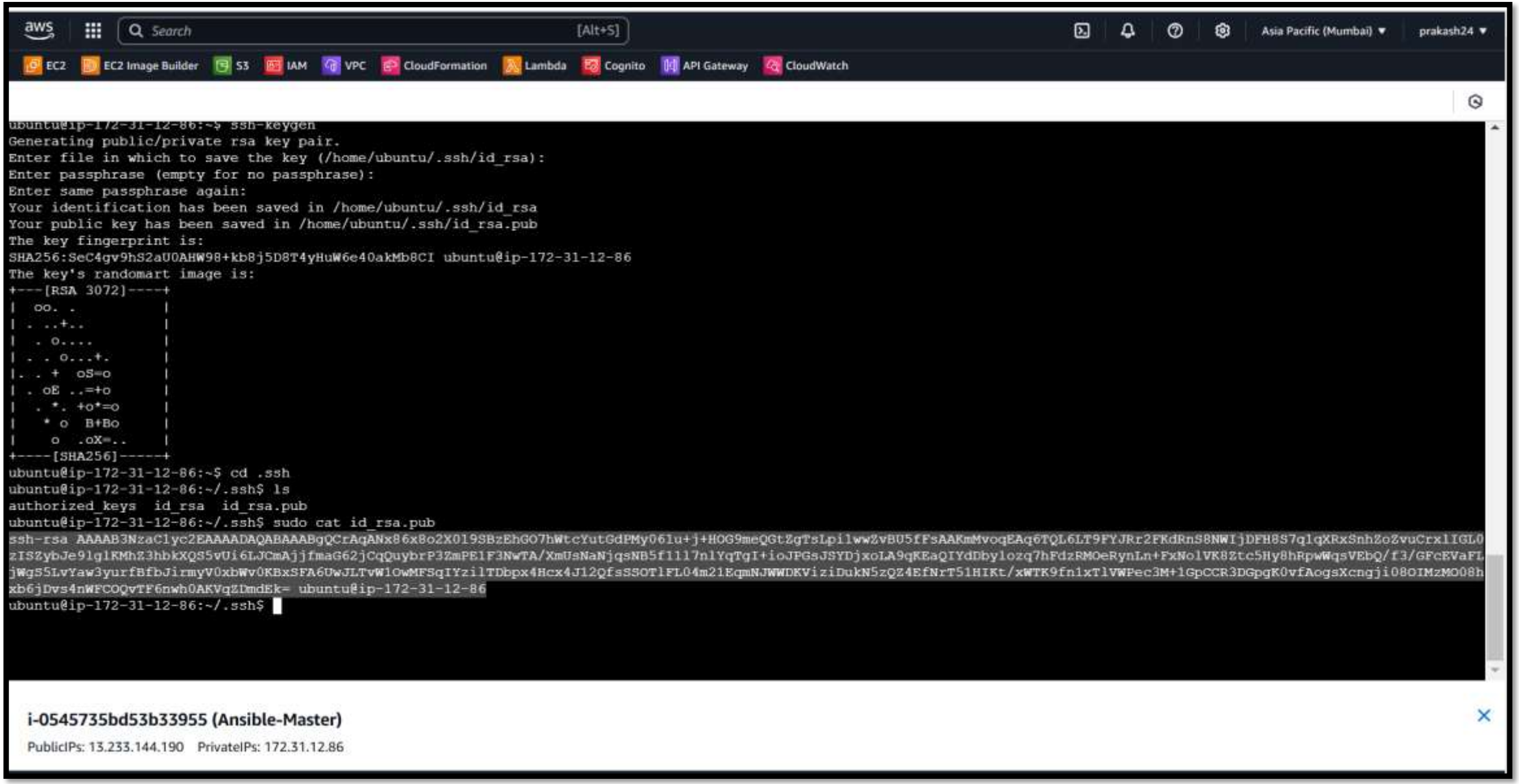
Installing ansible in master instance



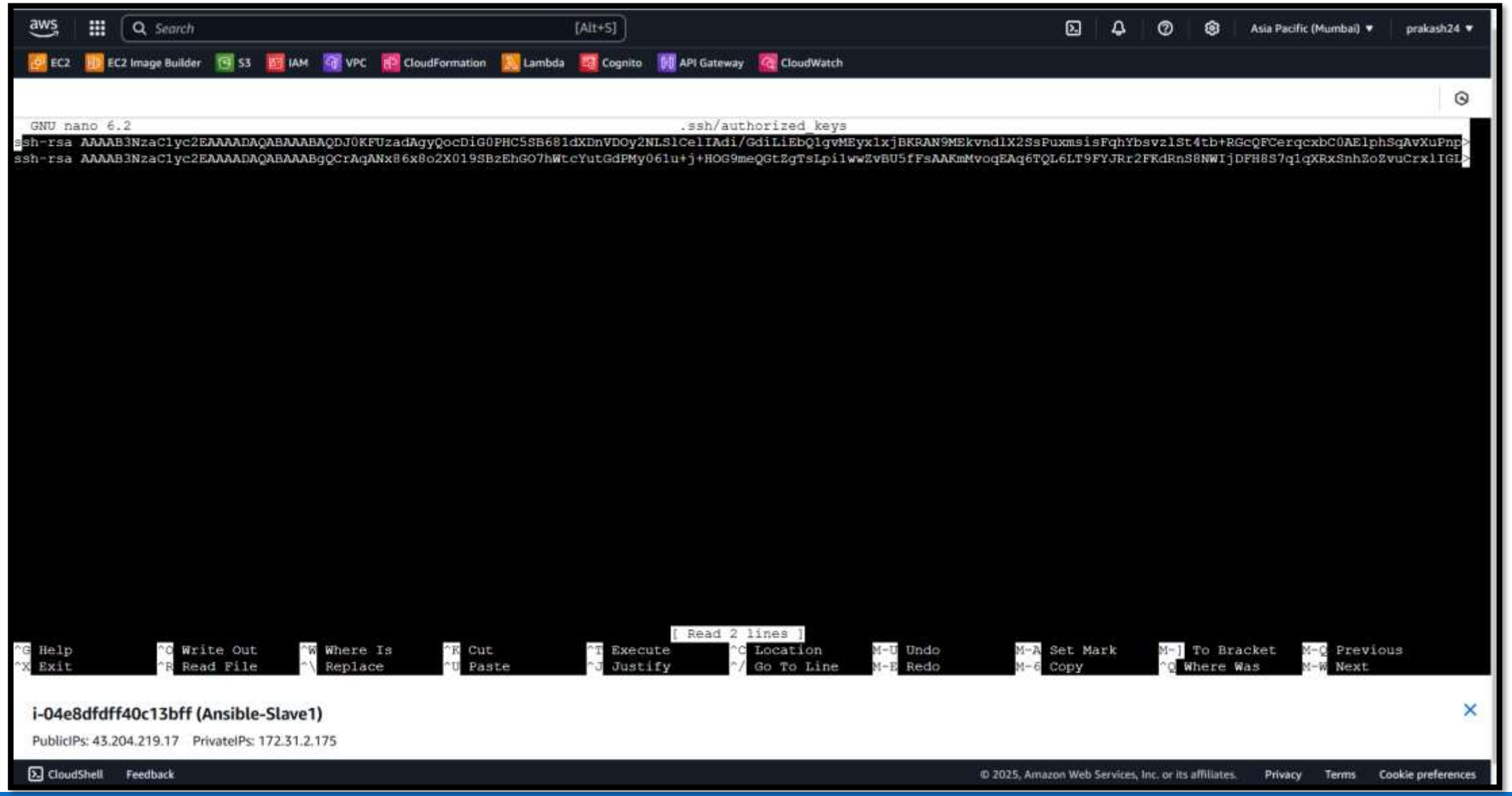
Validate ansible installation in master instance



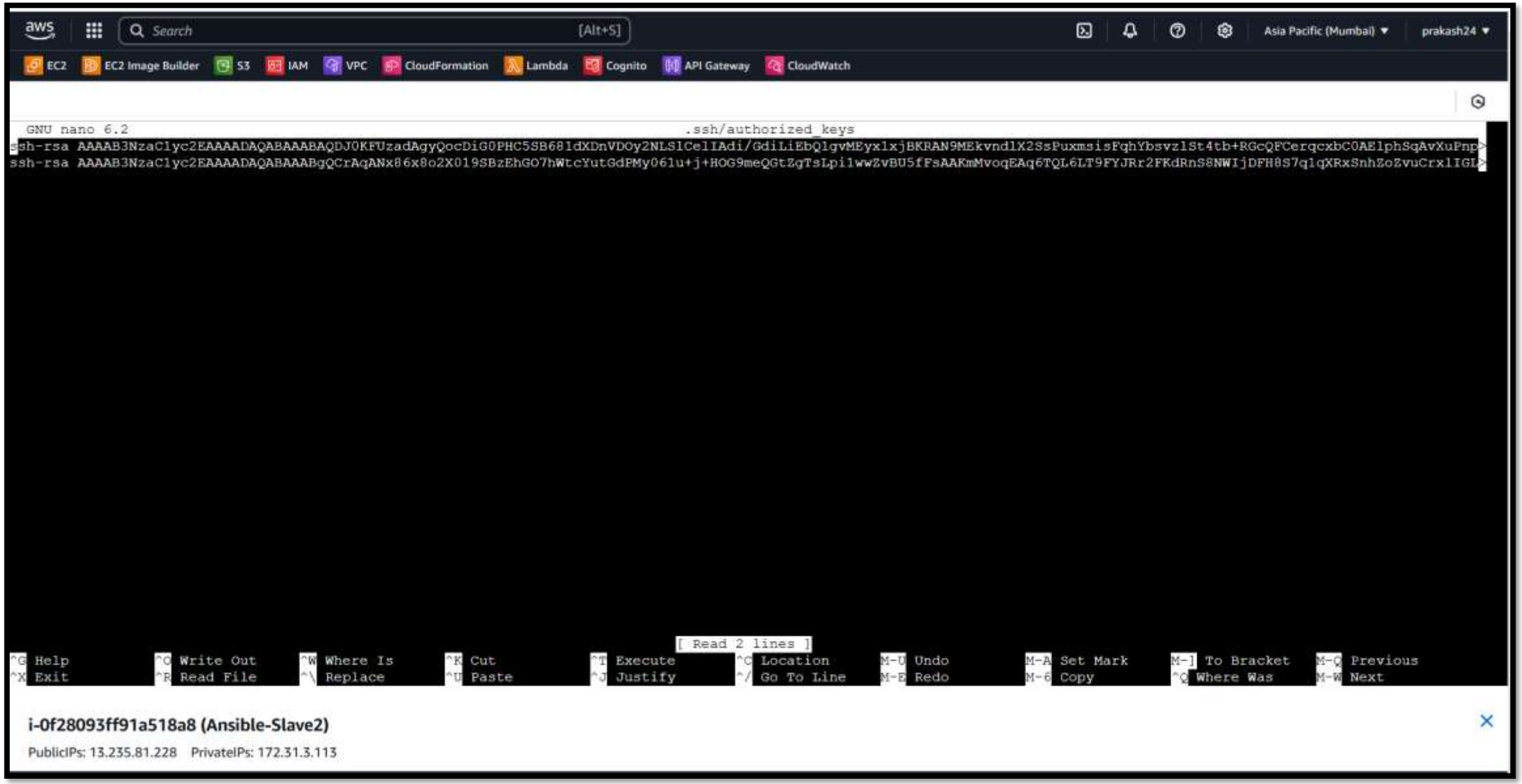
Generating SSH Key for connect slave nodes



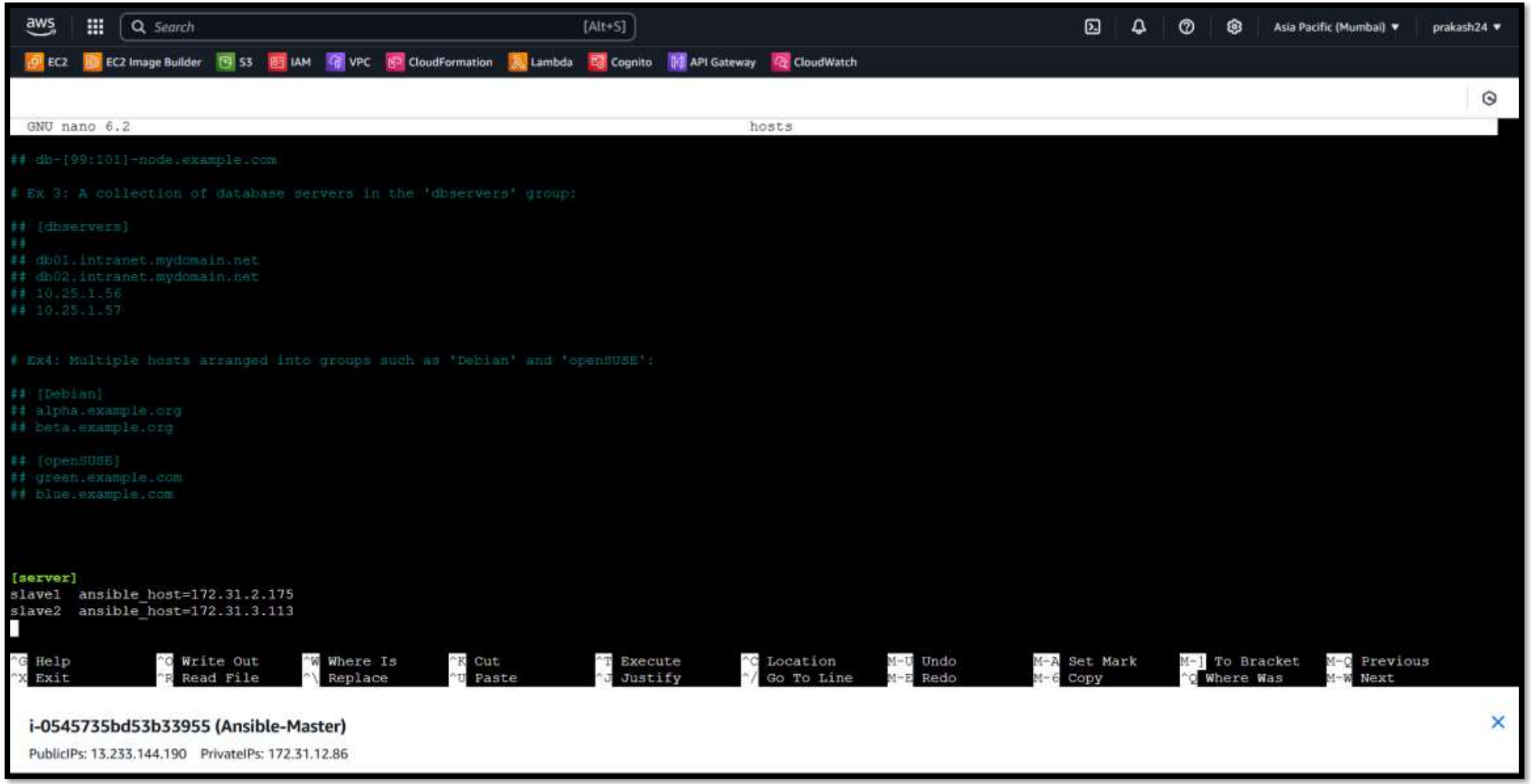
Mapping SSH Key from master node to Slave1 node



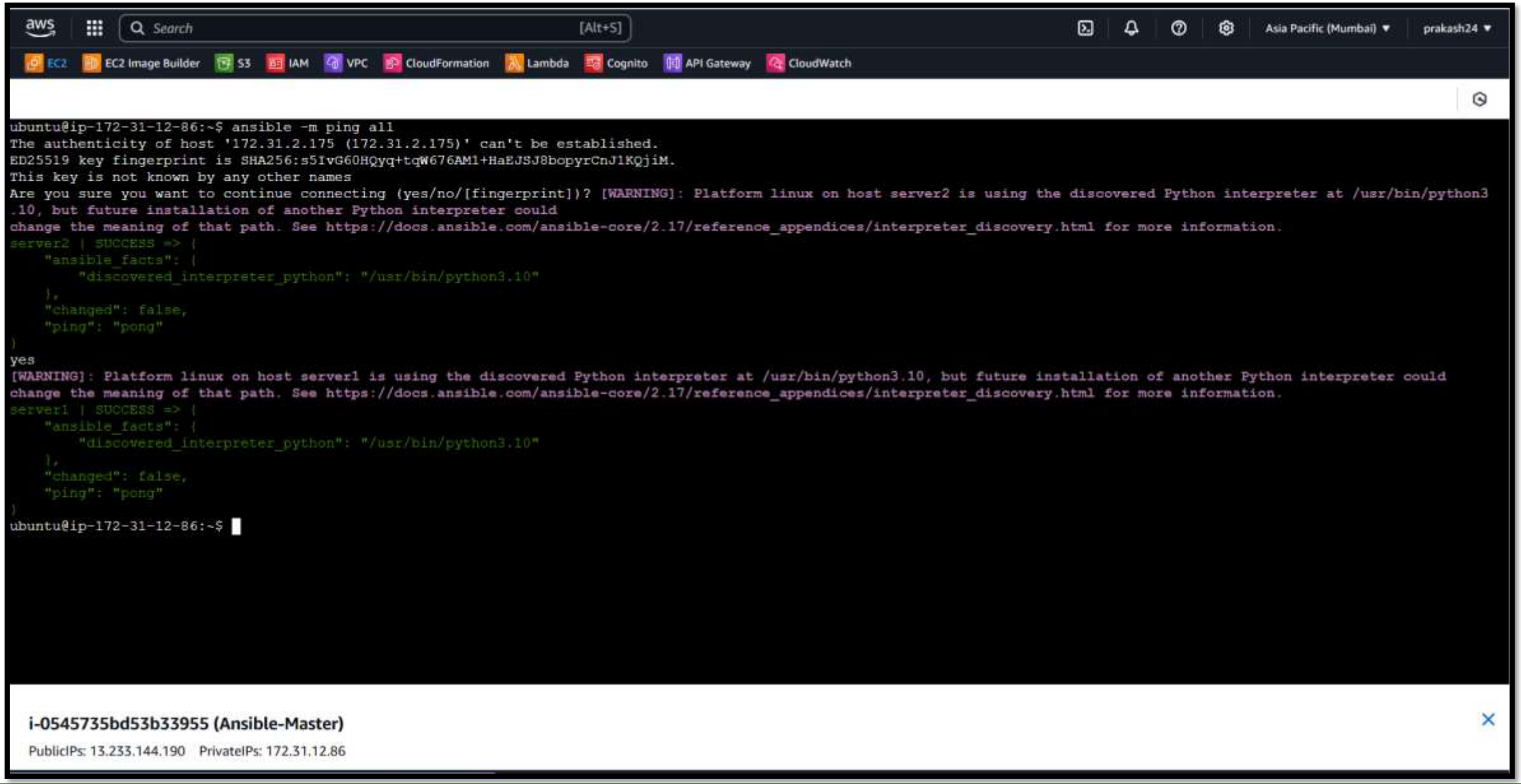
Mapping SSH Key from master node to Slave2 node



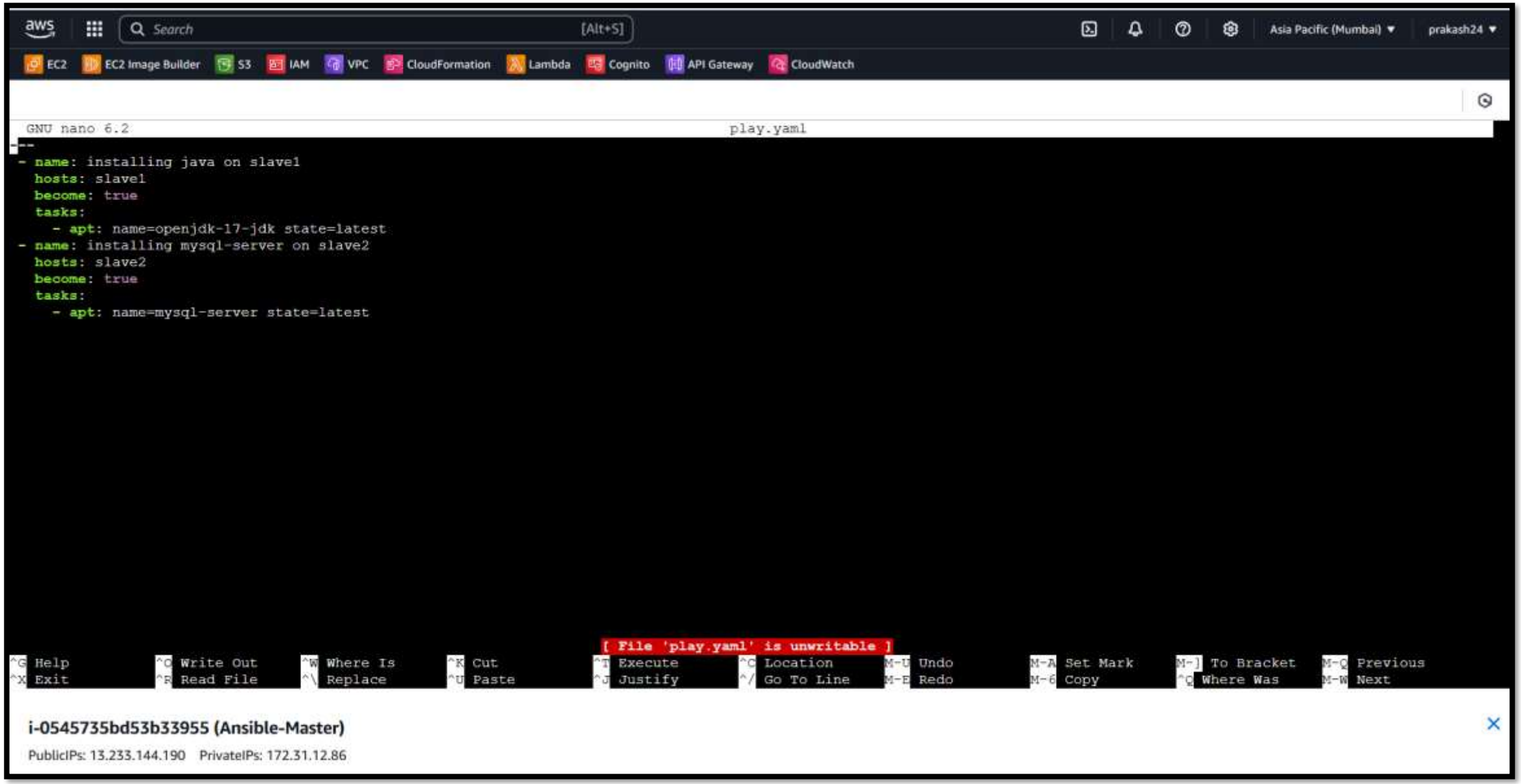
Binding slave1 & Slave2 on hosts using master node



