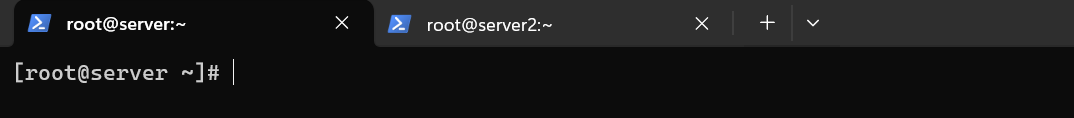
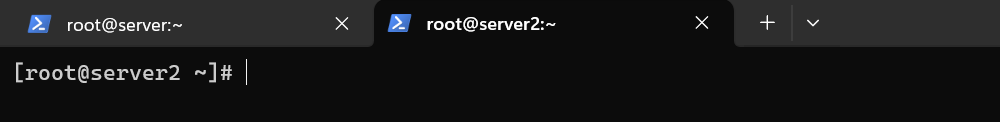
**Create an Ec2 instance using configuration management tool Ansible.**

Created two servers – one is working as a control plane, and another is the worker node.





Connection is built between both nodes.

A screenshot of a computer program

AI-generated content may be incorrect.

Copied ssh key in the both the nodes

A screenshot of a computer program

AI-generated content may be incorrect.

A screenshot of a computer program

AI-generated content may be incorrect.

Installed Ansible in the control plane.

A screenshot of a computer

AI-generated content may be incorrect.

A screen shot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

Ansible connection is successful.

A screenshot of a computer program

AI-generated content may be incorrect.

Wrote a playbook code to create an ec2 instance

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer program

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

The instance named ansible-new-server got created.

A screen shot of a computer

AI-generated content may be incorrect.

**Deploy a Ngnix application on your Kubernetes cluster and it should be available across the cluster on port 80.**

Created an ec2 instance and a user with policy **administrator access** and generated access key

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

Created a role with below permissions and attached it to the instance.

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

A white rectangular object with a black and blue line

AI-generated content may be incorrect.



Installed eks tool, kubectl and generated ssh-keys.

A black screen with white text

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

Created a cluster and a nodegroup.

A screenshot of a computer program

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

We can see here a cluster is created

A screenshot of a computer

AI-generated content may be incorrect.

Wrote the yaml code to deploy a nginx application on port 80

A black screen with a black border

AI-generated content may be incorrect.

A screenshot of a computer program

AI-generated content may be incorrect.

Copied the external Ip link and ran it with :80 (I allowed port 80 in my security group)

A screenshot of a computer

AI-generated content may be incorrect.

**Deploy a web application in the Kubernetes pod and create a replica set. In any case load is going to increase on your replica set, increase the number of replicas of the pods.**

Created an ec2 instance and a user with policy **administrator access** and generated access key

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

Created a role with below permissions and attached it to the instance.

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

A white rectangular object with a black and blue line

AI-generated content may be incorrect.



Installed eks tool, kubectl and generated ssh-keys.

A black screen with white text

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

Created a cluster and a nodegroup.

A screenshot of a computer program

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

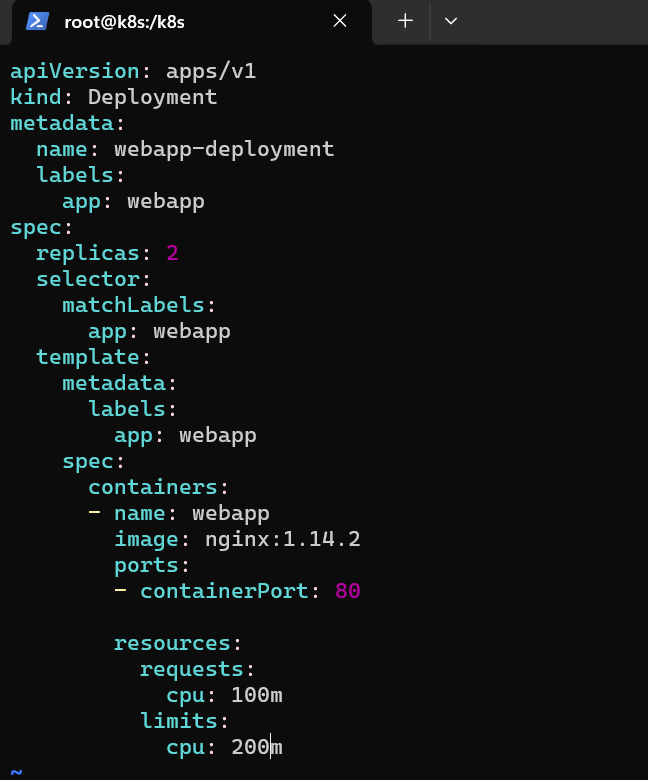
We can see here a cluster is created

A screenshot of a computer

AI-generated content may be incorrect.

