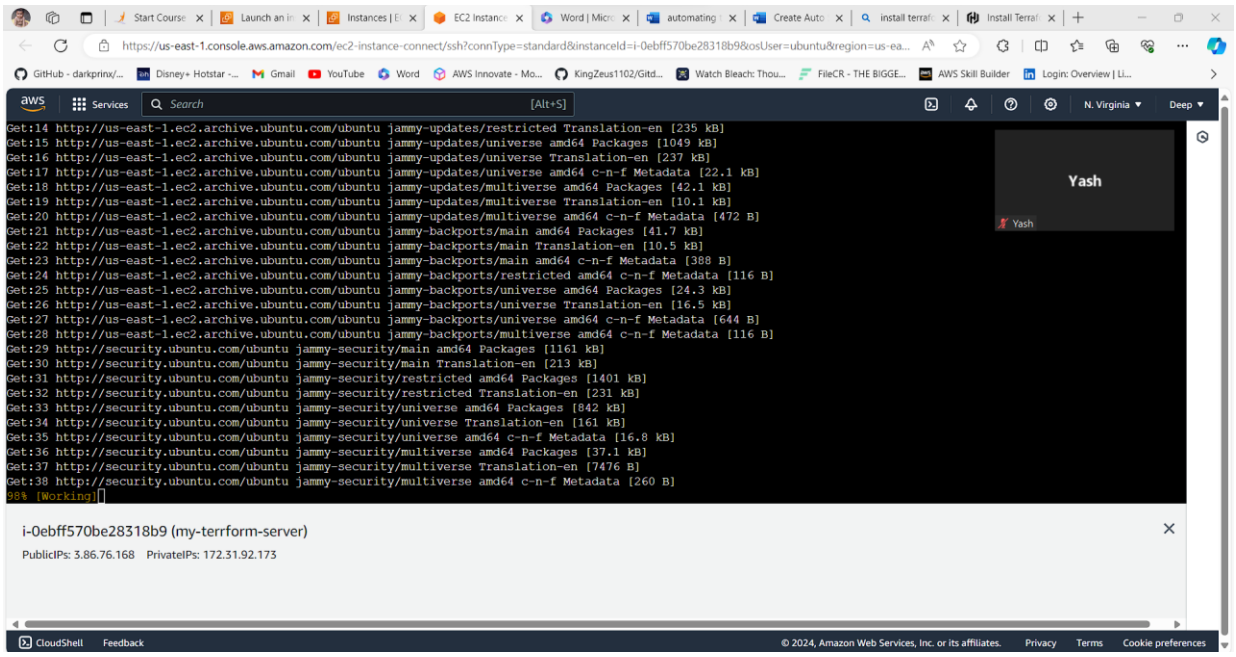
automating the infrastructure creation and the deployment procedure

1)launch a instance and install terraform from the official portal.

Sudo apt update

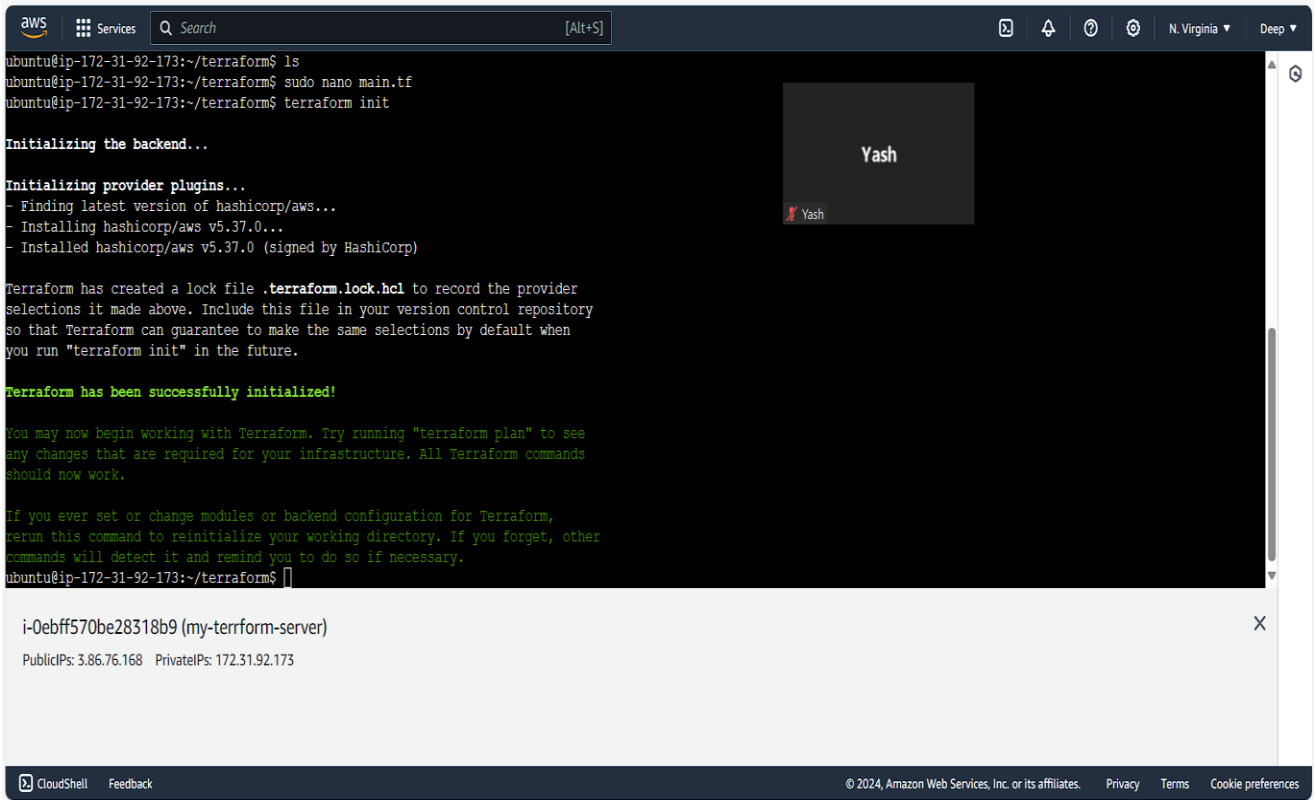
The commands can be found here: [Install Terraform | Terraform | HashiCorp Developer]