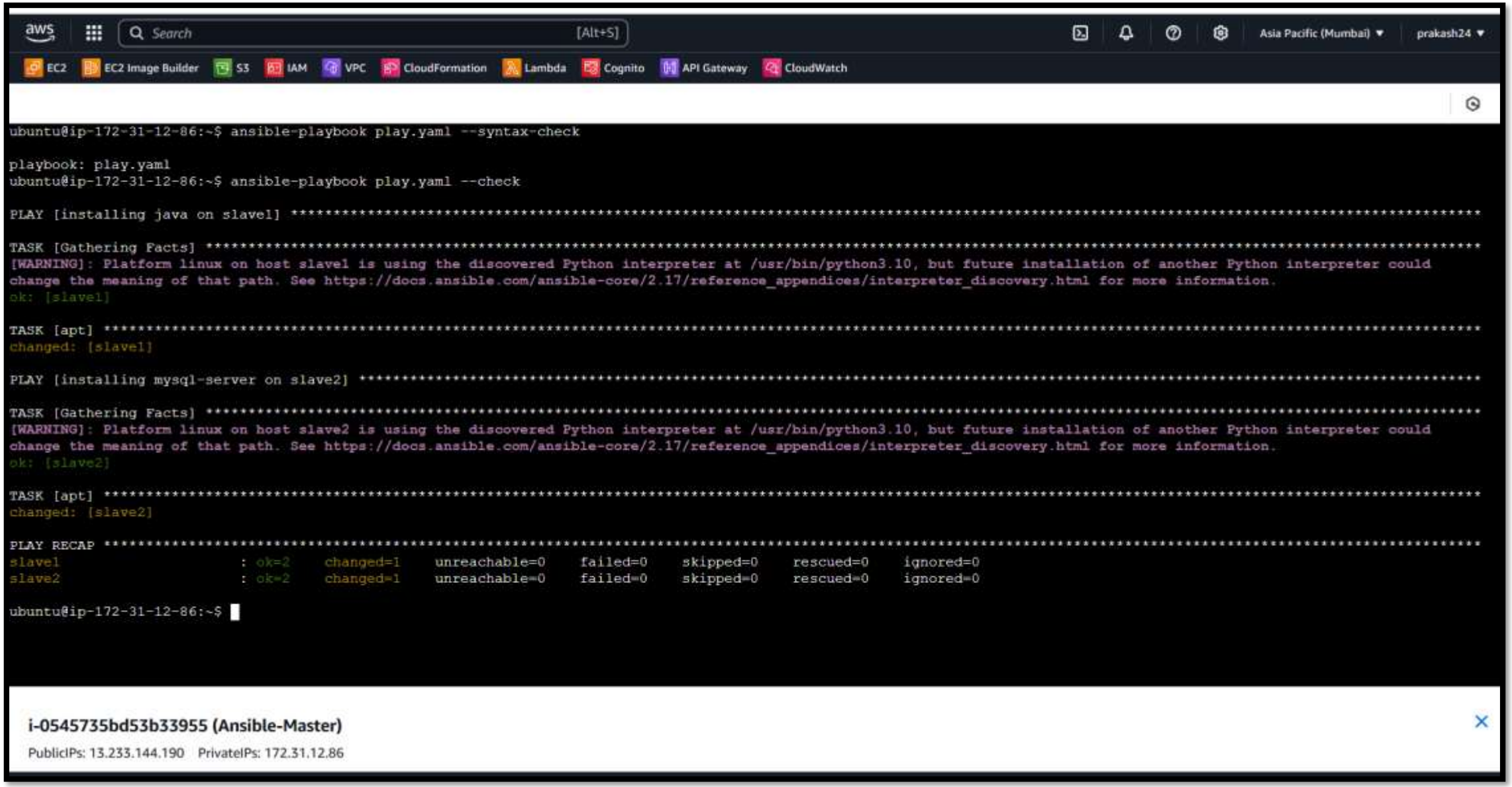
Validating slave1 & Slave2 using “ansible –m ping all” command , master node able to reach slave node or not



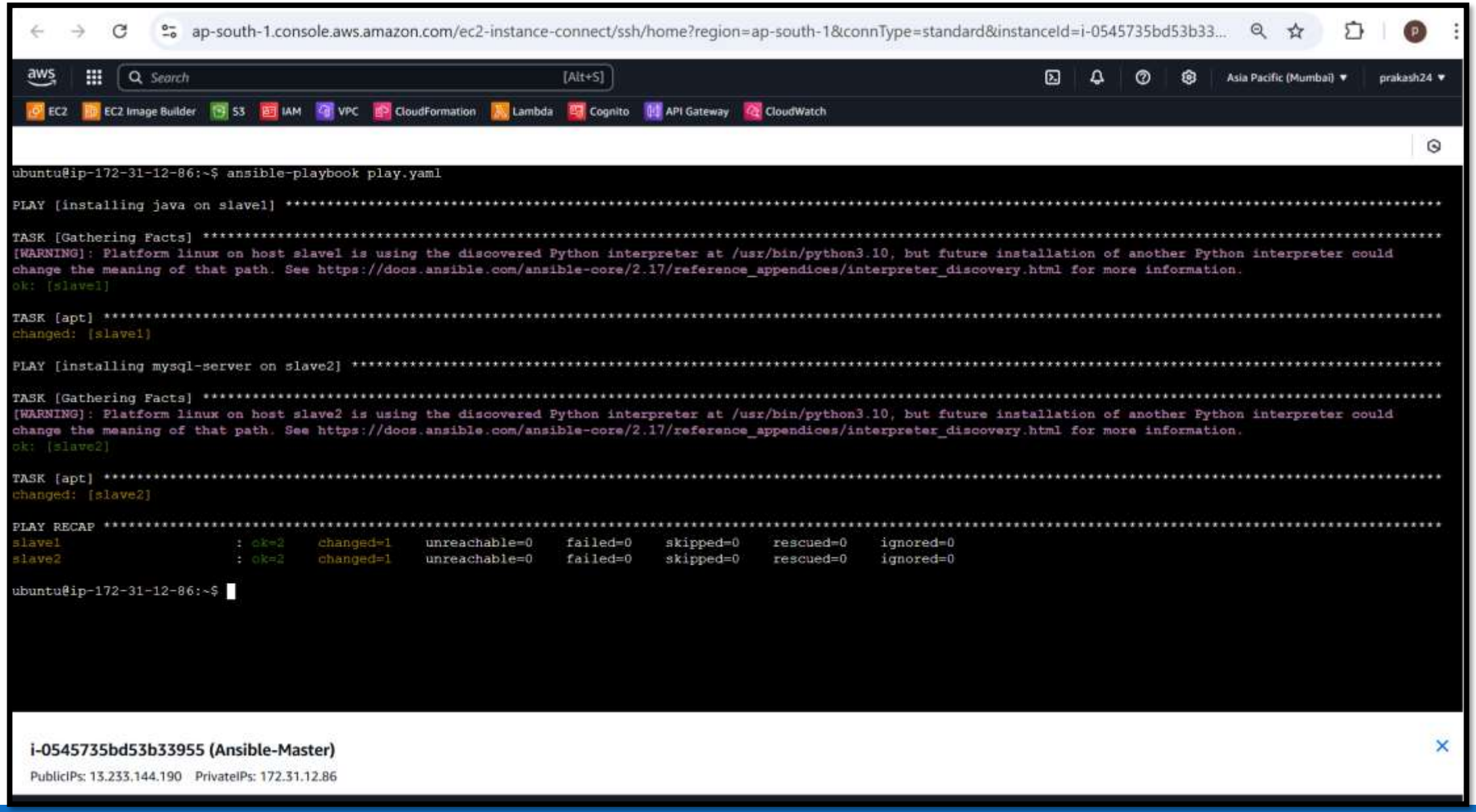
Creating a playbook yaml file to install Java & MySQL Server



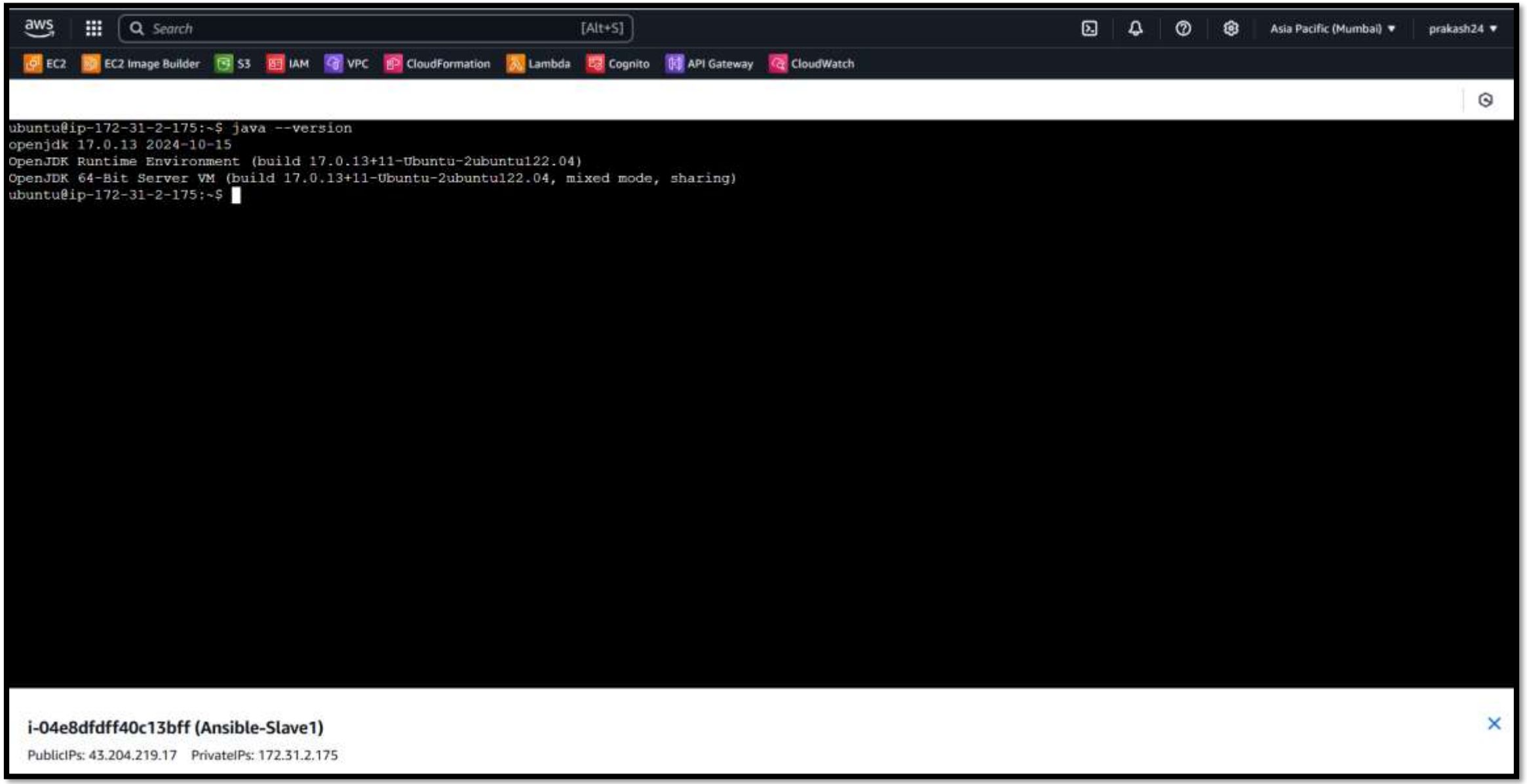
Checking syntax of playbook file & running dry run command



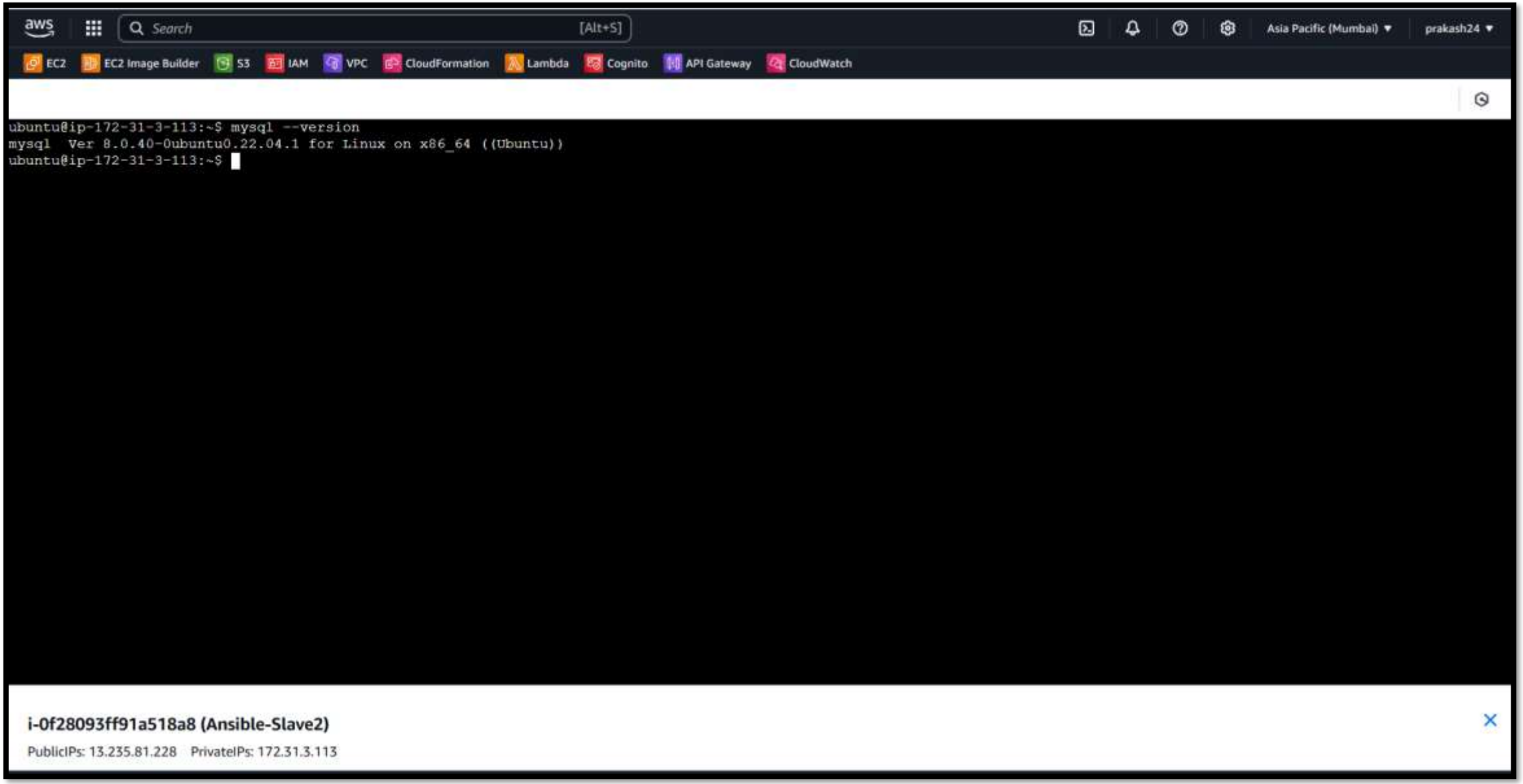
Running playbook file for installation



Validate java installation in slave 1



Validate MySql installation in slave 2

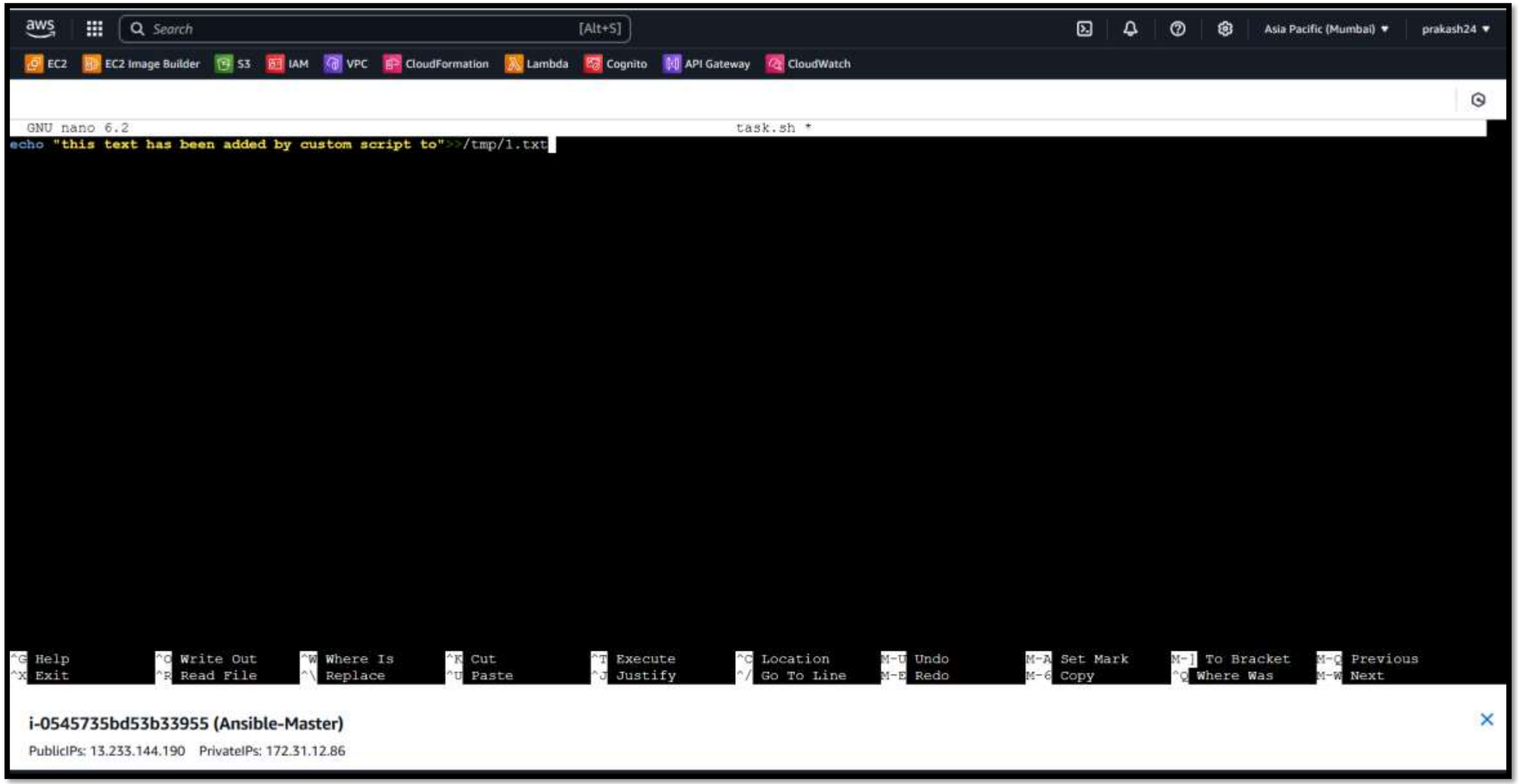


Module 5: Ansible Assignment - 2

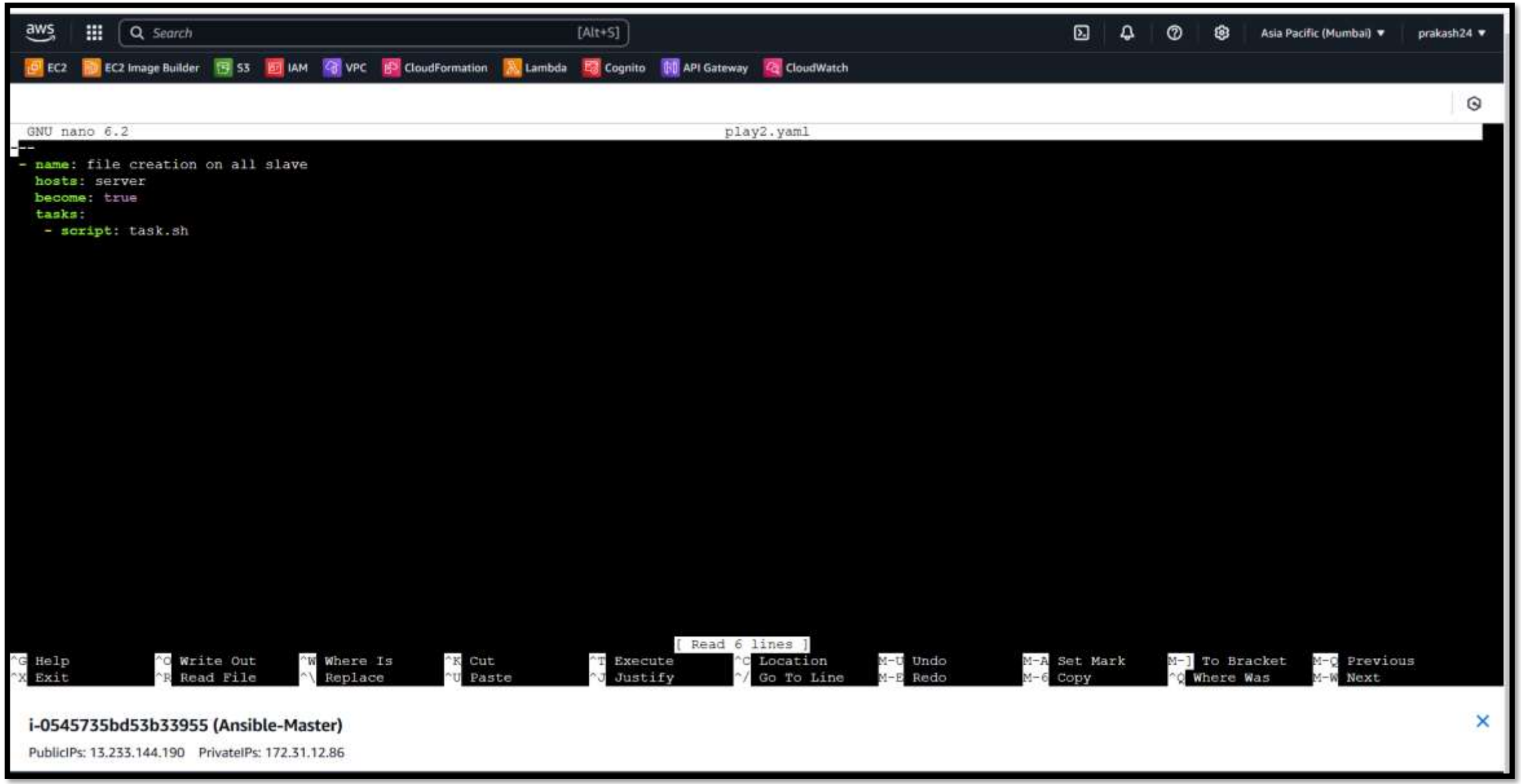
Tasks To Be Performed:

1. Create a script which can add text “This text has been added by custom script” to /tmp.1.txt
2. Run this script using Ansible on all the hosts

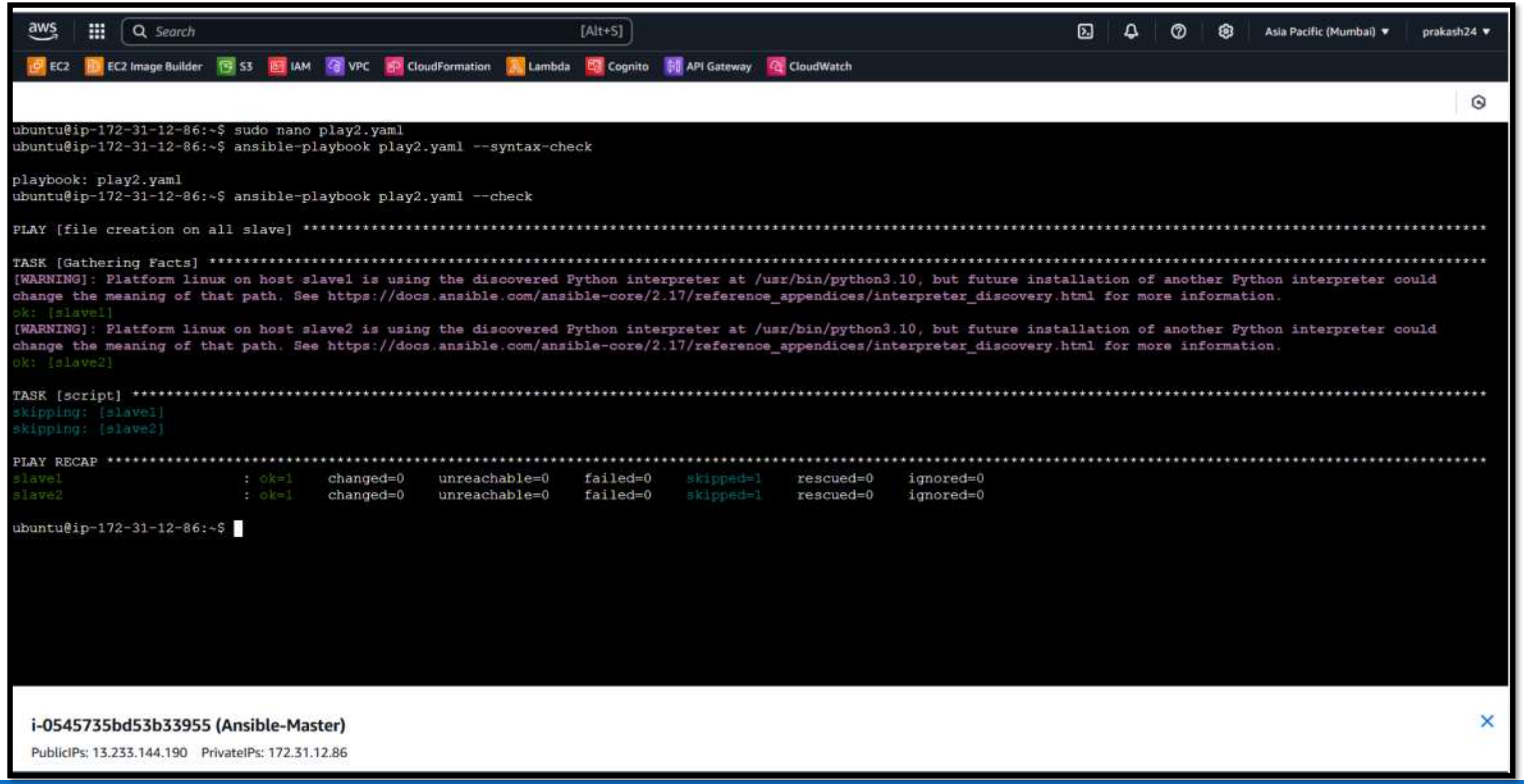
Creating a 1.txt file in /tmp/ location



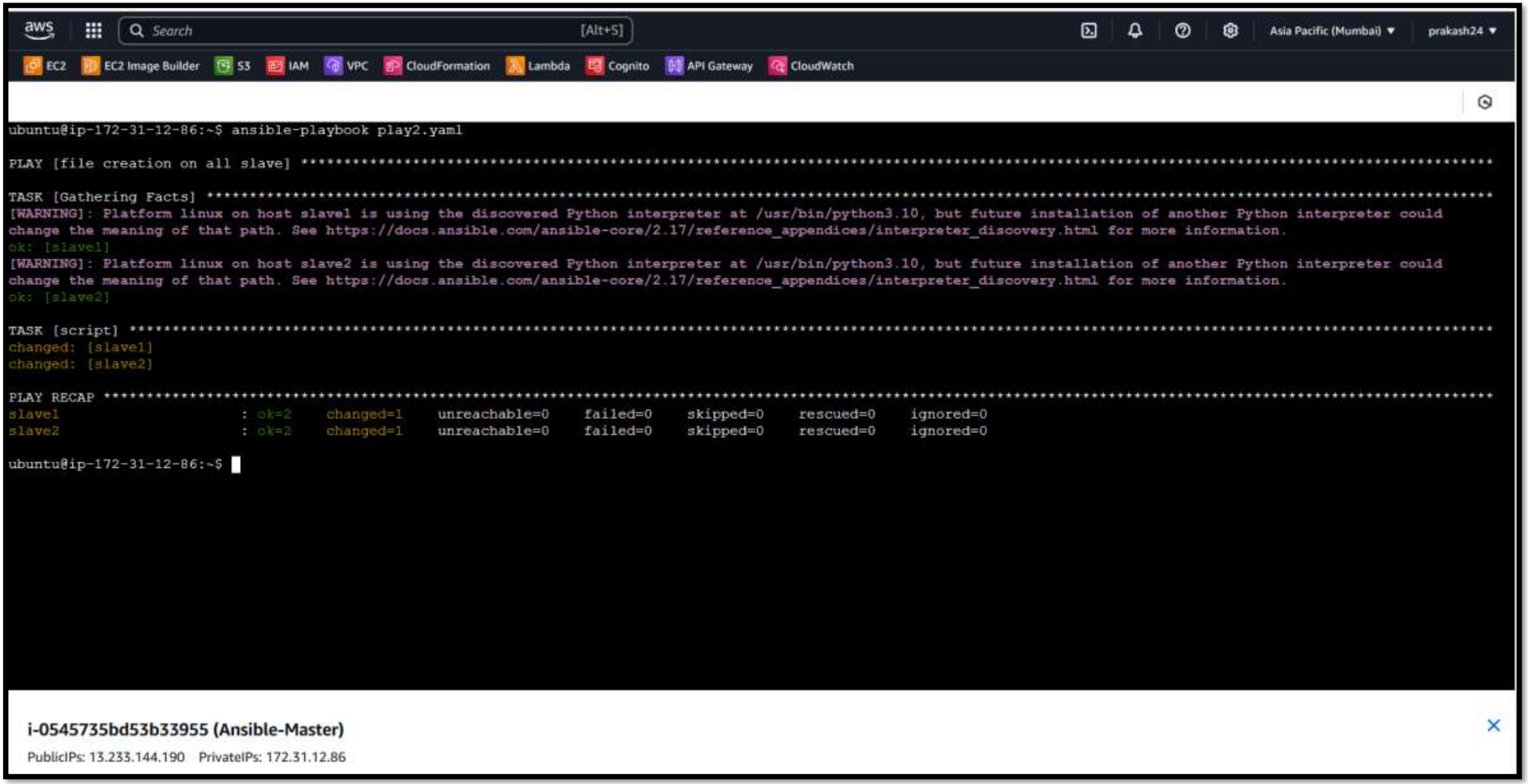
Creating a playbook file to move 1.txt file using task.sh file



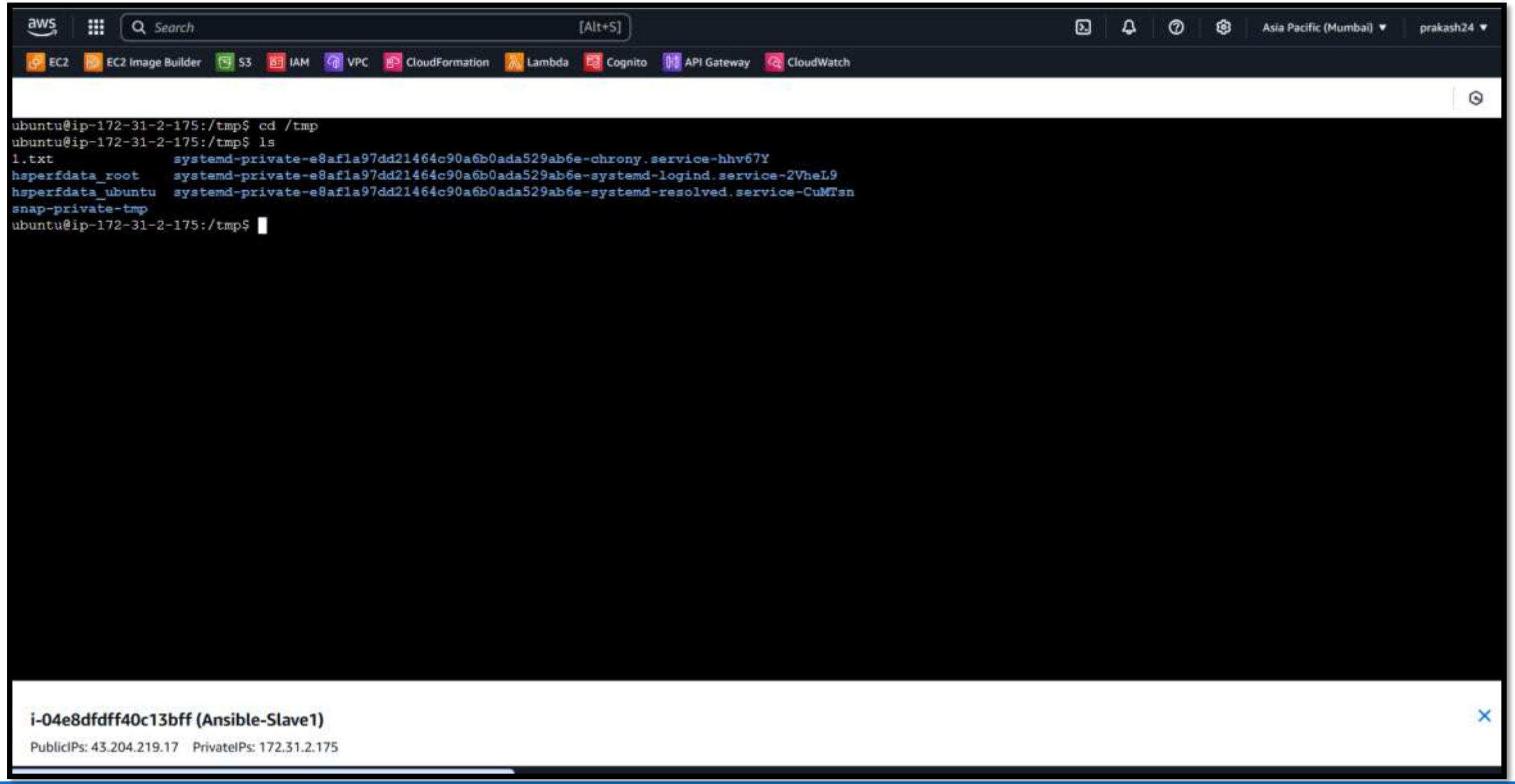
Checking syntax of playbook file & running dry run command



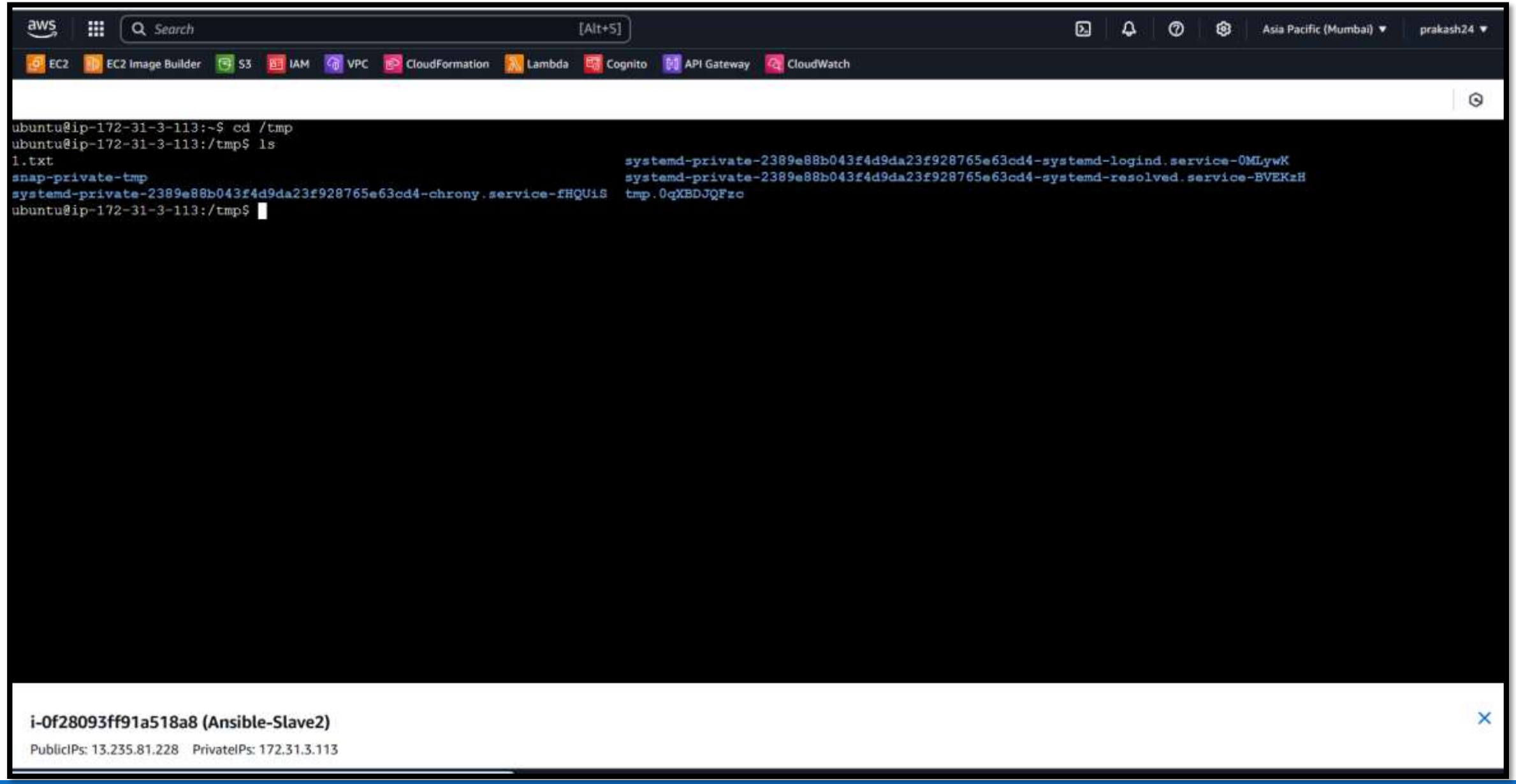
Running playbook file for move file from give location /tmp/



Validate in slave1 we see 1.txt file in location /tmp/



Validate in slave2 we see 1.txt file in location /tmp/

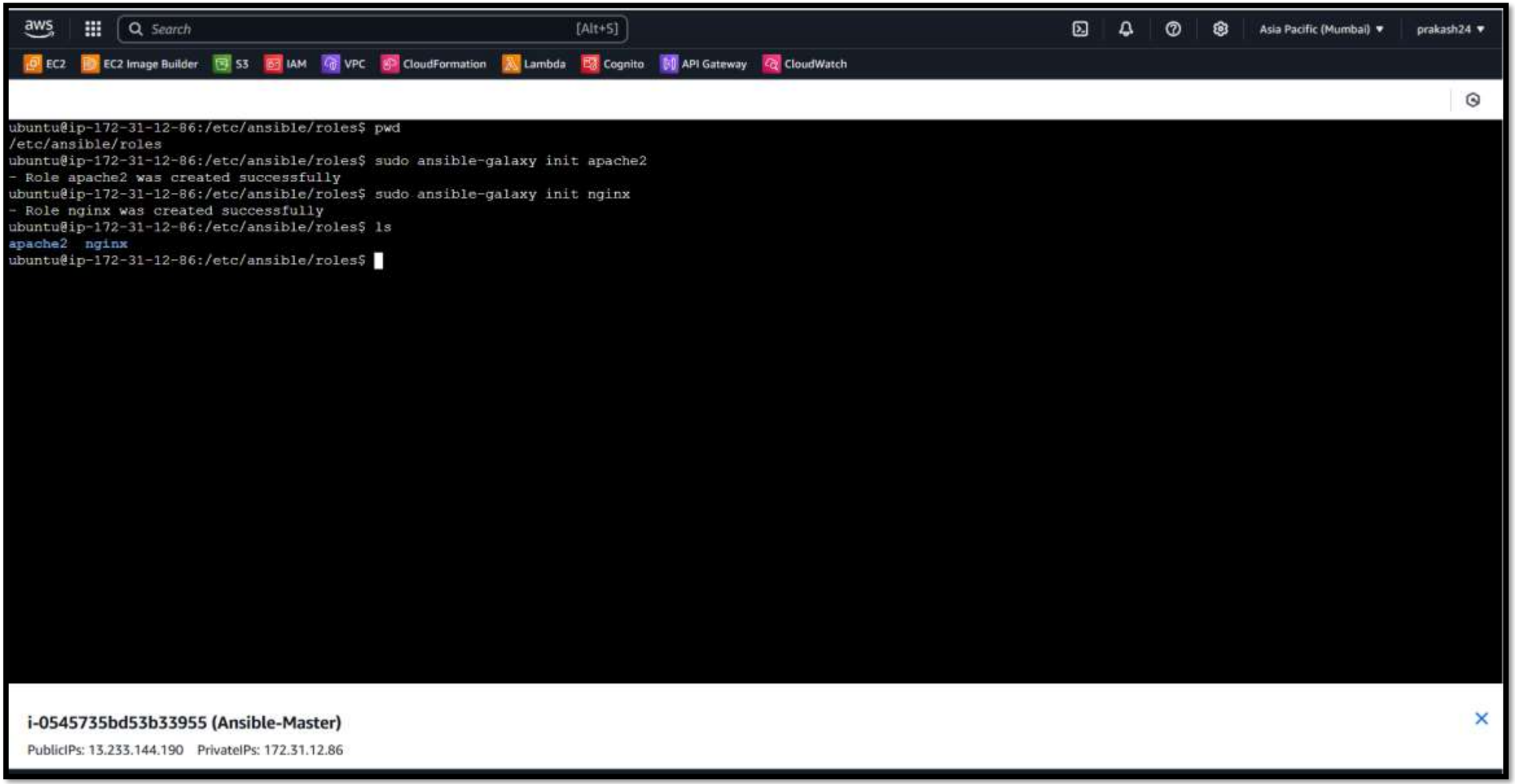


Module 5: Ansible Assignment - 3

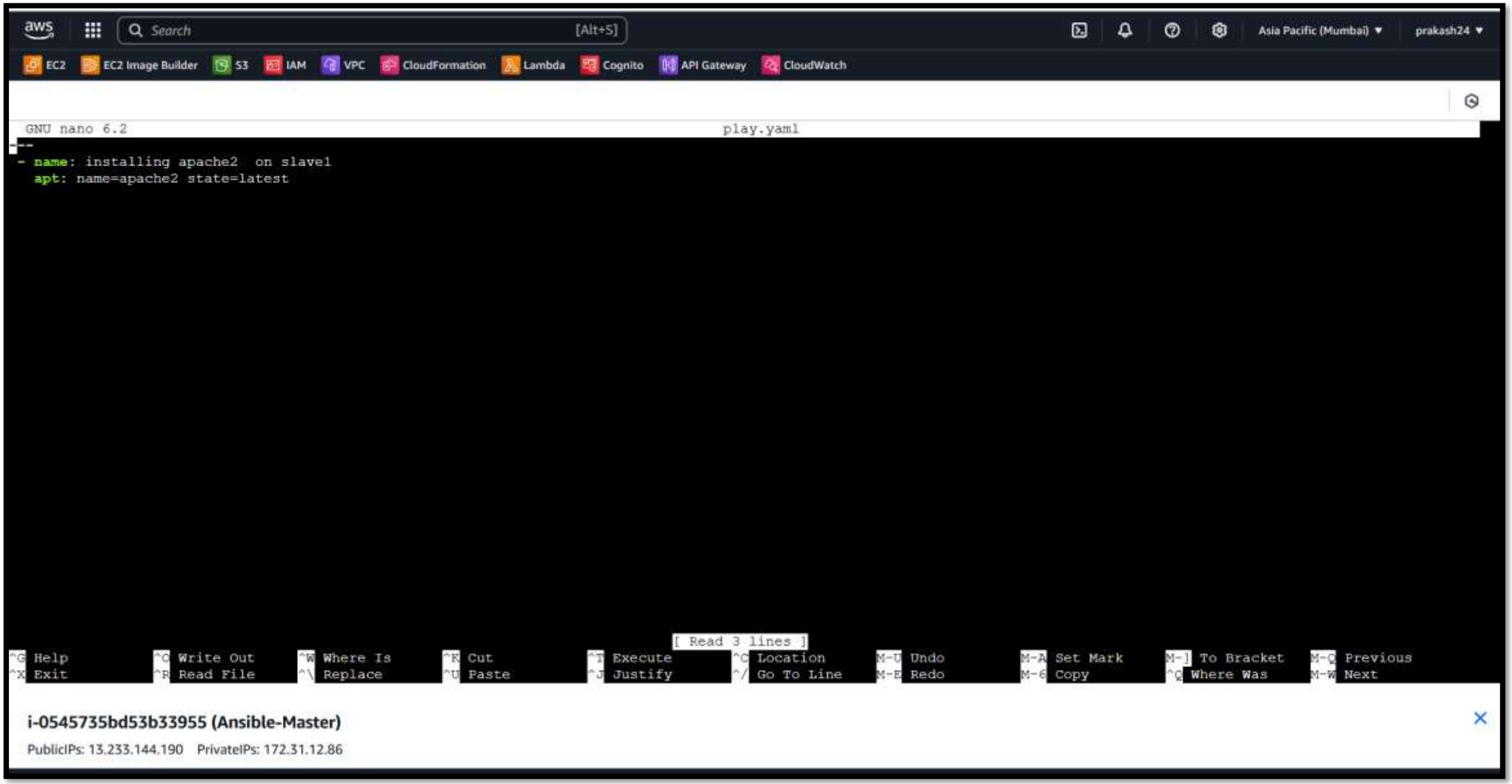
Tasks To Be Performed:

1. Create 2 Ansible roles
2. Install Apache2 on slave1 using one role and NGINX on slave2 using the other role
3. Above should be implemented using different Ansible roles

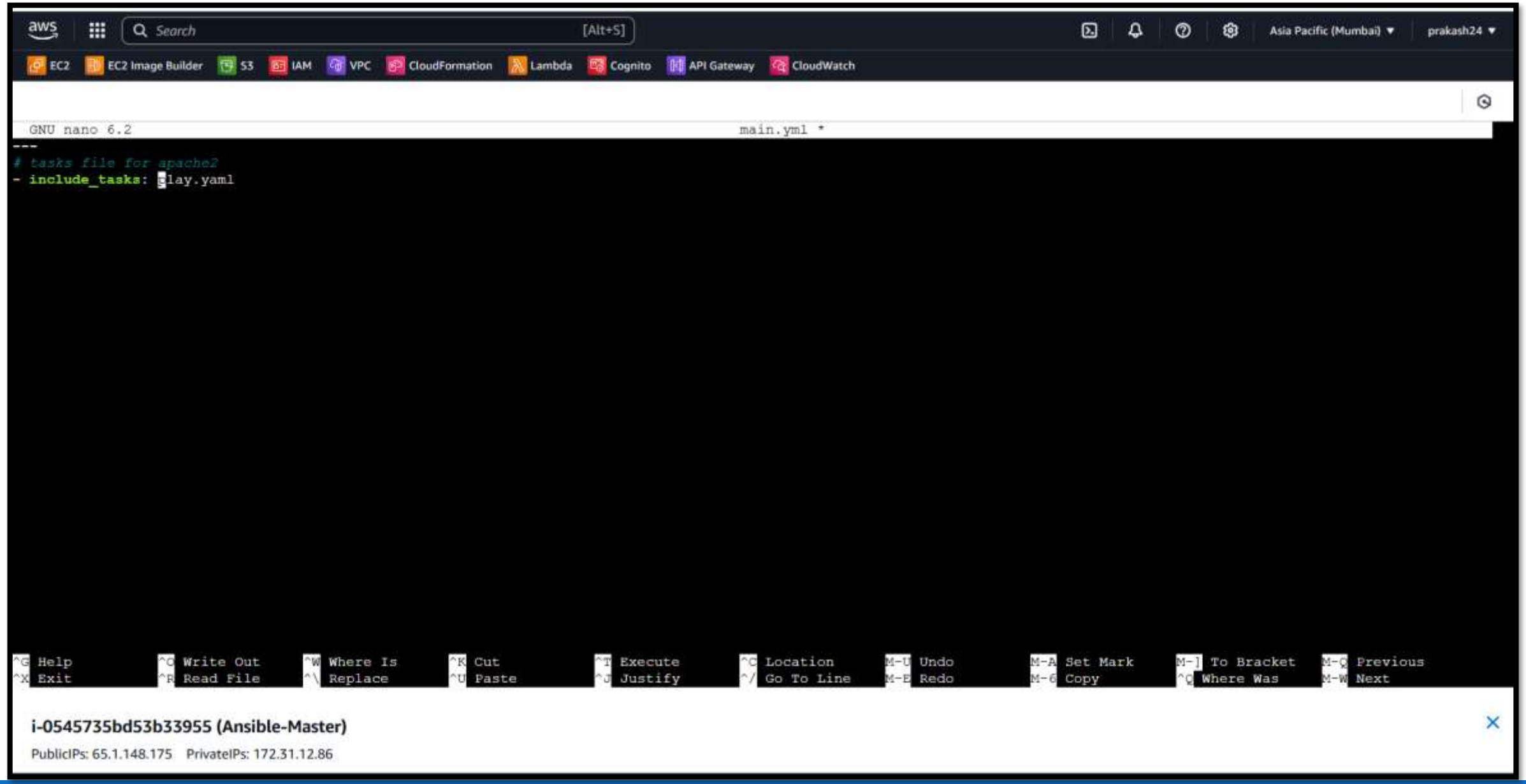
Creating two roles apache2 & nginx



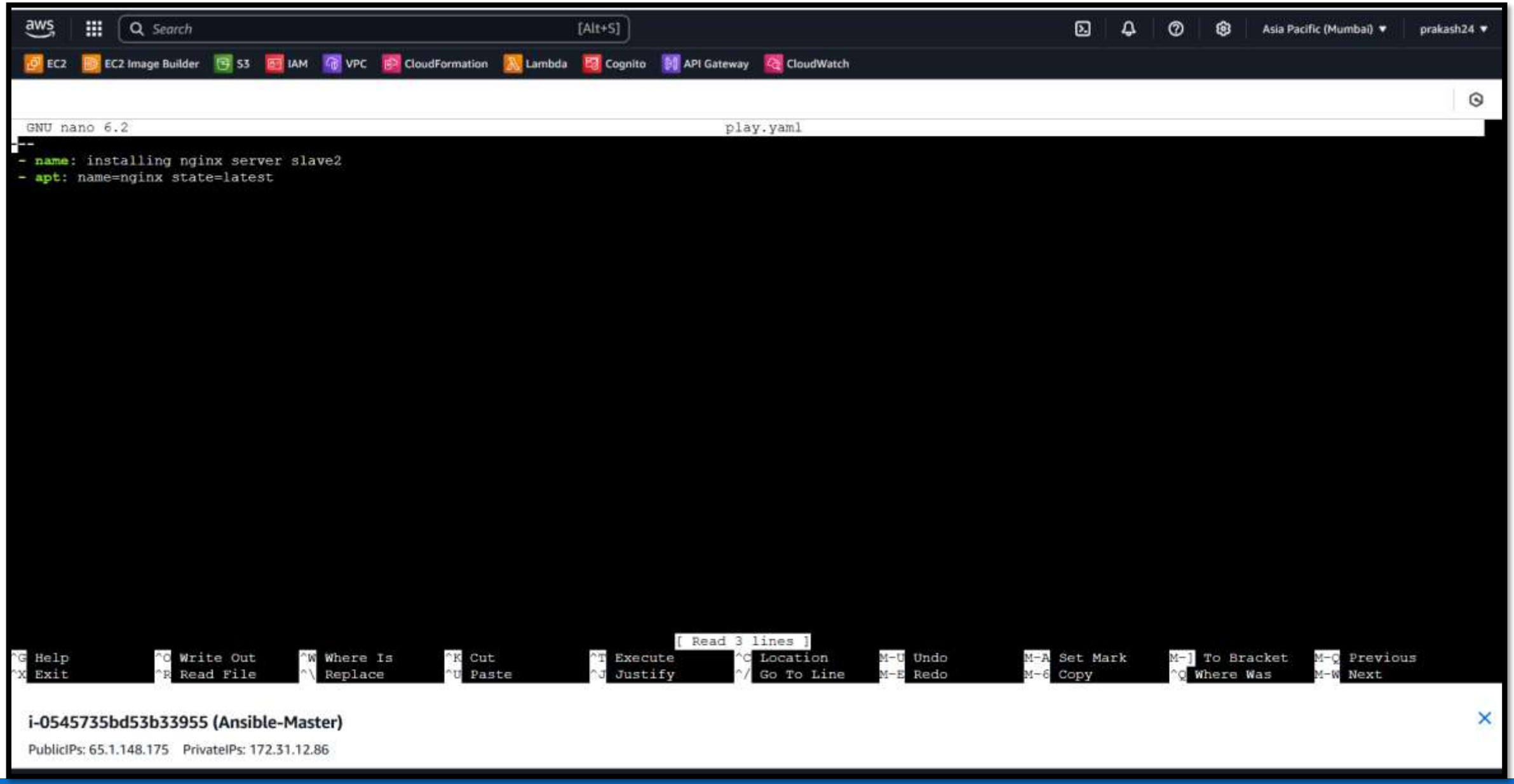
Creating play.yaml file for ruing installation of apache2 inside role tasks folder



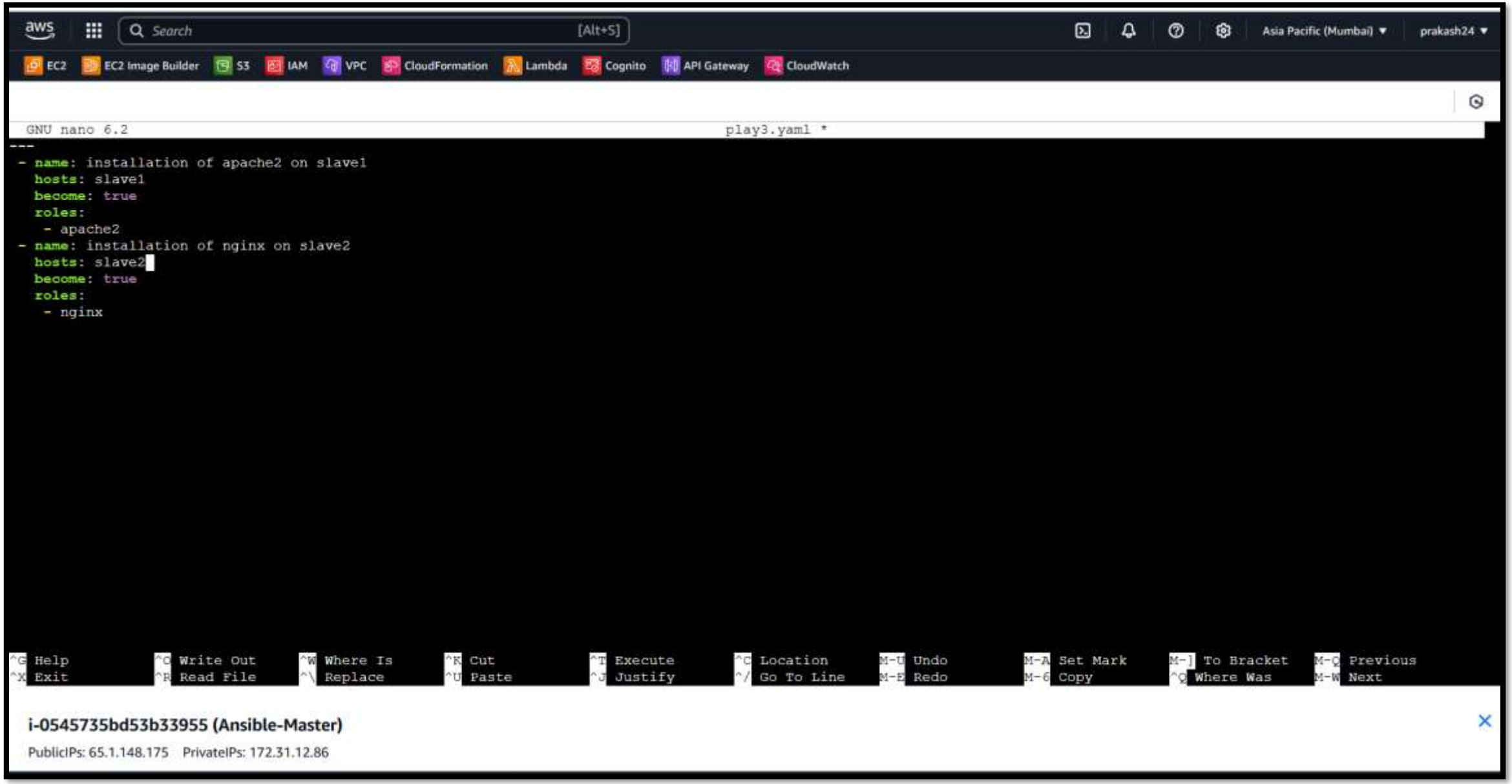
Including play.yaml file in main.yml file



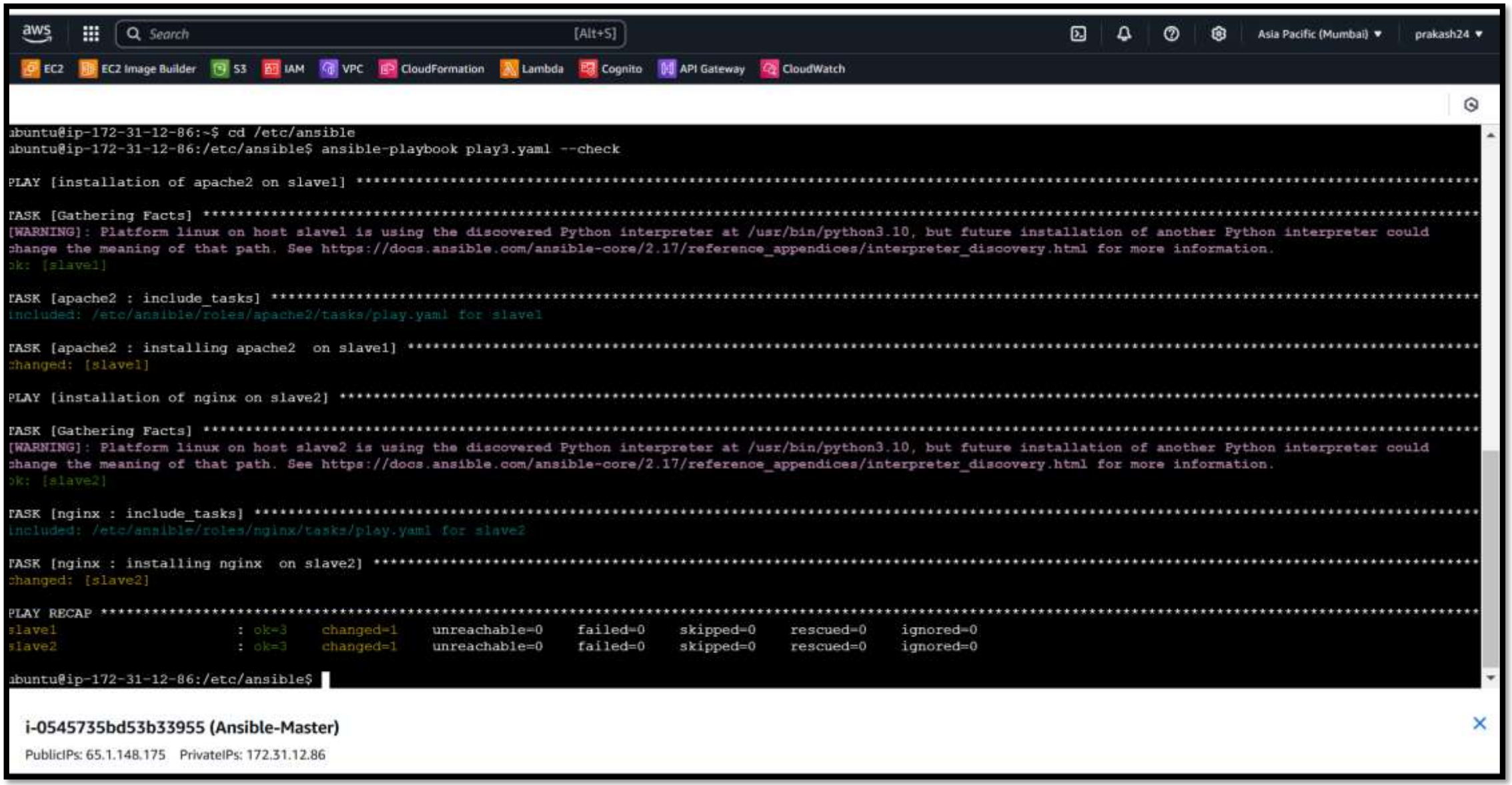
Creating play.yaml file for ruing installation of nginx inside role tasks folder



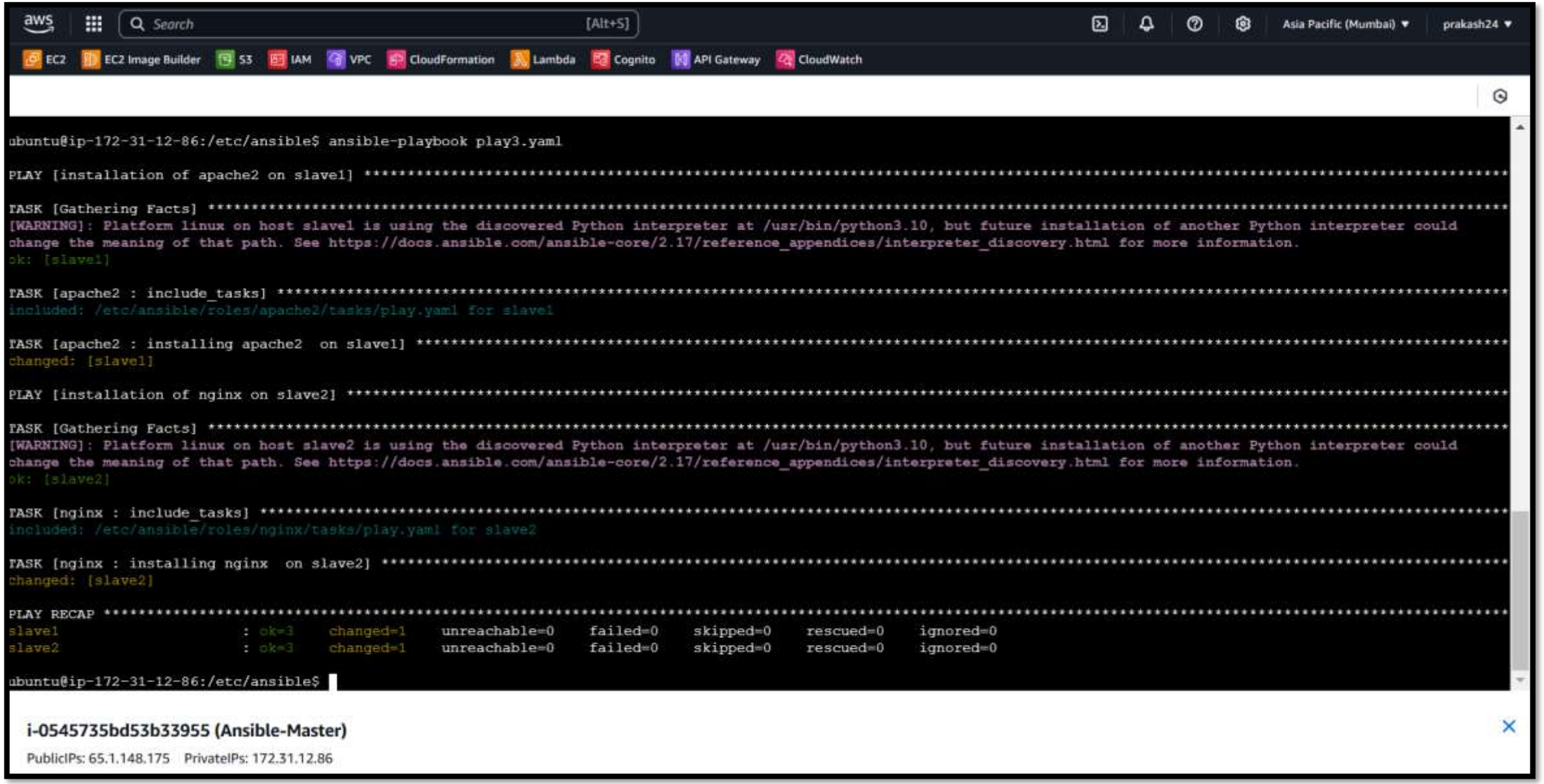
Creating play3.yaml playbook file to rung roles



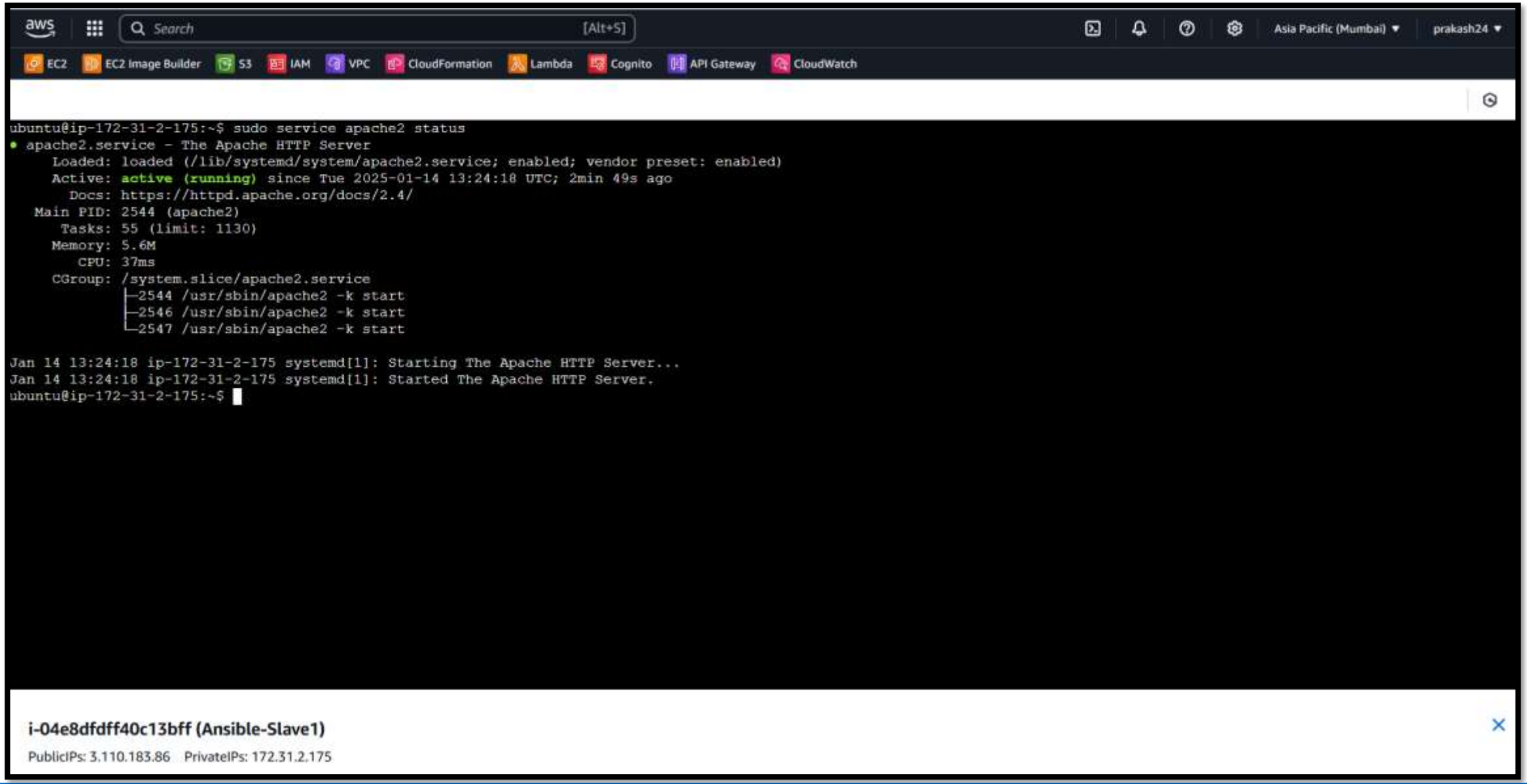
Running dry run commands for validation playbook file



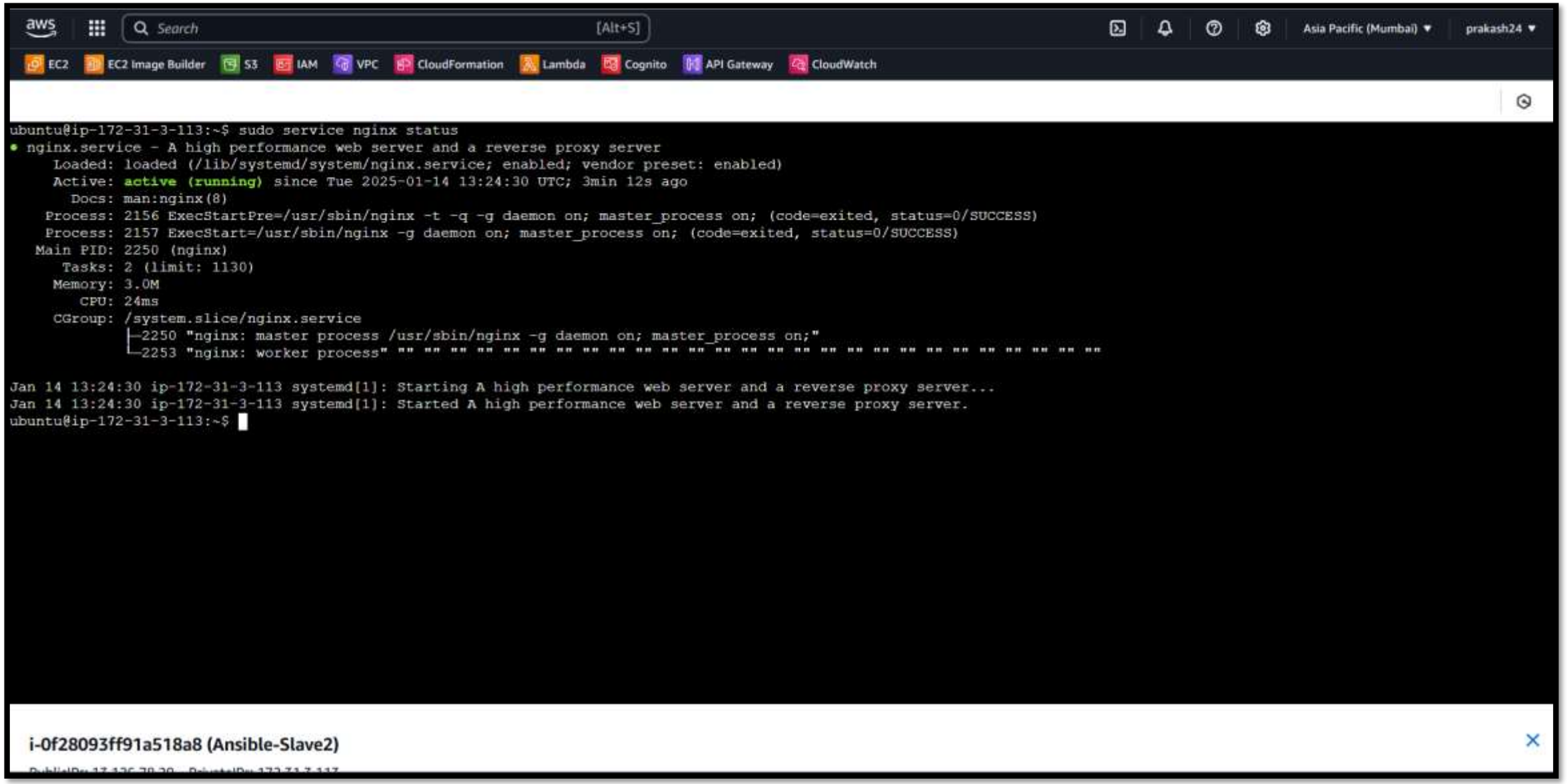
Running playbook file for installation



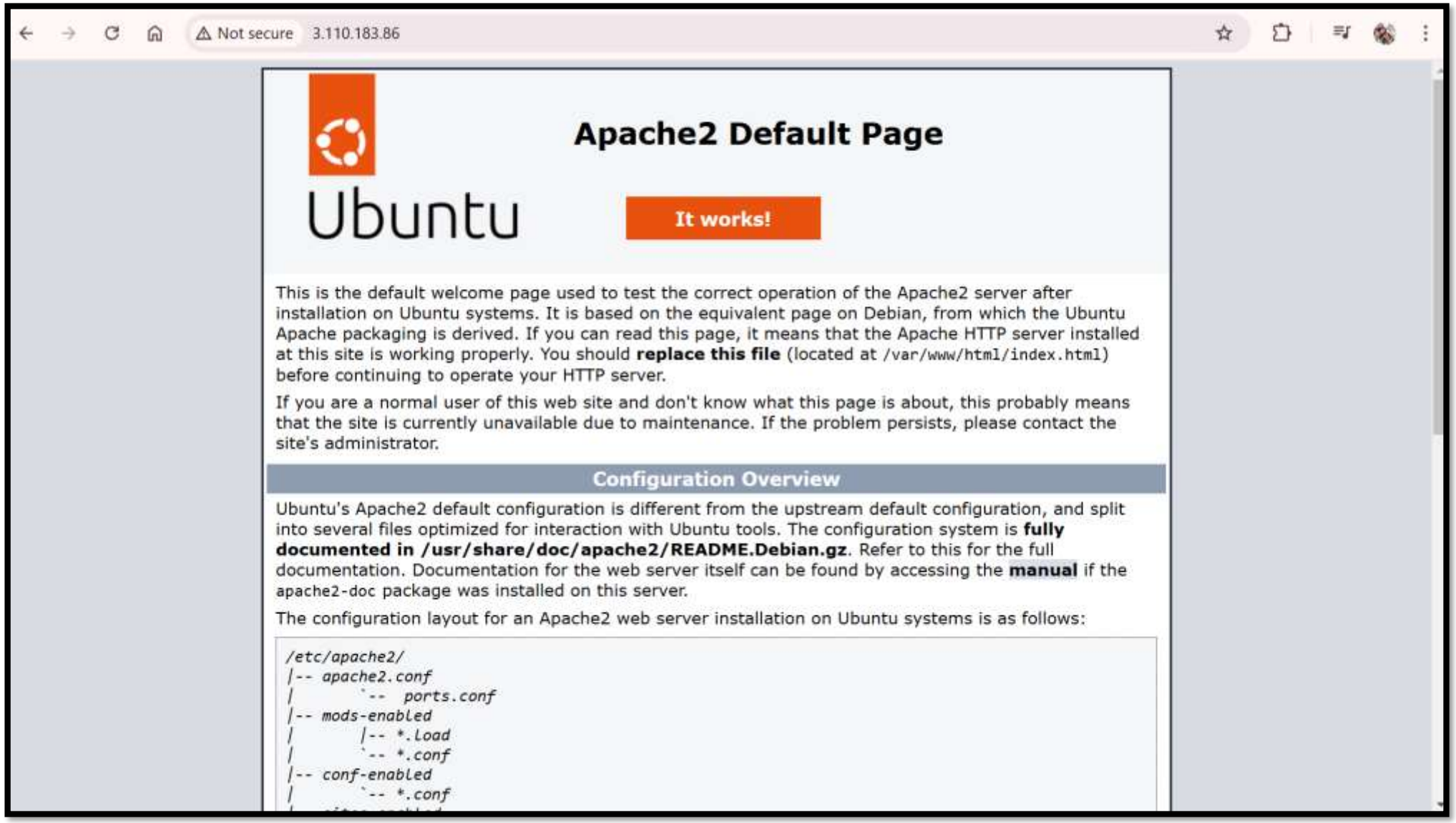
Validating Apache2 service in slave 1



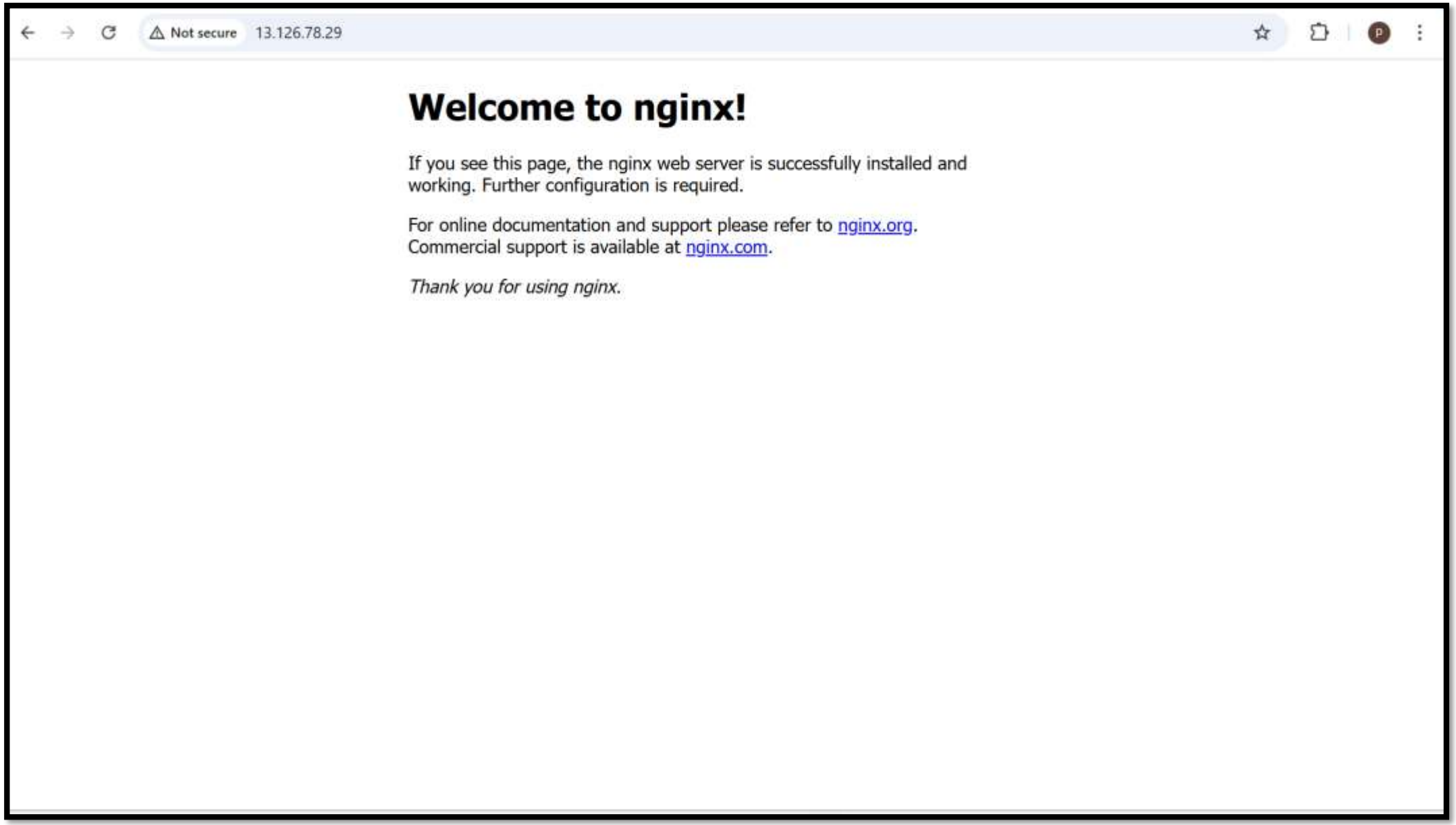
Validating nginx service in slave 2



Validating Apache2 default page in slave 1



Validating nginx default page in slave 2



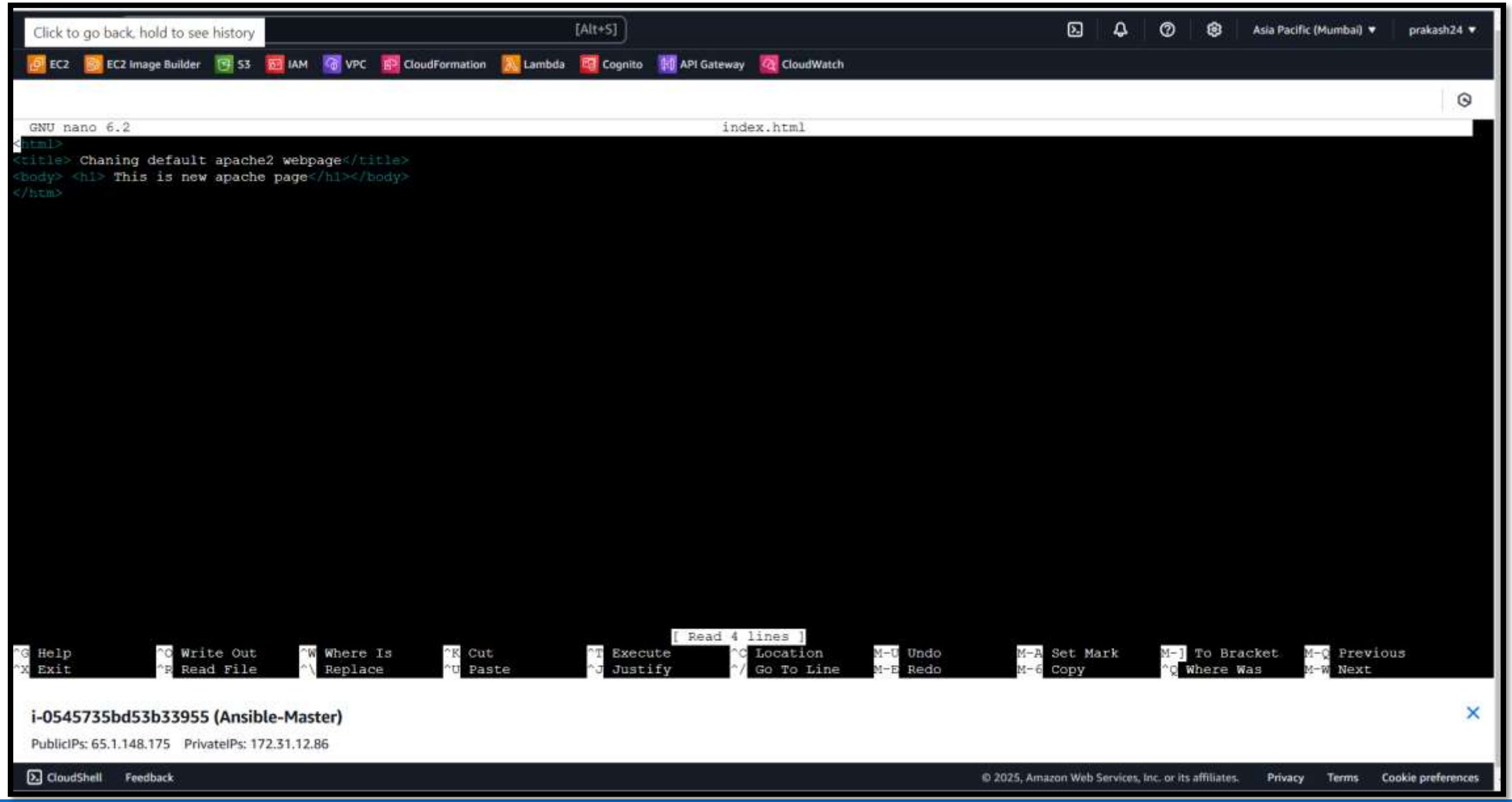
Module 5: Ansible Assignment - 4

Tasks To Be Performed:

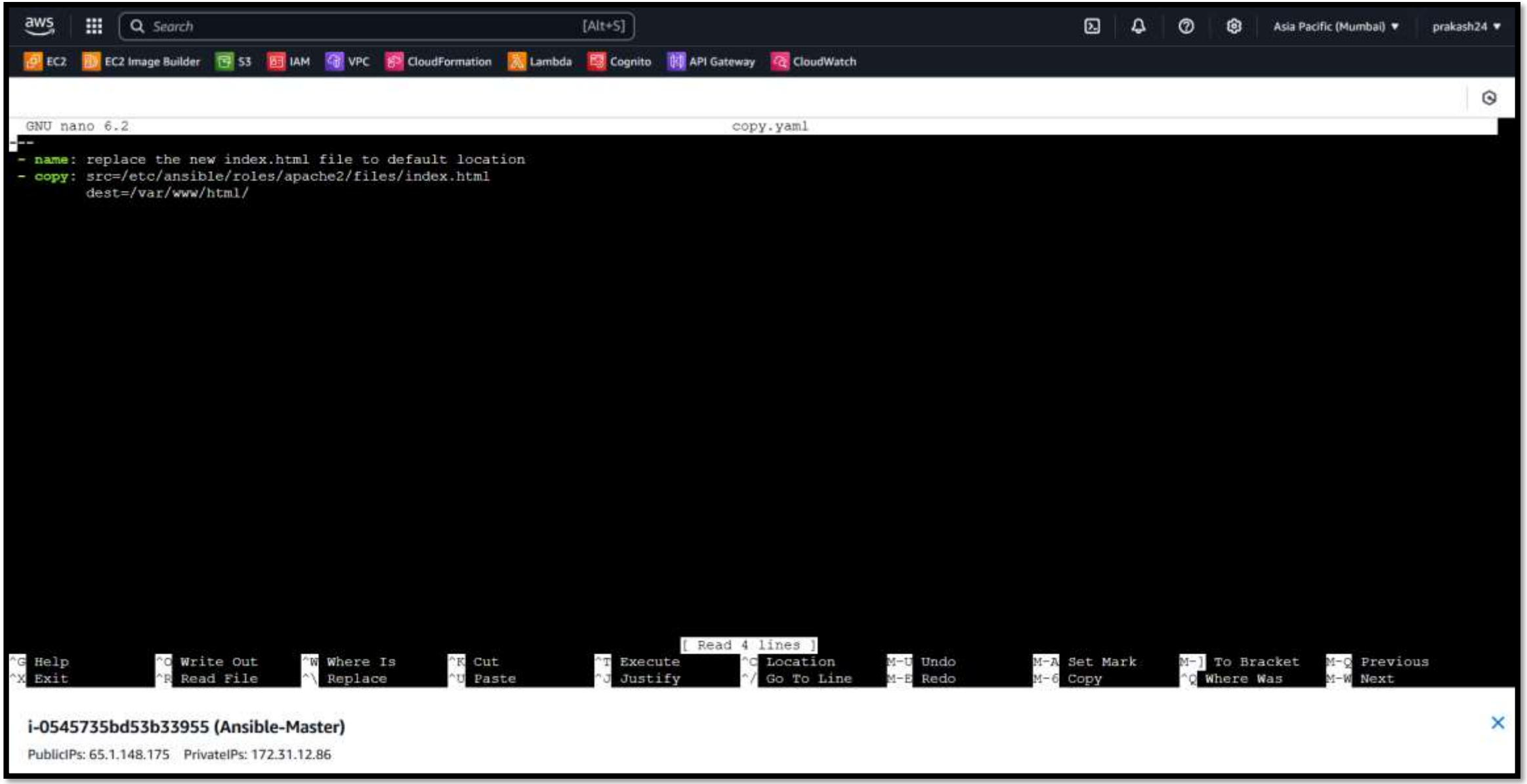
1. Use the previous deployment of Ansible cluster
2. Configure the files folder in the role with index.html which should be replaced with the original index.html

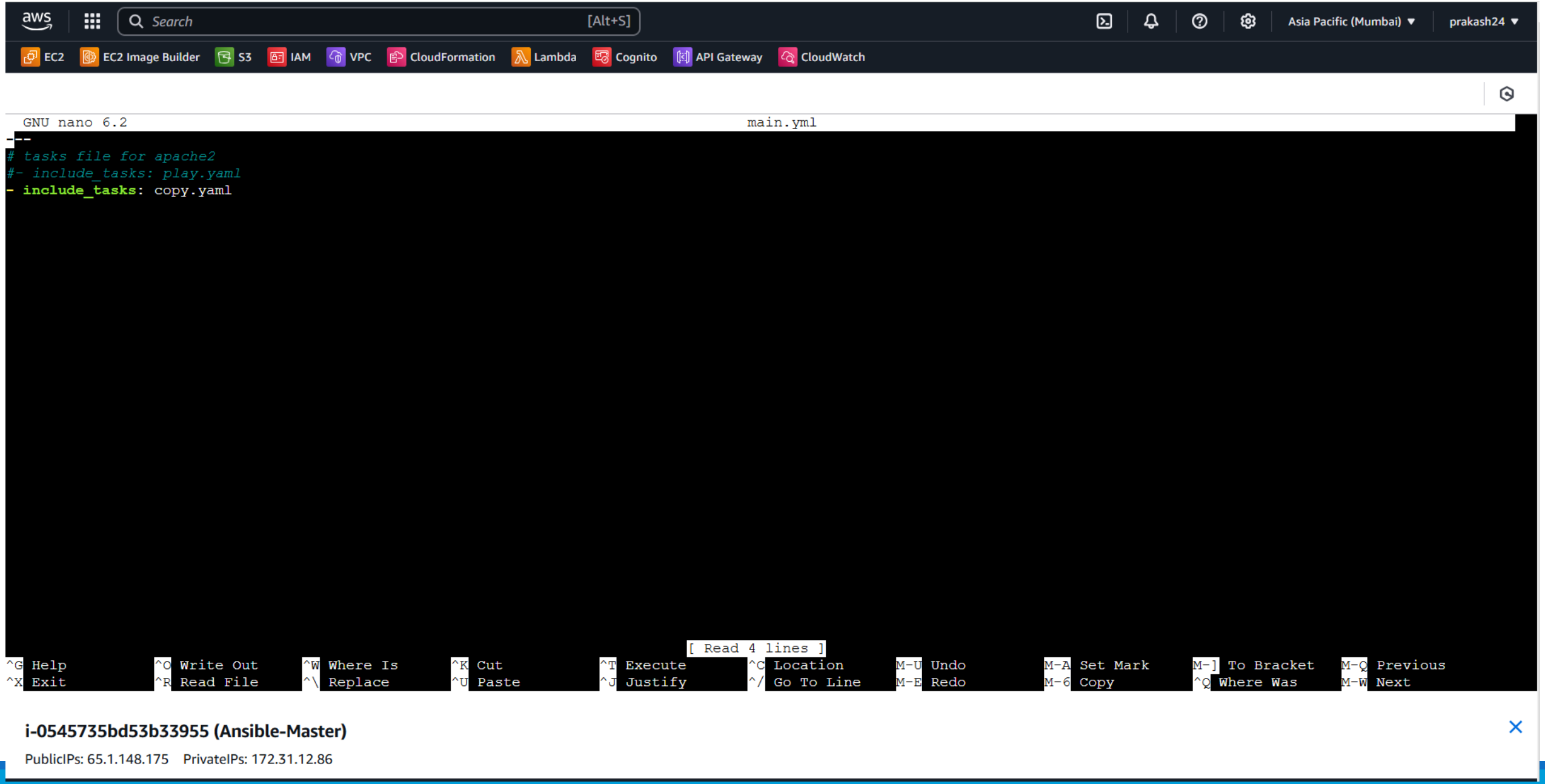
All of the above should only happen on the slave which has NGINX installed using the role.