Till here I have already done all these things for the above question that was to deploy a nginx application on Kubernetes.

So, after this I created 3 yaml files – deployment, service and an autoscaler.

 A screenshot of a computer program

AI-generated content may be incorrect. A screenshot of a computer

AI-generated content may be incorrect.

Applied all three of these.

A screenshot of a computer program

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

New instances got created

A screenshot of a computer

AI-generated content may be incorrect.

**Create an EC2 instance using of terraform us-east-1a zone in North Virginia region and create of your security group which name is web\_access and allow port 22 and 80 in the ingress. This security group should be attached with your EC2 instance**.

Launched an instance and connected to the terminal.

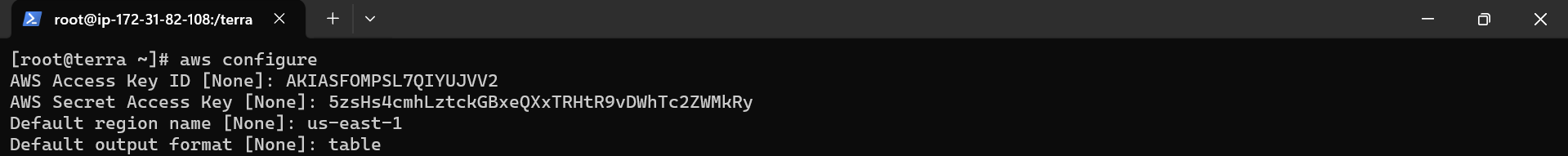
A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

Configured aws on the terminal

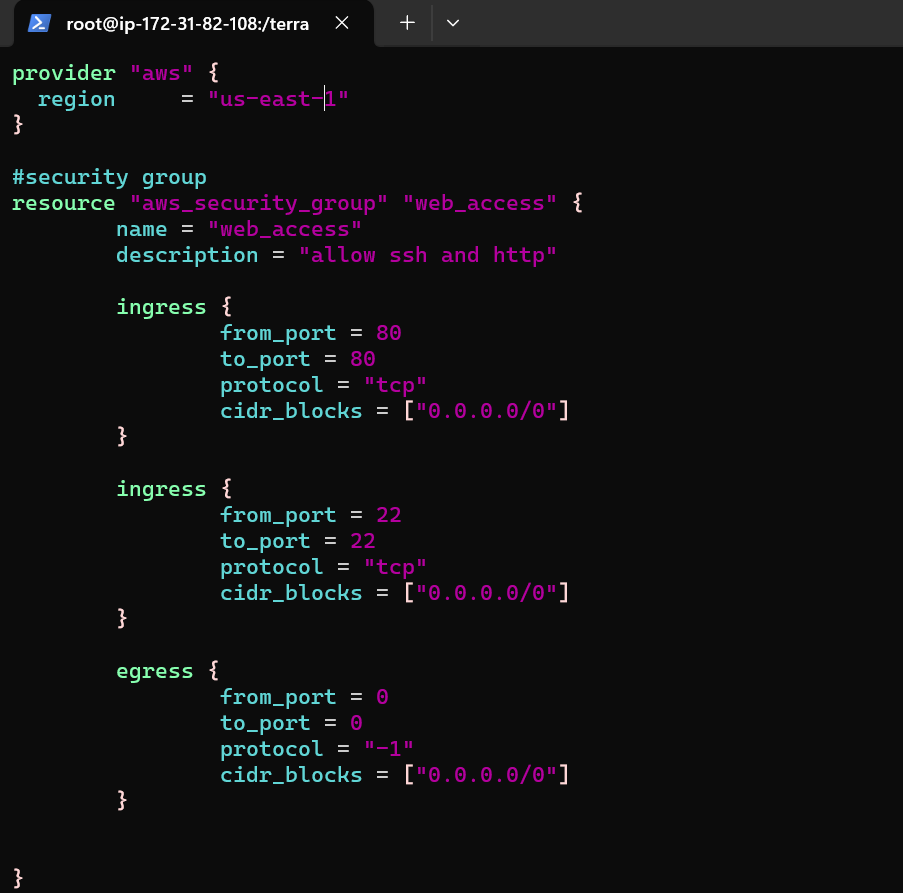


Installed Terraform.

A screenshot of a computer

AI-generated content may be incorrect.

Wrote the terraform code



A computer screen shot of a program code

AI-generated content may be incorrect.

Initialized and validated Terraform

A screenshot of a computer program

AI-generated content may be incorrect.

A screenshot of a computer

AI-generated content may be incorrect.

Ran terraform apply command and it’s successful.

A screenshot of a computer

AI-generated content may be incorrect.

An ec2 instance and a security group with name “web\_access” is created.

EC2 instance:

A screenshot of a computer

AI-generated content may be incorrect.

Security Group:

A screenshot of a computer

AI-generated content may be incorrect.