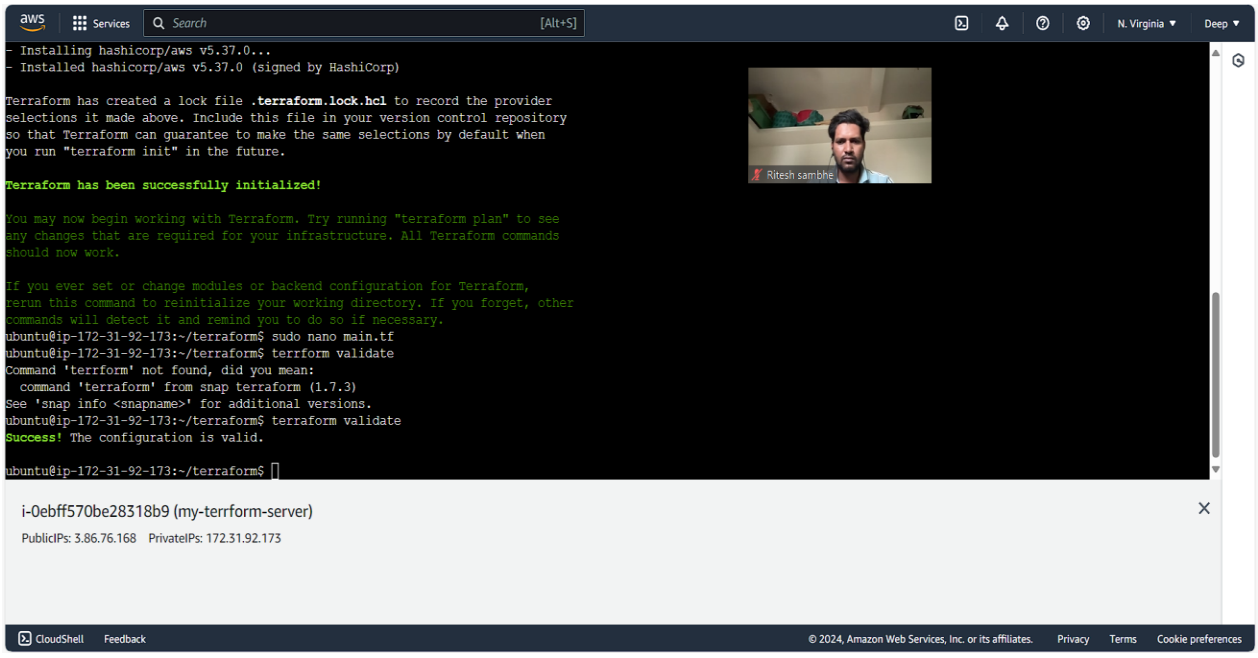
After successful installation, create a working dir using mkdir terraform

Cd terraform

Here we need to initialize terraform. We can do so by creating a main.tf file.