Creating a html page so we can replay this page using playbook

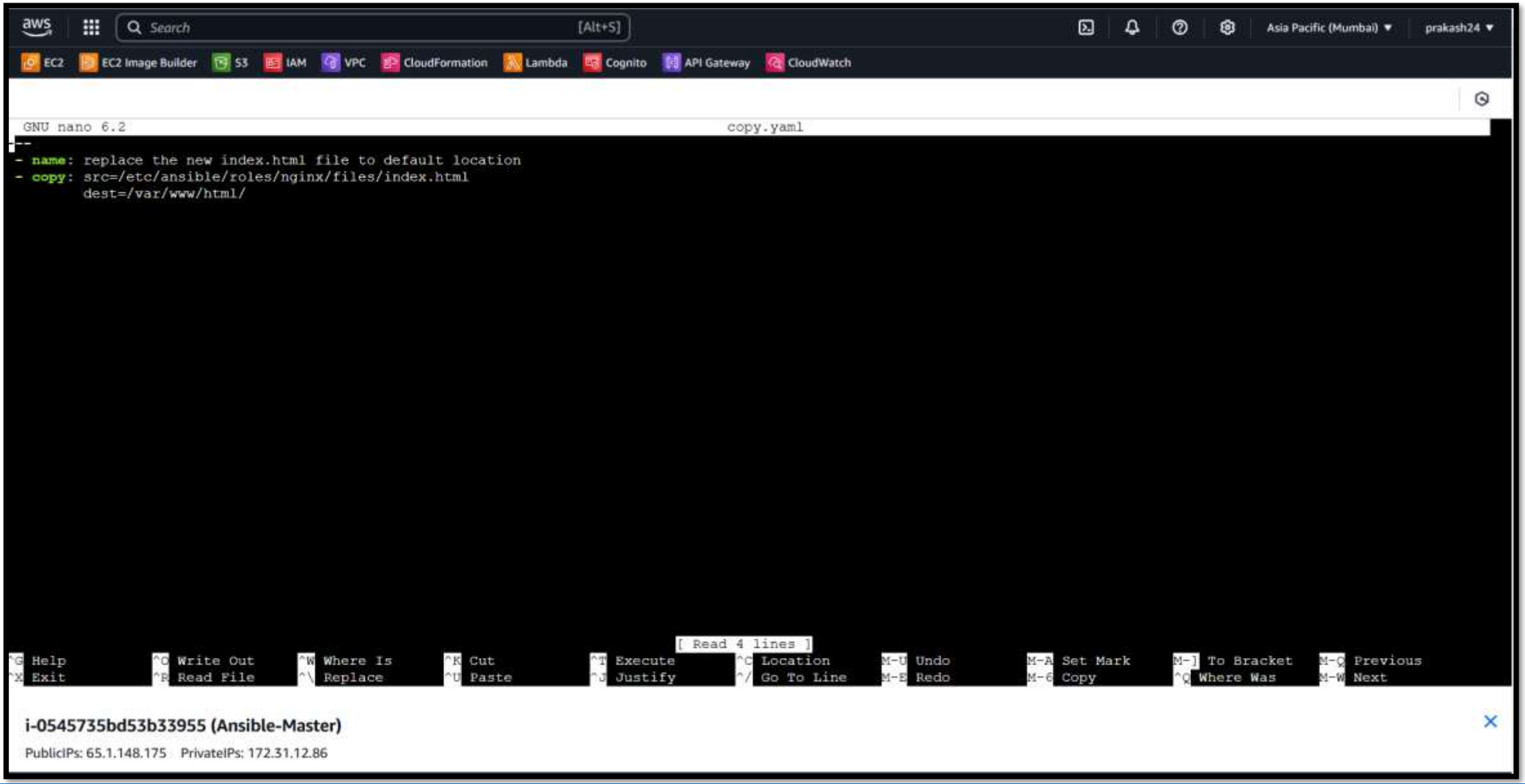


Creating a playbook file for replace html file in apche2 role

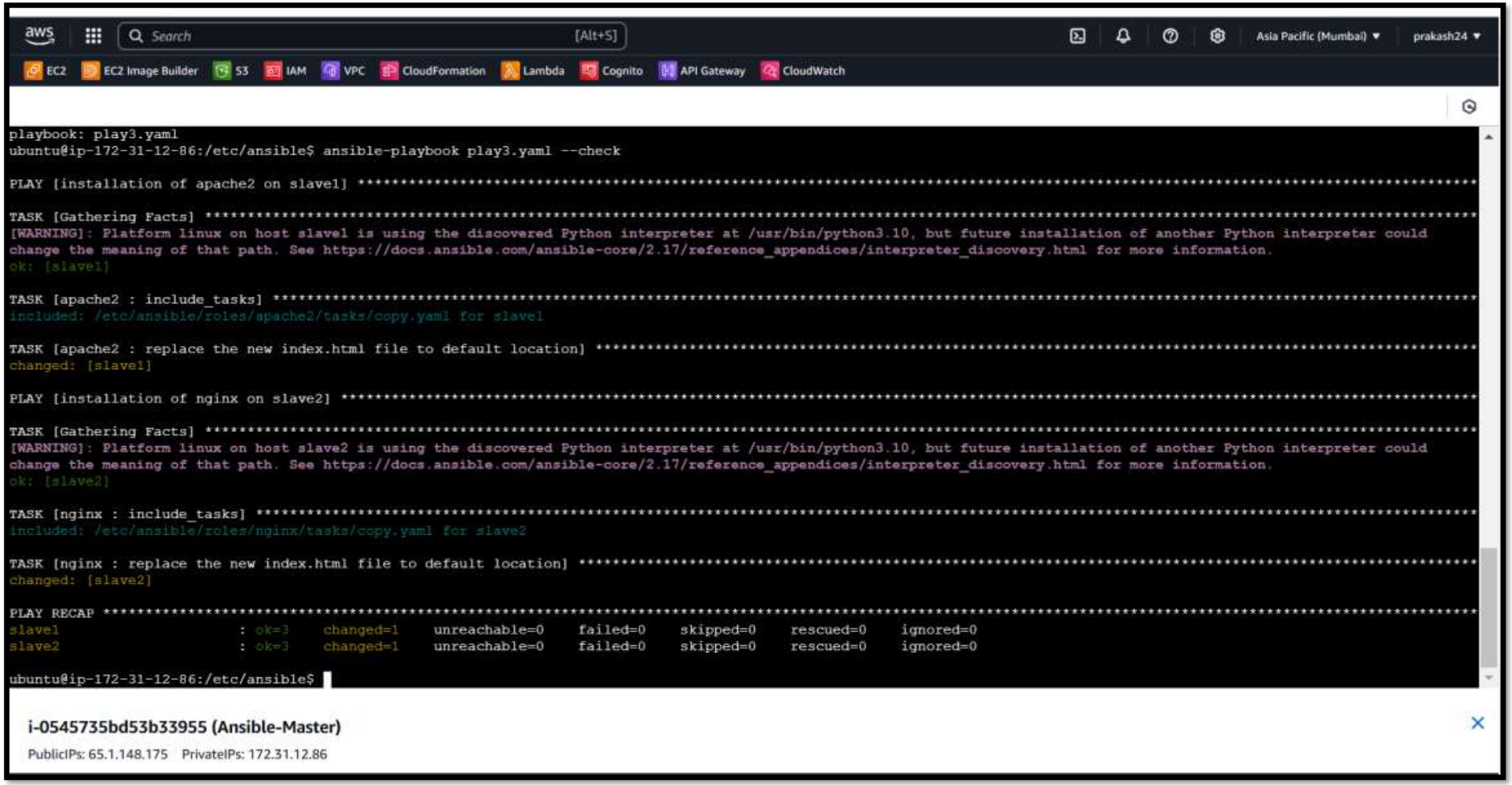



aws
Search
[Alt+S]
Asia Pacific (Mumbai)
prakash24
EC2
EC2 Image Builder
S3
IAM
VPC
CloudFormation
Lambda
Cognito
API Gateway
CloudWatch
GNU nano 6.2
main.yml
---
tasks file for apache2
#- include_tasks: play.yaml
- include_tasks: copy.yaml
[Read 4 lines]
^G Help
^O Write Out
^W Where Is
^K Cut
^T Execute
^C Location
M-U Undo
M-A Set Mark
M-] To Bracket
M-Q Previous
^X Exit
^R Read File
^\ Replace
^U Paste
^J Justify
^/ Go To Line
M-E Redo
M-6 Copy
^Q Where Was
M-W Next
i-0545735bd53b33955 (Ansible-Master)
PublicIPs: 65.1.148.175 PrivateIPs: 172.31.12.86

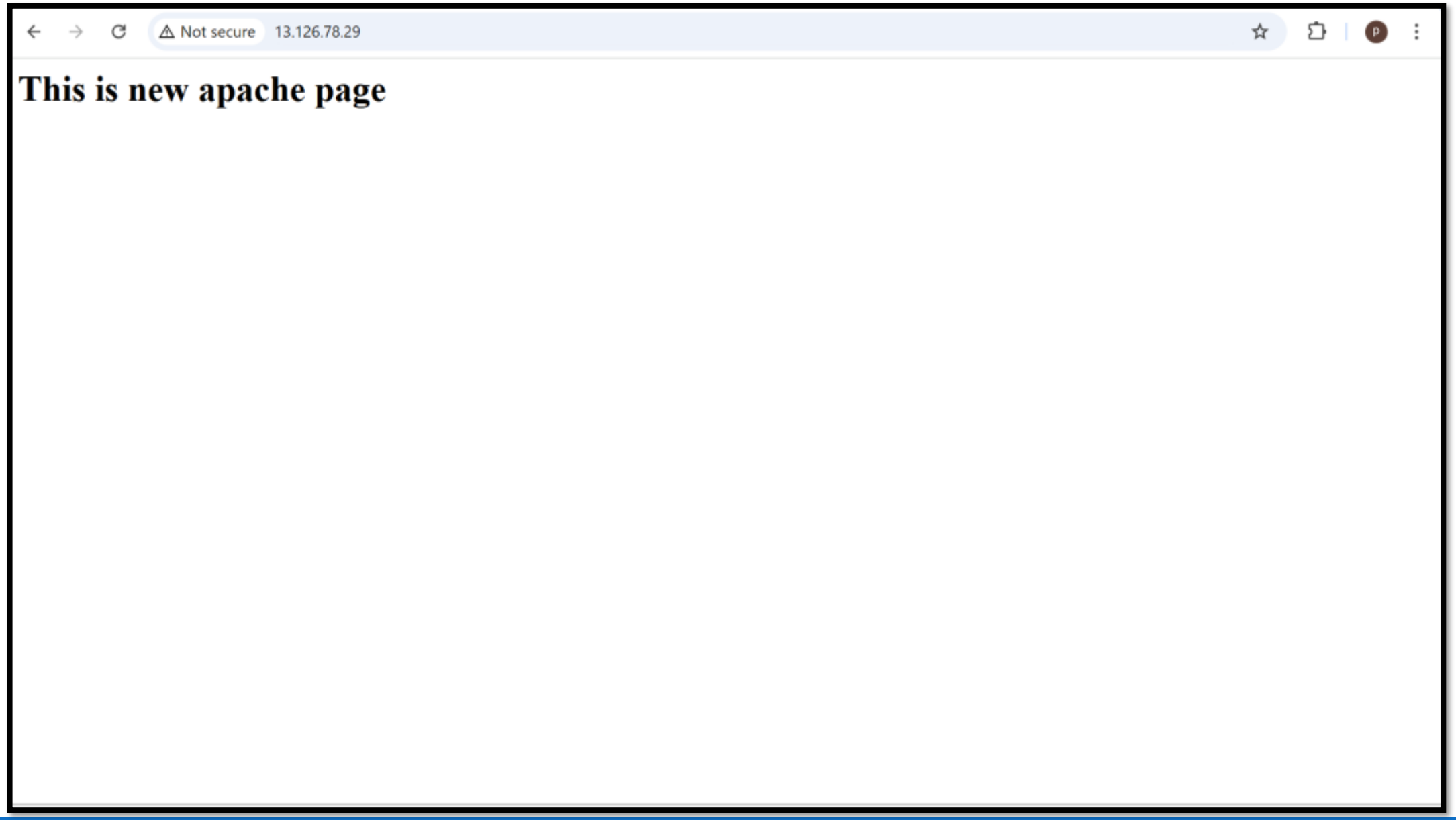
Creating a playbook file for replace html file in nginx roles



Dry run of paybook & Execution of playbook



We Can see the Apache2 default index page got changed



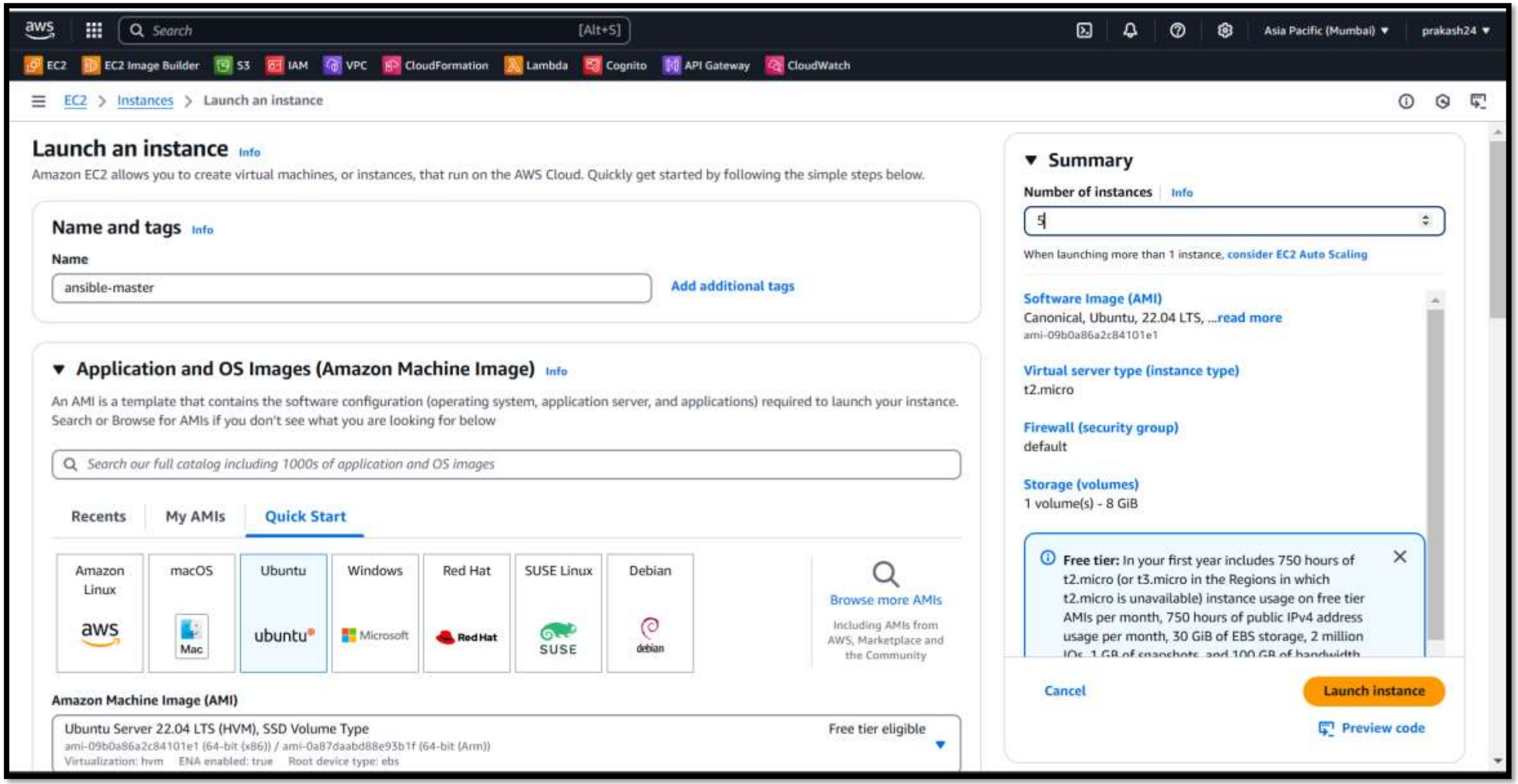
Module 5: Ansible Assignment - 5

Tasks To Be Performed:

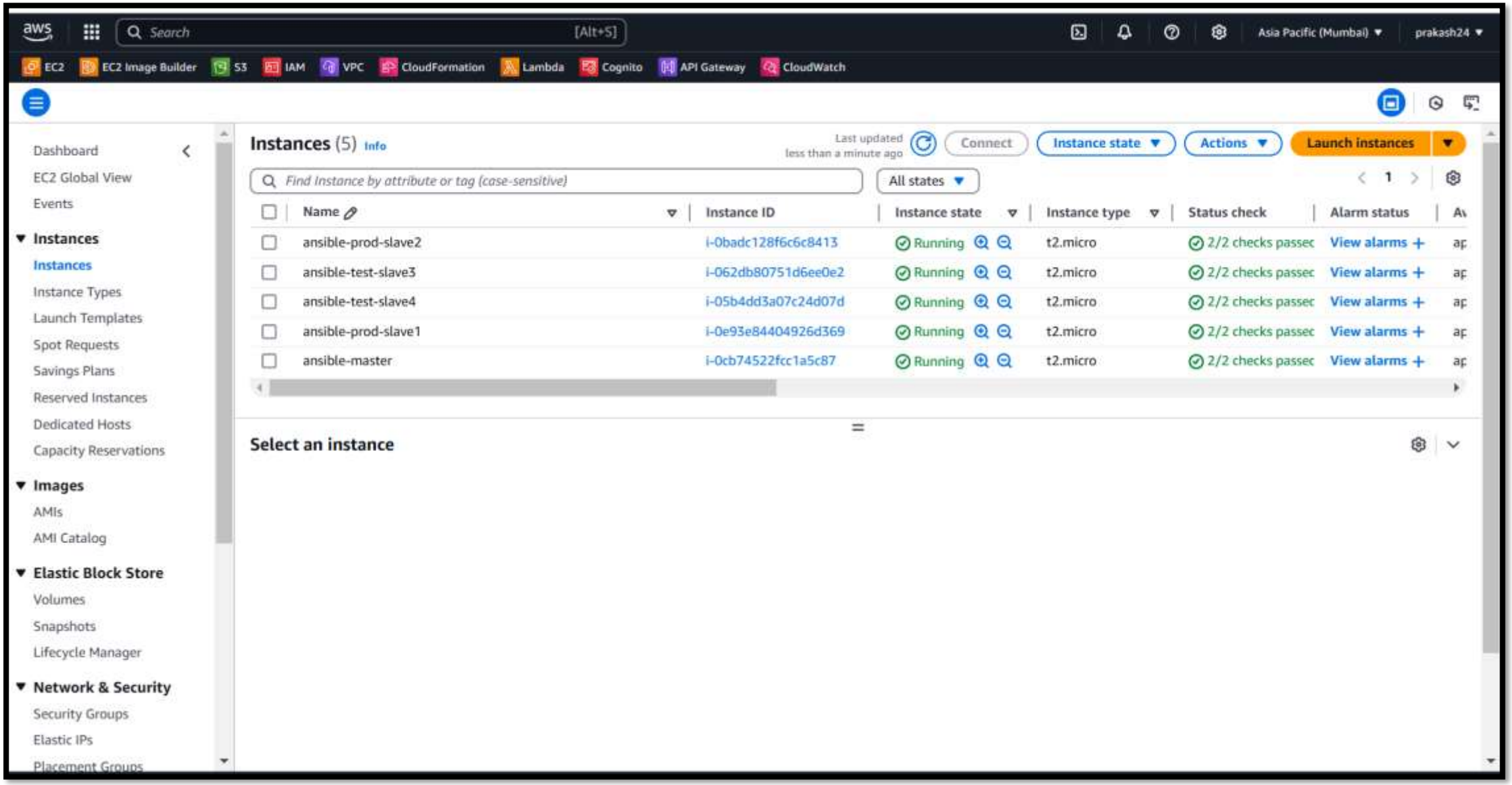
1. Create a new deployment of Ansible cluster of 5 nodes
2. Label 2 nodes as test and other 2 as prod
3. Install Java on test nodes
4. Install MySQL server on prod nodes

Use Ansible roles for the above and group the hosts under test and prod.

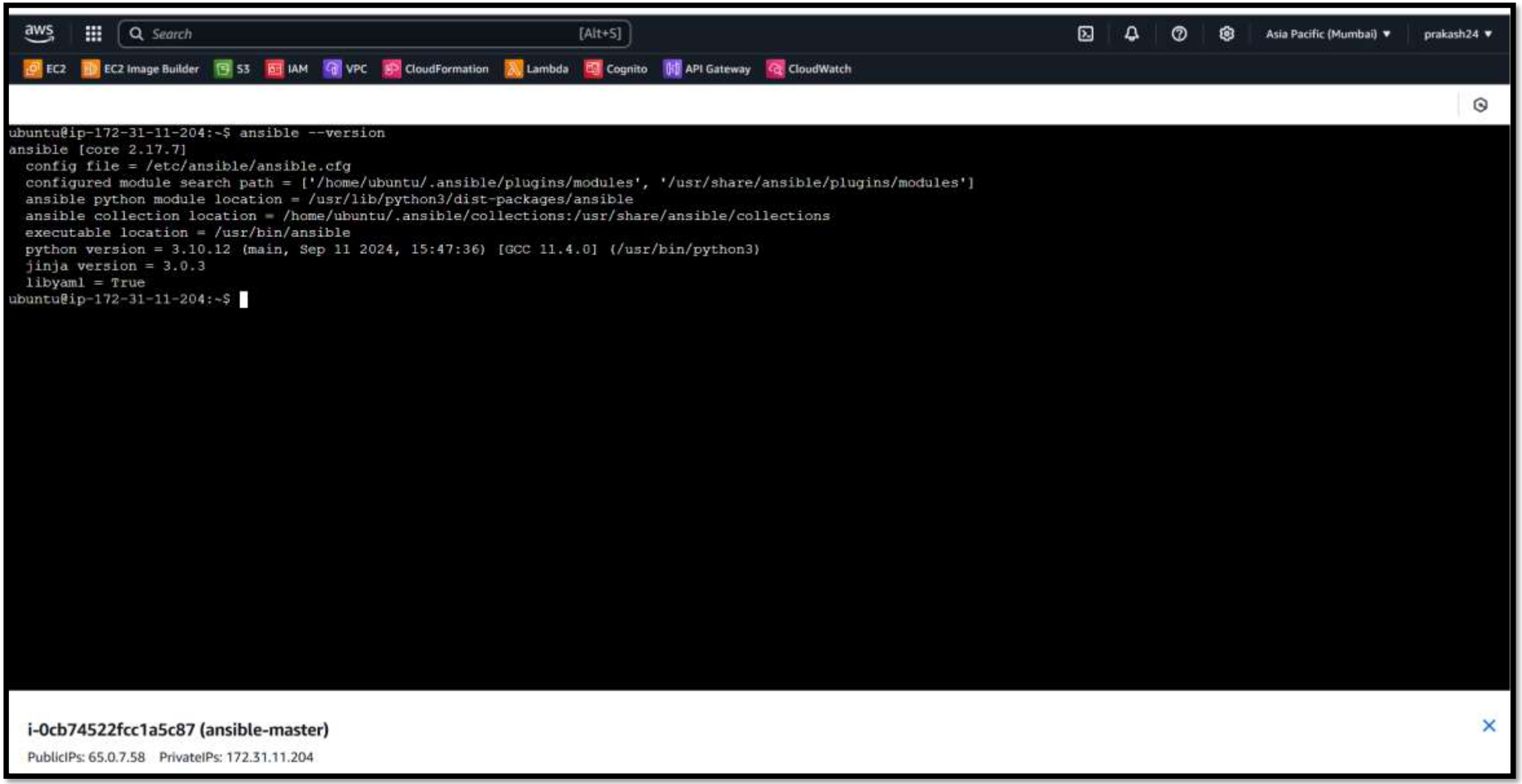
Launching 5 Ec2 Instance



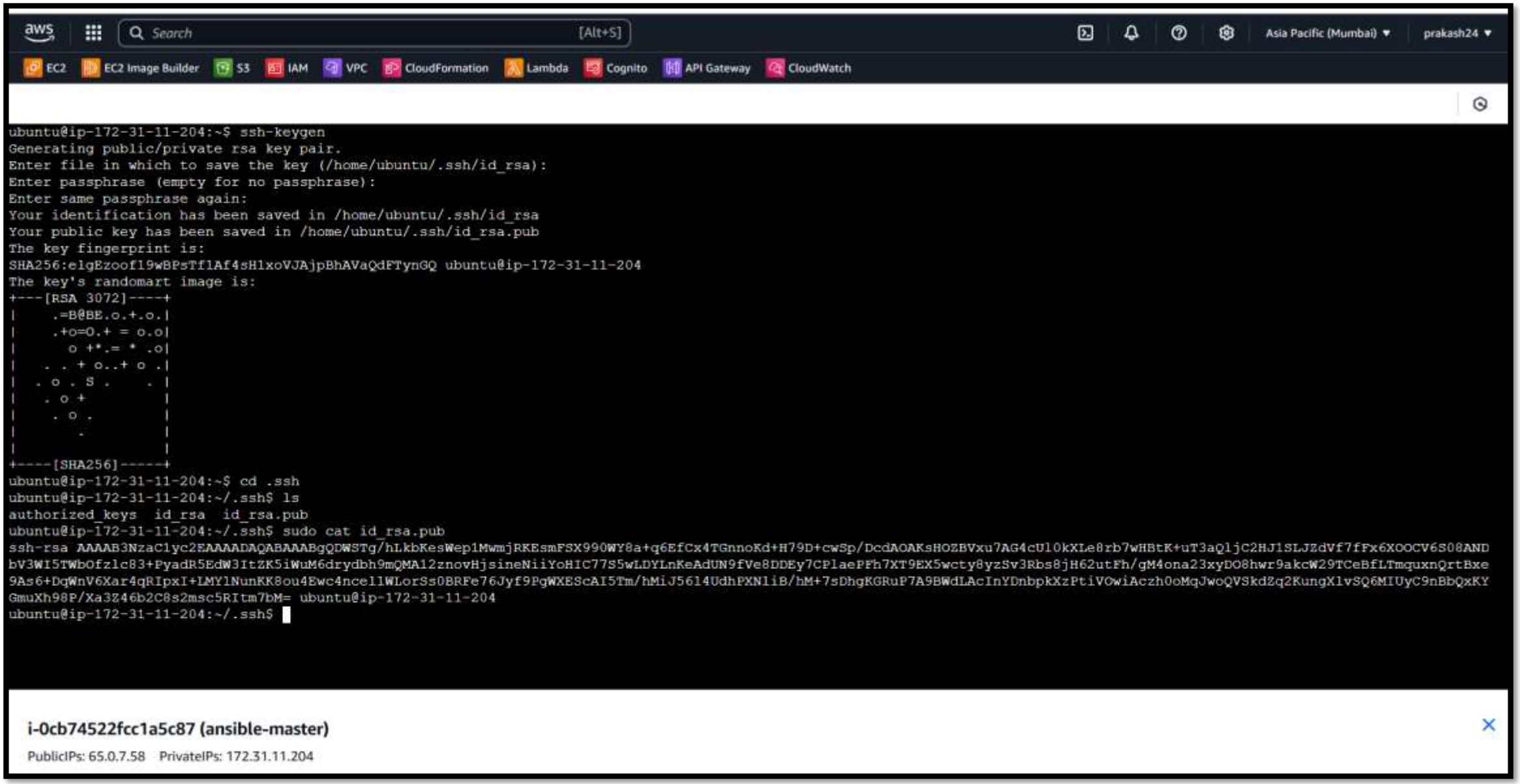
5 Instance 1- master & 4 slave



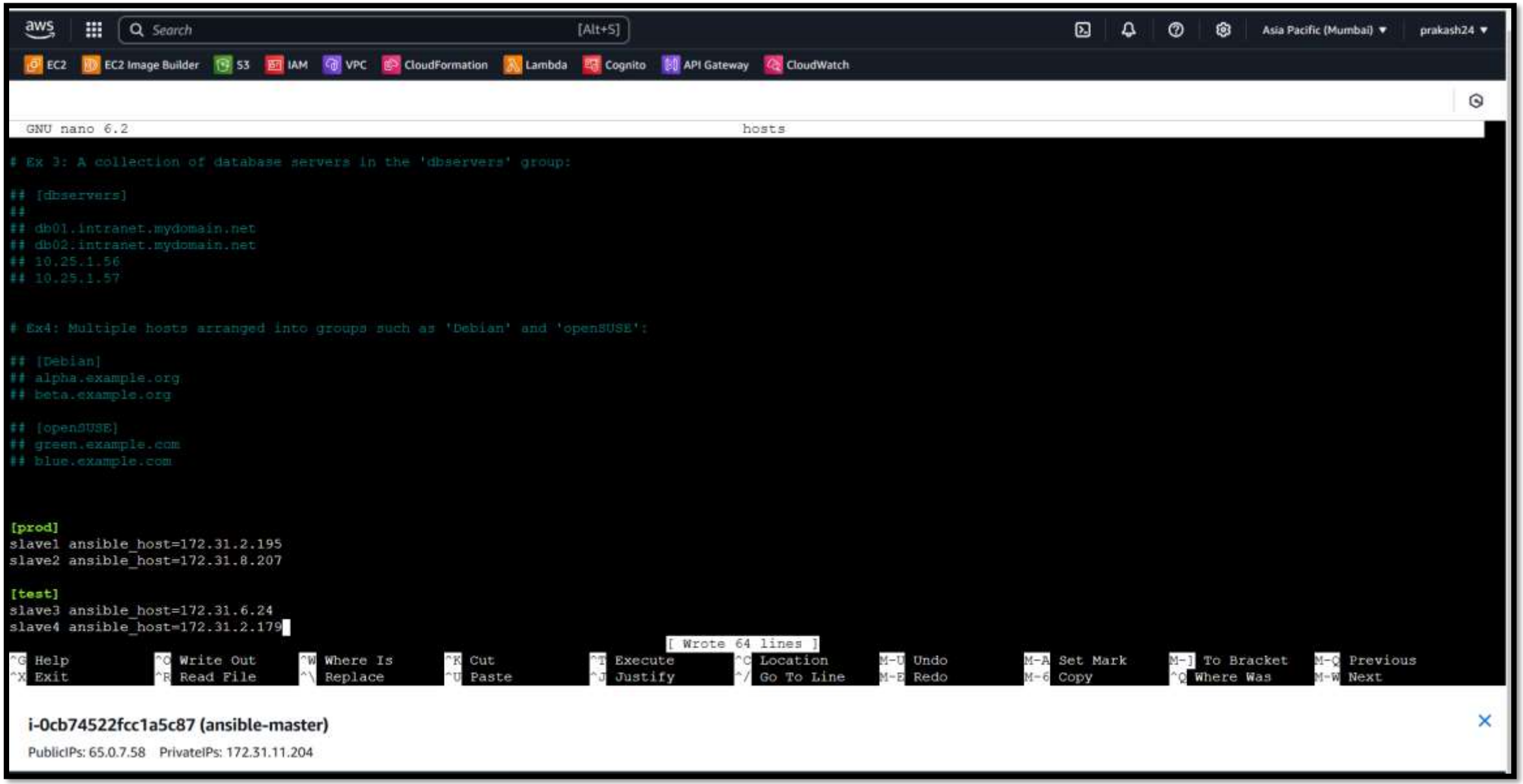
Validate ansible installation in master instance



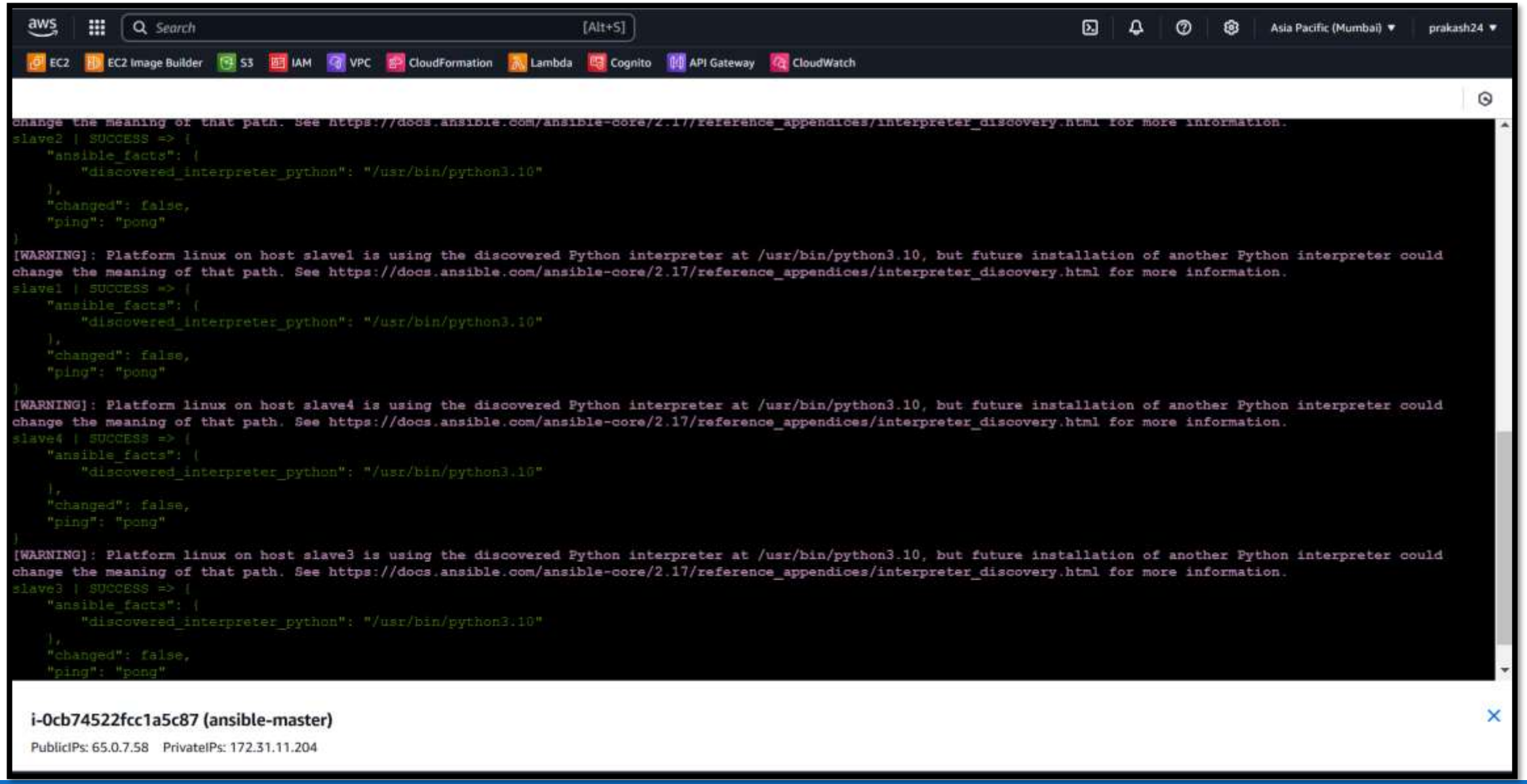
Generating SSH Key for connect slave nodes



Binding slave1 & Slave2 as prod & slave3 & slave 4 as test on hosts using master node

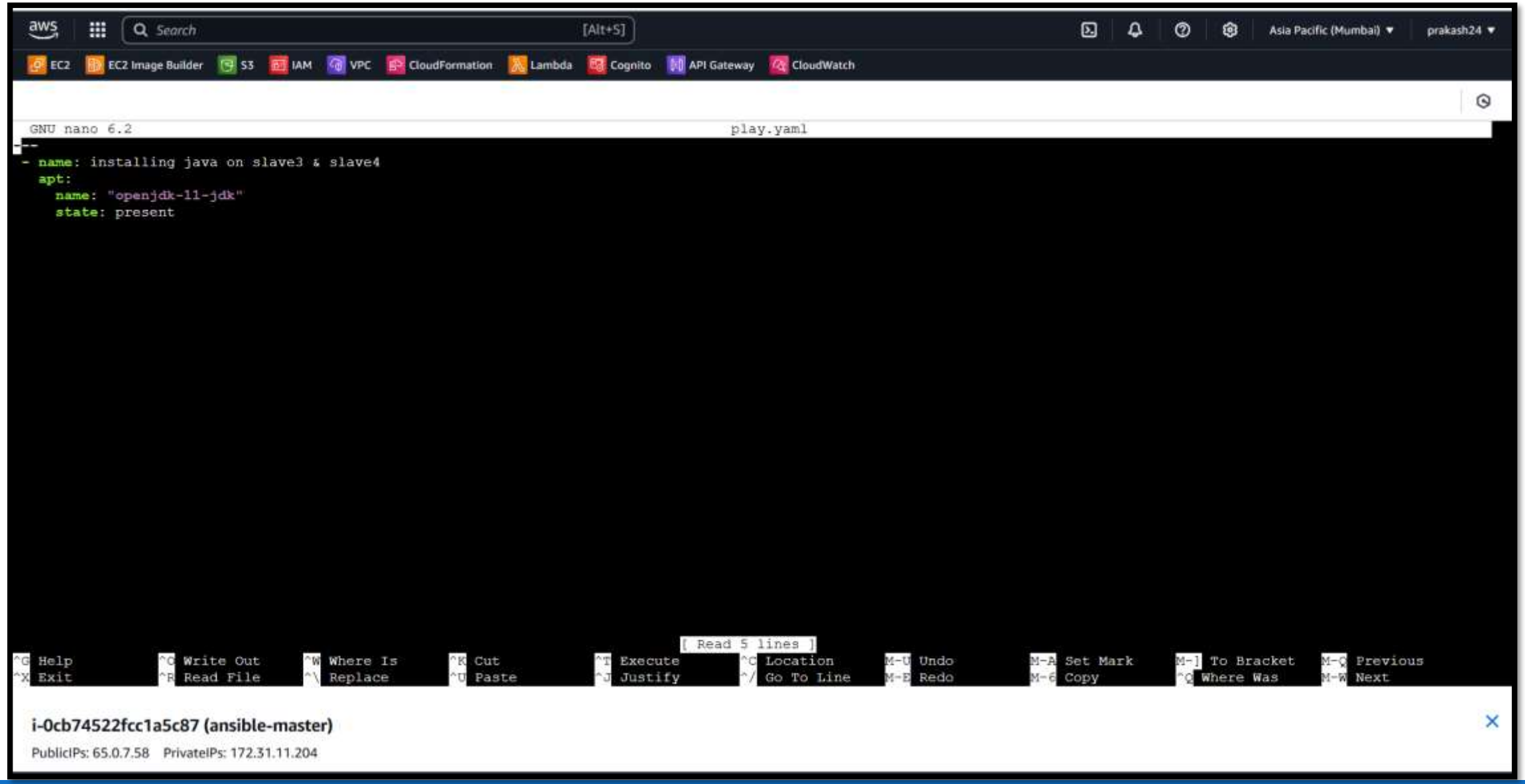


Validating all 4 slave using “ansible –m ping all” command , master node able to reach slave node or not

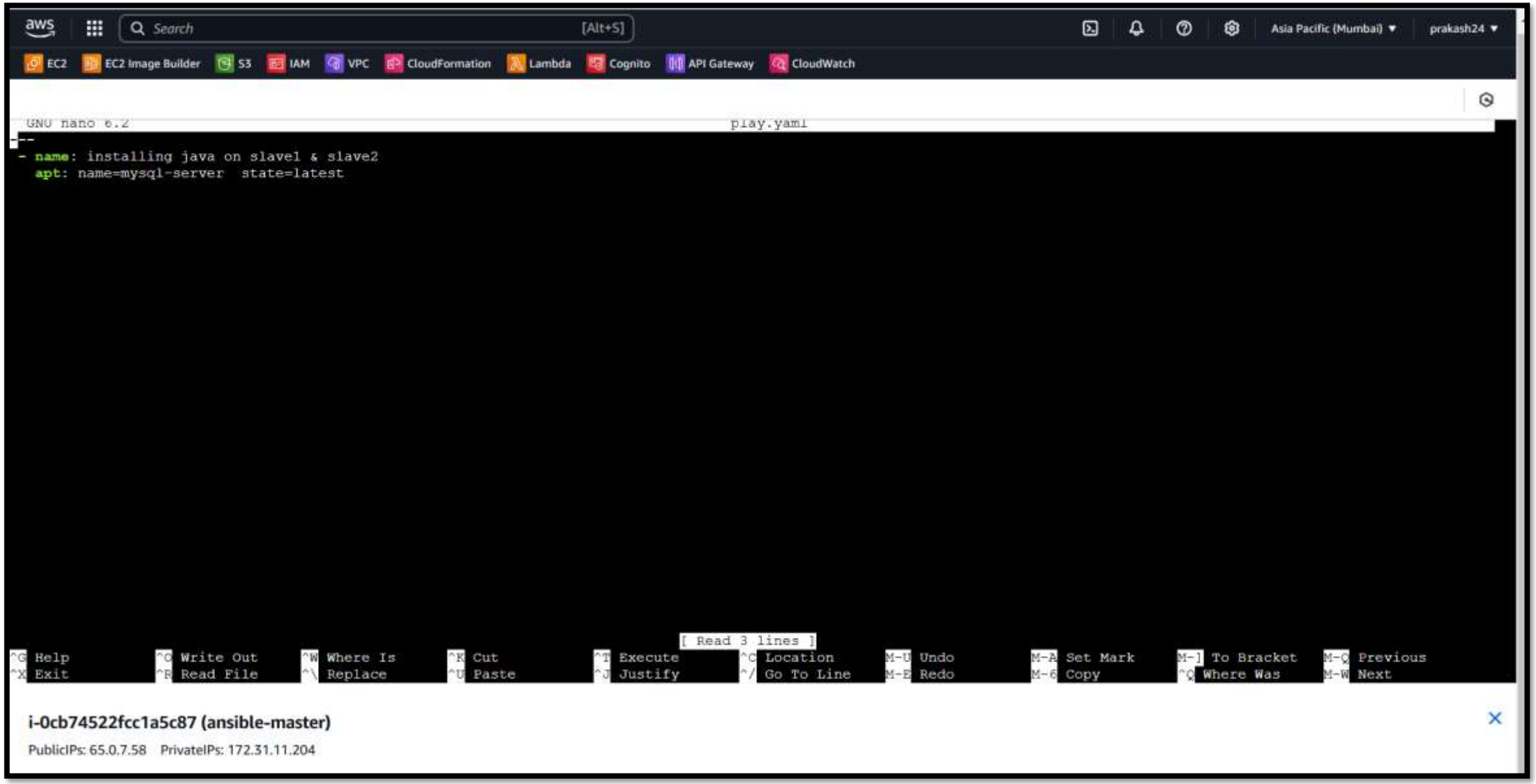


Created two roles Java & MySql

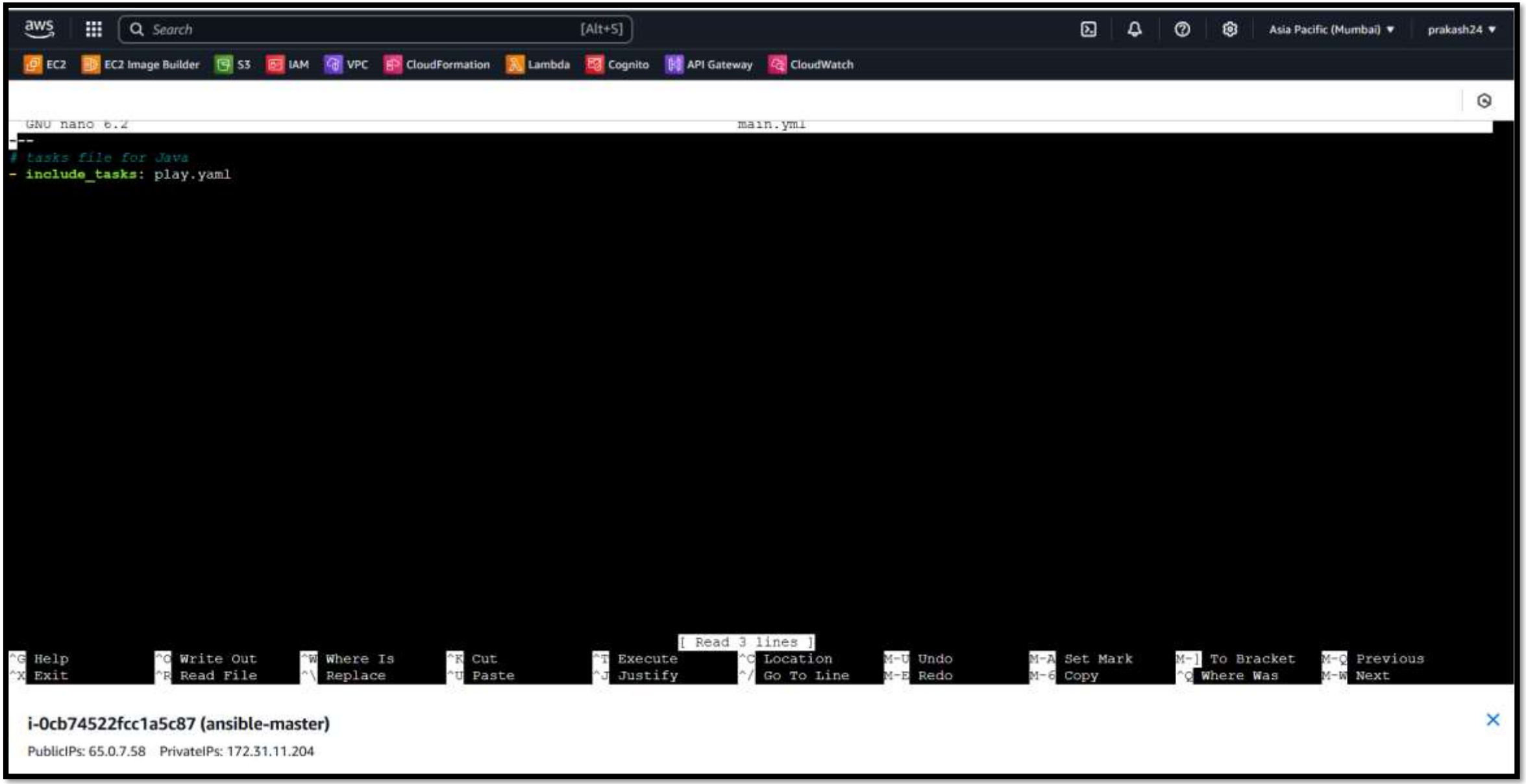
Created playbook file for installation of Java in test



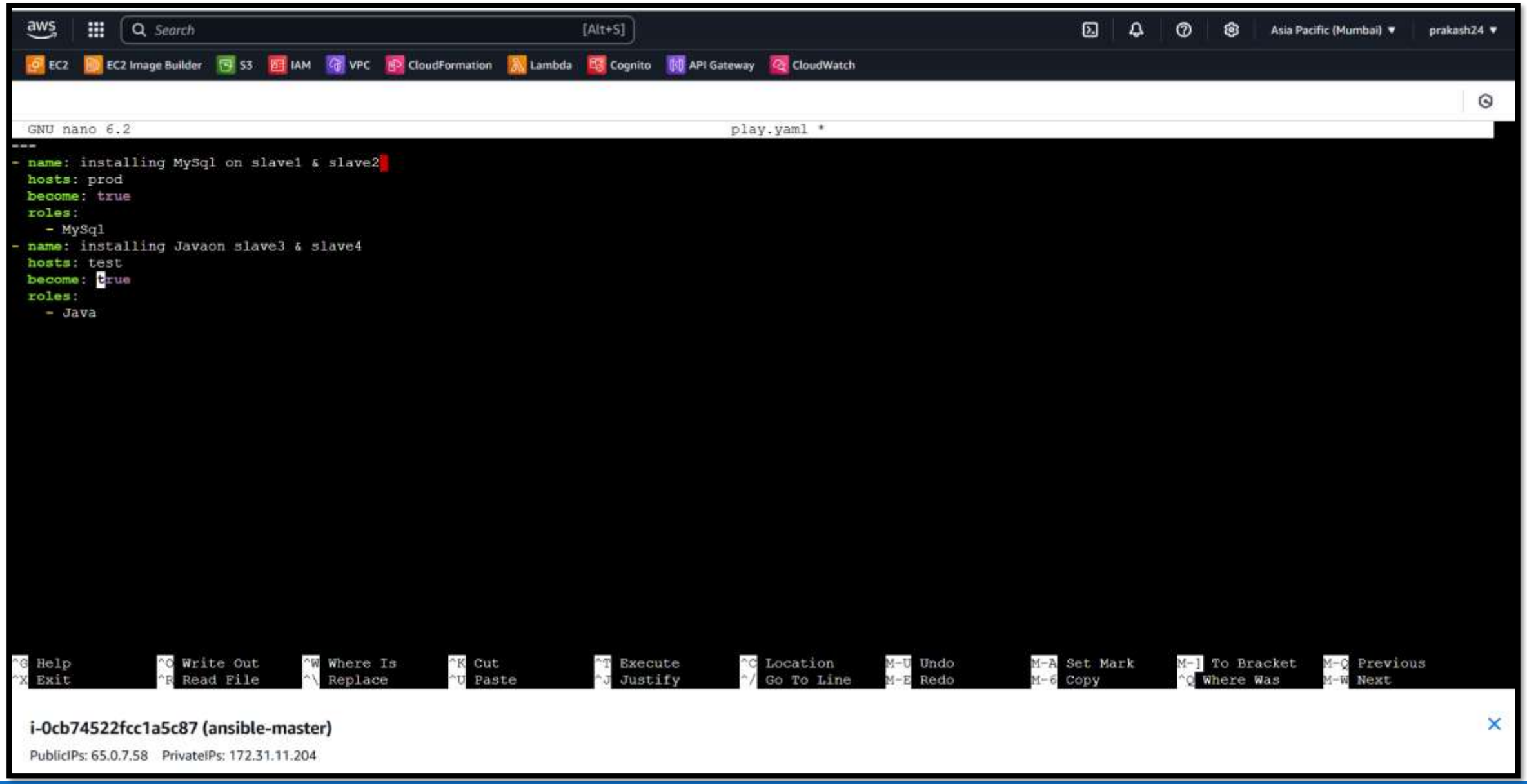
Created playbook file for installation of MySql in Prod



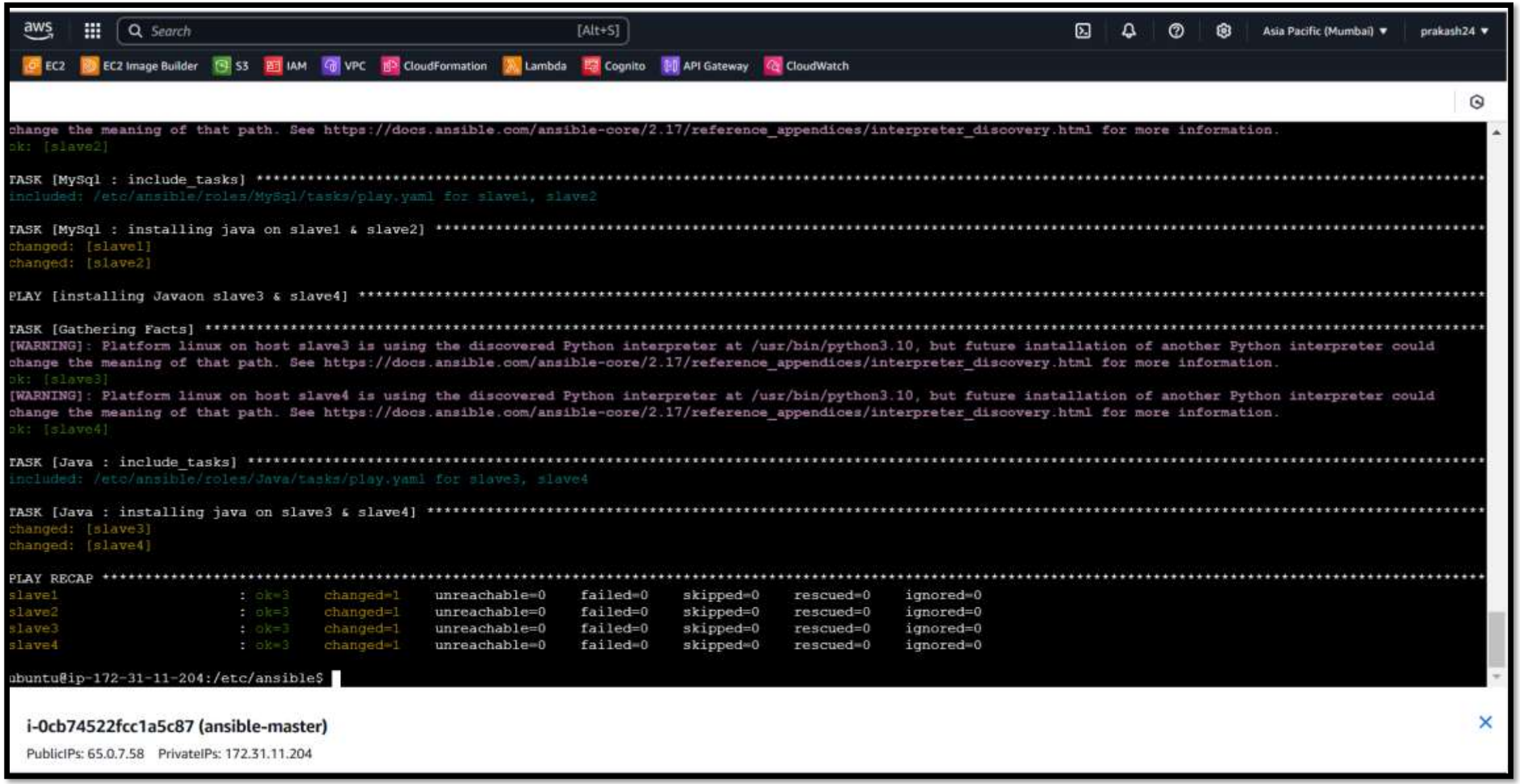
Including play.yaml file in main.yaml file



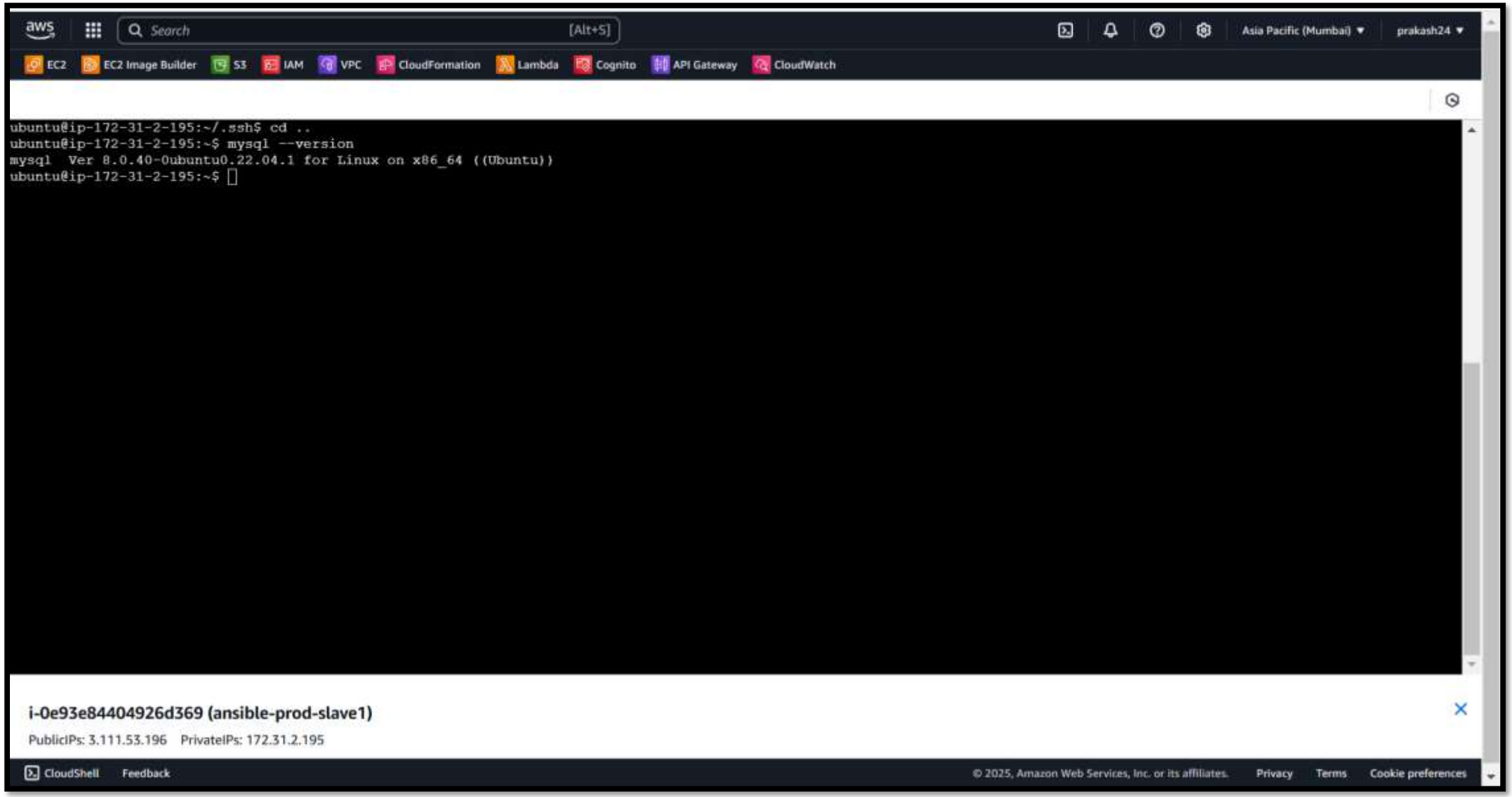
Creating a playbook file to run roles



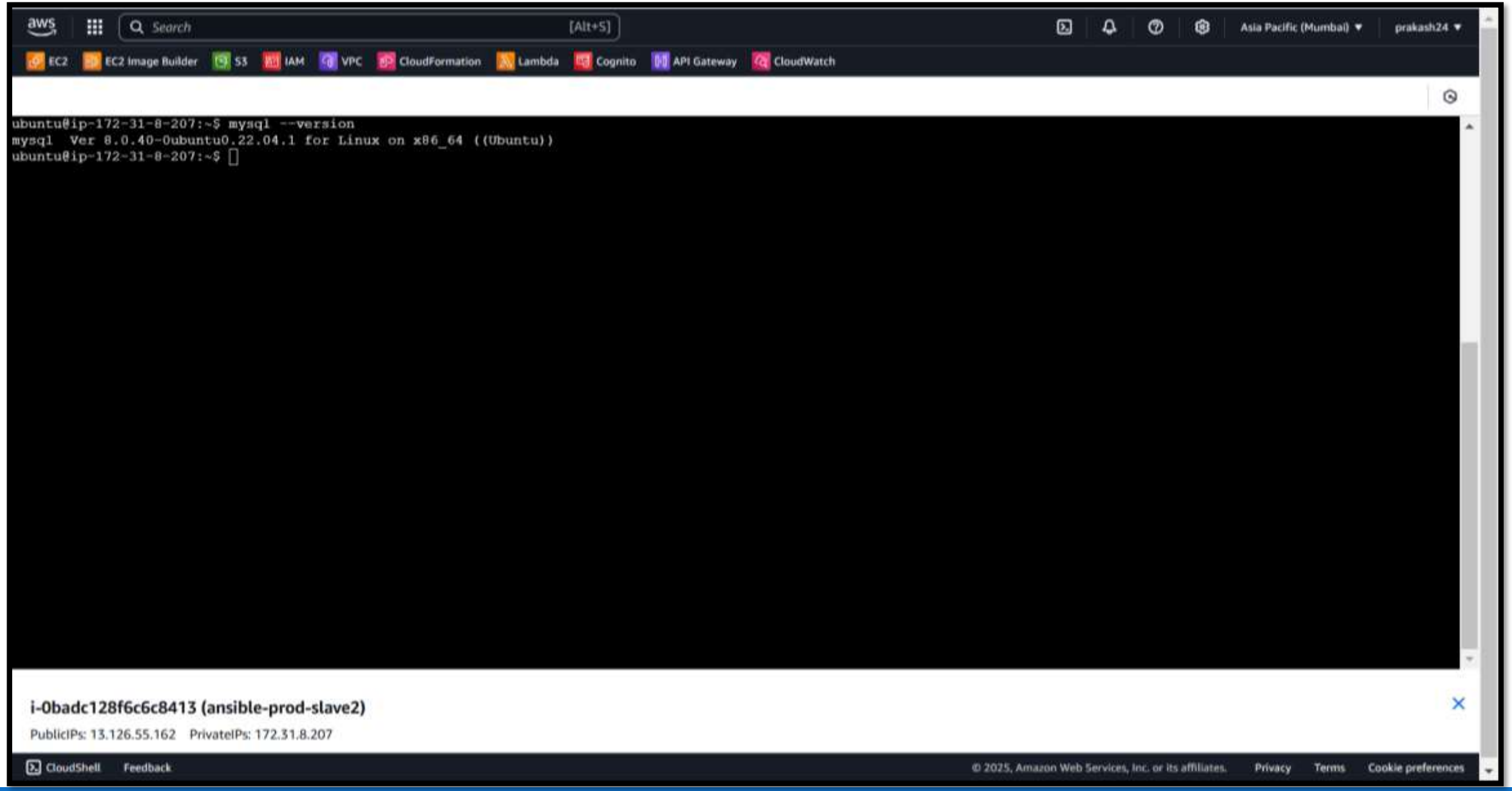
Running playbook file in master node



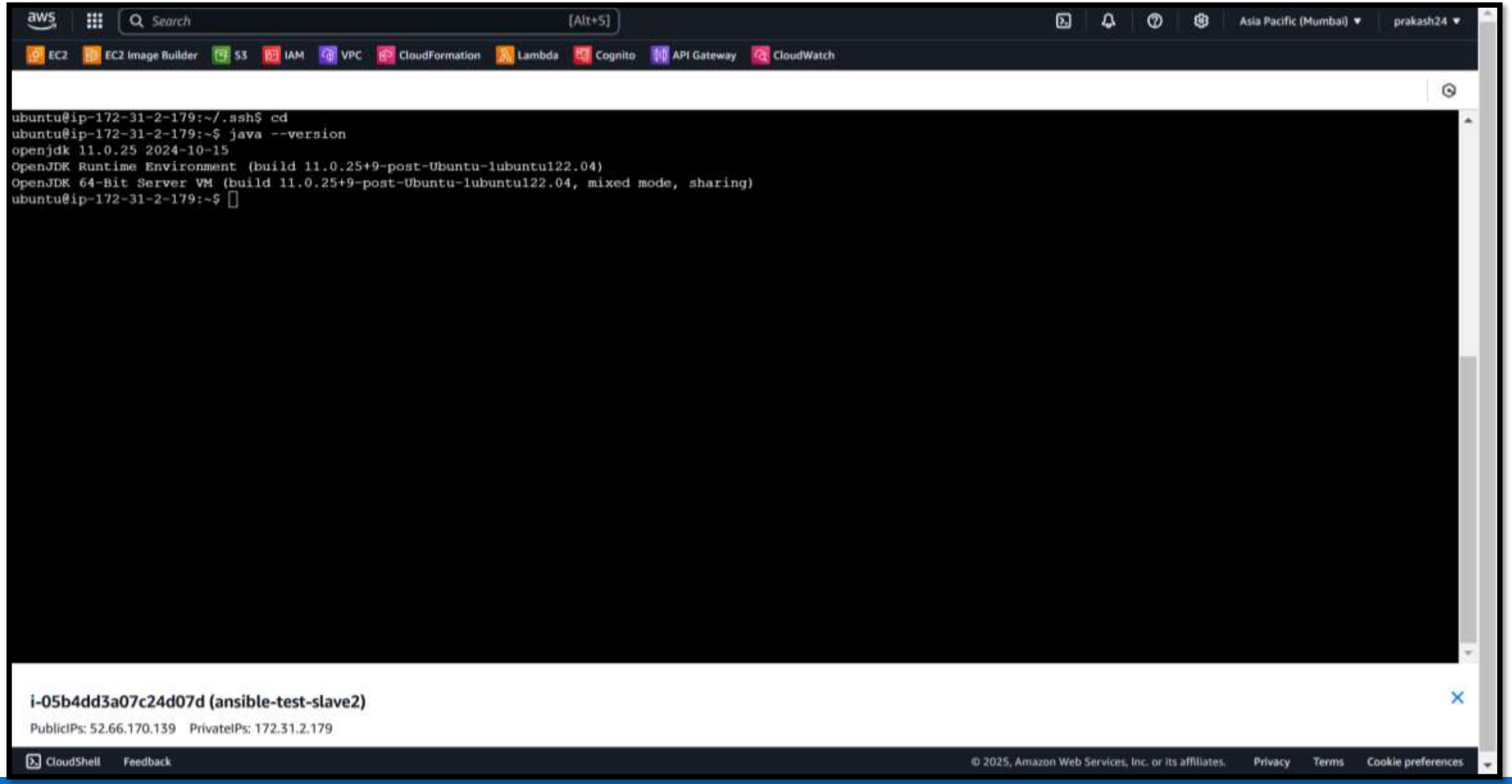
Validating MySql version in slave1



Validating MySql version in slave2



Validating Java version in slave3



Validating Java version in slave4