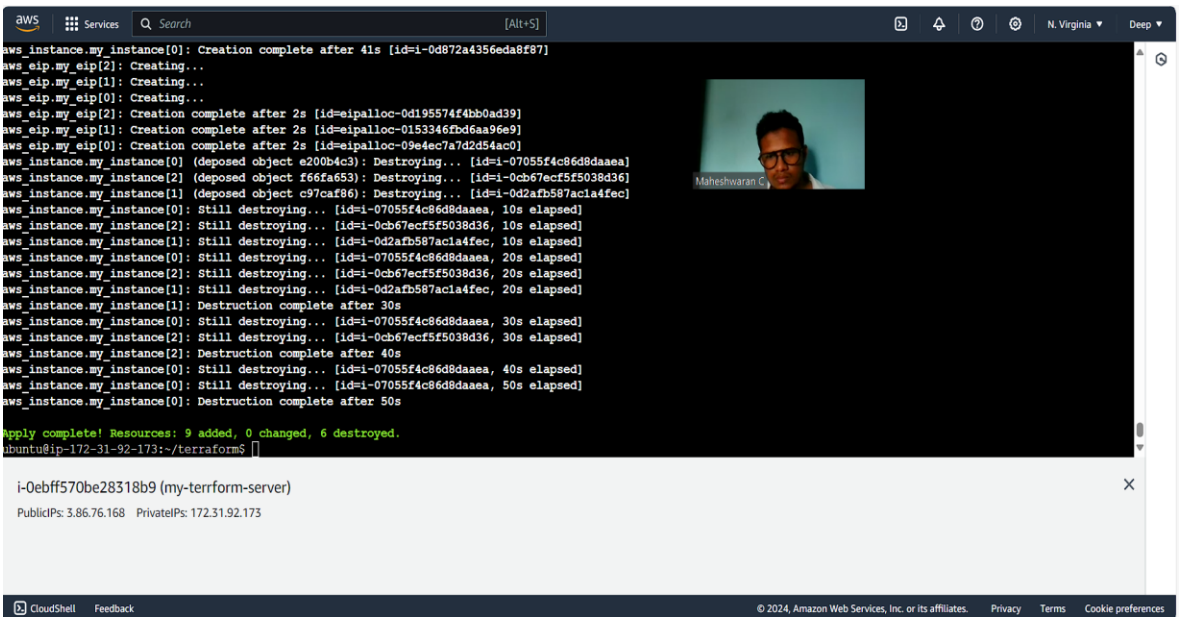


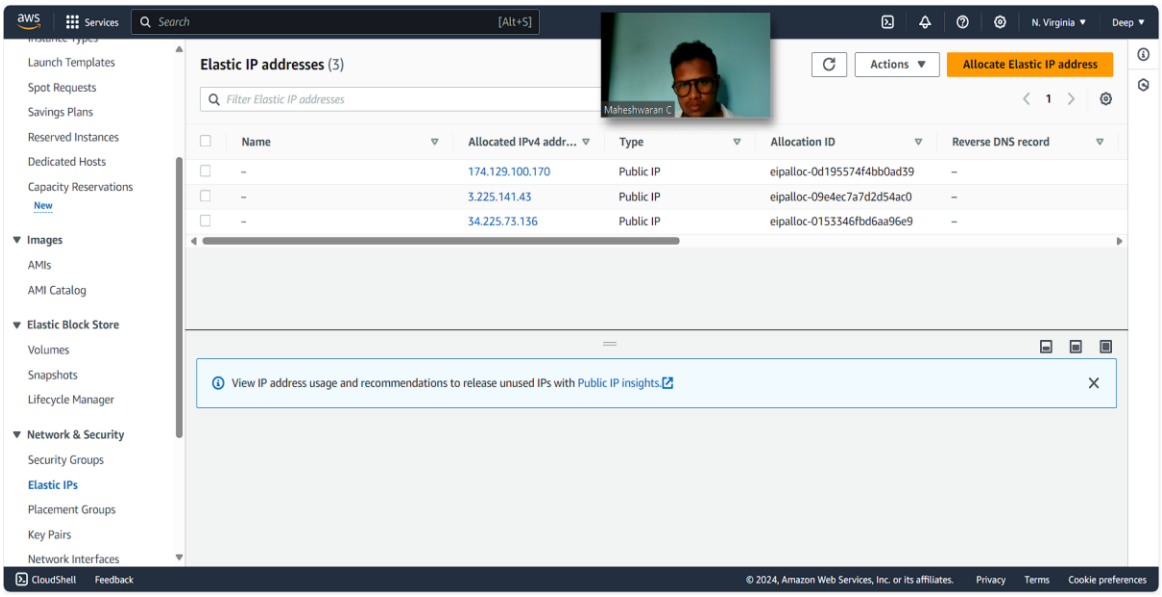
Validate the created script using **terraform validate**.



Do a terraform plan and terraform apply to execute the changes.

Post approval the resources will be created as in the script.





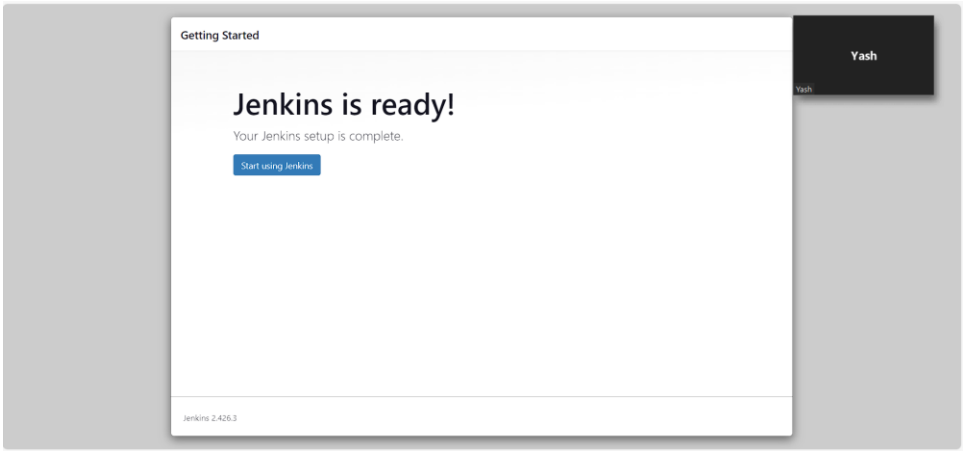
Install Jenkins and ansible on one the machines -

For Jenkins, java is a pre-requiste, do a sudo apt install openjdk-11-jdk –y

Then follow the ansible installation guide.

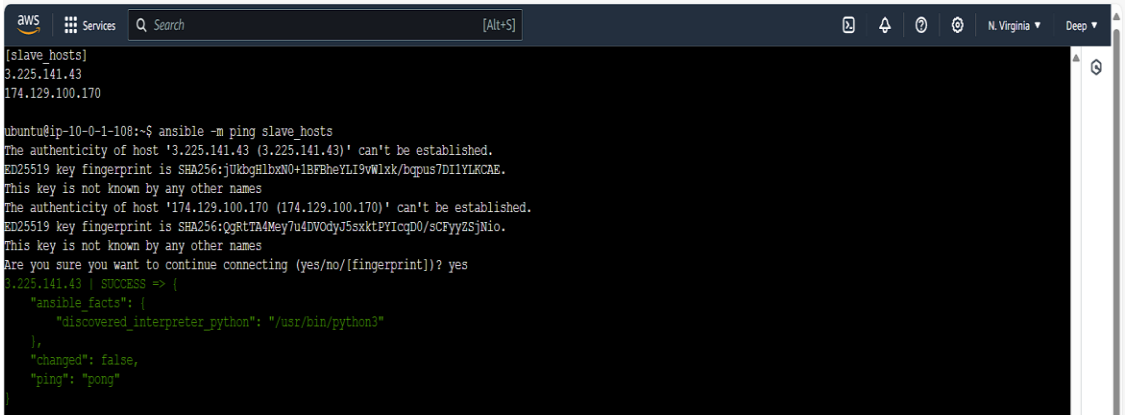
After successful installation confirm the version,

Jenkins Dashboard setup:



Establish keyless connection between ansible master and slaves:

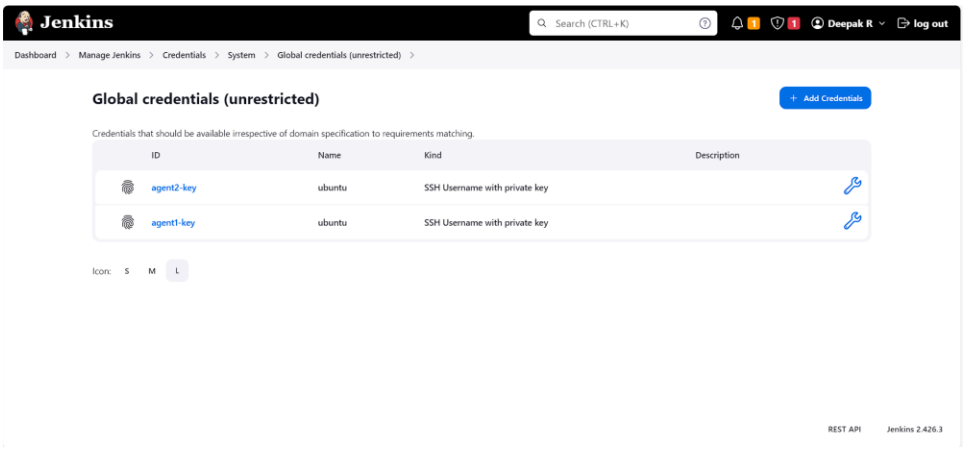
Ansible –m ping slave_hosts



For jenkins master-agent configuration

Do a ssh-keygen on each of the agents and copy id_rsa pvt key in to credential of the jenkins.

This will be Later used by jenkins to authenticate and execute the pipeline



Setup pipeline: