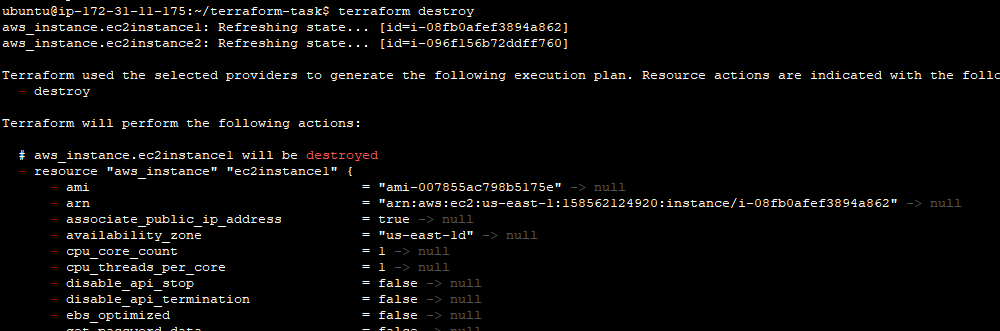
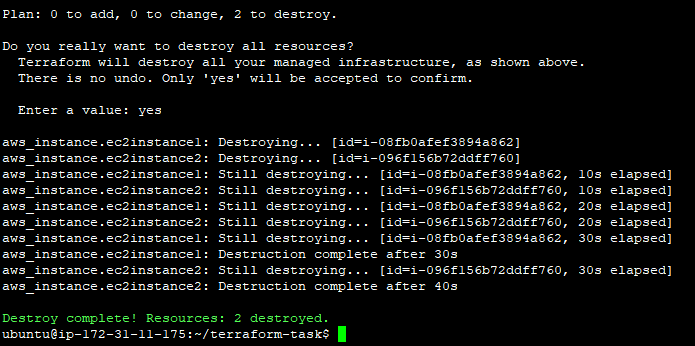
To destroy previous deployment run the below command.

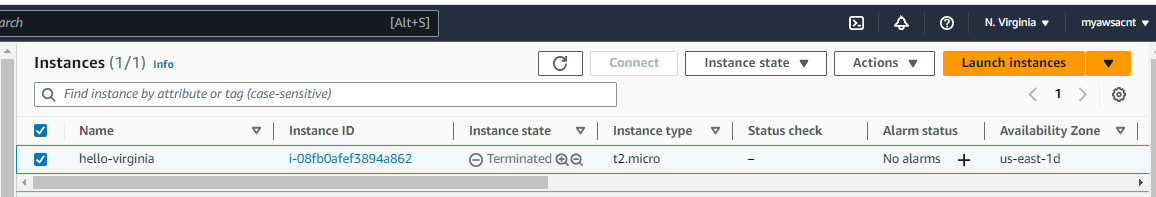
**terraform destroy**

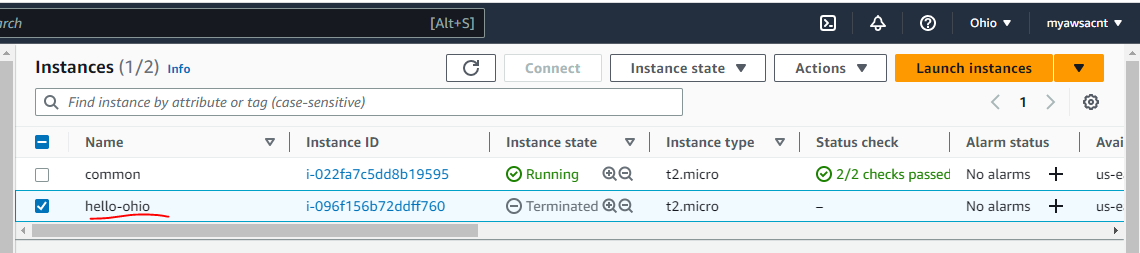


Enter yes to confirm.



And our EC2 instance has been destroyed.





Now let’s create main.tf file with below lines of code.

**provider "aws" {**

**access\_key = "AKIASJ2YKAR4DL3NNPHW"**

**secret\_key = "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"**

**region = "us-east-1"**

**}**

**# Create a VPC**

**resource "aws\_vpc" "demo-vpc" {**

**cidr\_block = var.vpc\_cidr**

**tags = {**

**Name = "demo-vpc"**

**}**

**}**

**resource "aws\_internet\_gateway" "demo-igw" {**

**vpc\_id = aws\_vpc.demo-vpc.id**

**tags = {**

**Name = "demo-igw"**

**}**

**}**

**resource "aws\_subnet" "demo-public-subnet" {**

**vpc\_id = aws\_vpc.demo-vpc.id**

**cidr\_block = var.public\_subnet\_cidr**

**map\_public\_ip\_on\_launch = true**

**availability\_zone = "us-east-1a"**

**tags = {**

**Name = "demo-public-subnet"**

**}**

**}**

**resource "aws\_route\_table" "demo-public-rt" {**

**vpc\_id = aws\_vpc.demo-vpc.id**

**route {**

**cidr\_block = "0.0.0.0/0"**

**gateway\_id = aws\_internet\_gateway.demo-igw.id**

**}**

**tags = {**

**Name = "demo-public-rt"**

**}**

**}**

**resource "aws\_route\_table\_association" "public\_rt\_asso" {**

**subnet\_id = aws\_subnet.demo-public-subnet.id**

**route\_table\_id = aws\_route\_table.demo-public-rt.id**

**}**

**resource "aws\_instance" "ec2instance" {**

**ami = "${var.ami\_id}"**

**instance\_type = "${var.instance\_type}"**

**key\_name = "${var.ami\_key\_pair\_name}"**

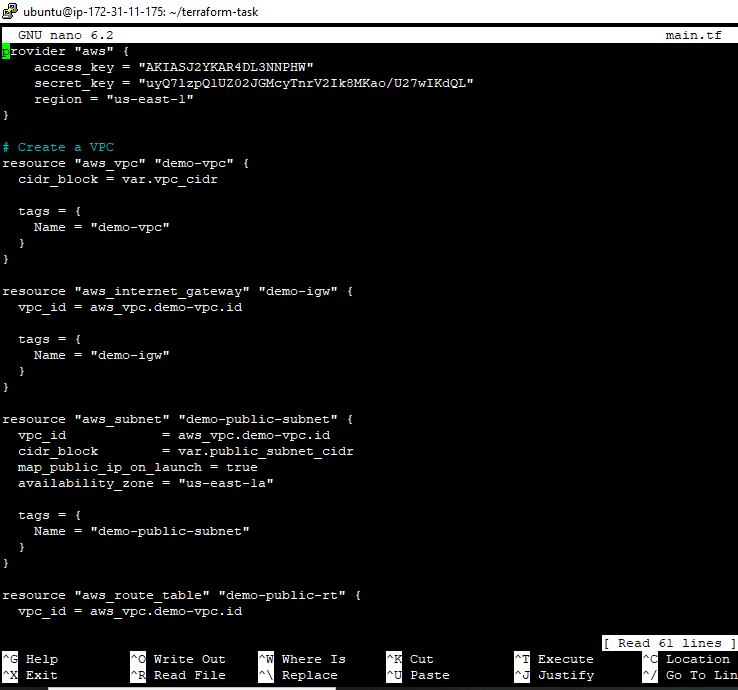
**subnet\_id = aws\_subnet.demo-public-subnet.id**

**tags = {**

**Name ="${var.instance\_name}"**

**}**

**}**



Create variables.tf with below lines of code.

**variable "instance\_name" {**

**description = "Name of the instance to be created"**

**default = "assignment4"**

**}**

**variable "instance\_type" {**

**default = "t2.micro"**

**}**

**variable "ami\_id" {**

**description = "The AMI to use"**

**default = "ami-007855ac798b5175e"**

**}**

**variable "ami\_key\_pair\_name" {**

**default = "virginia"**

**}**

**variable "vpc\_cidr" {**

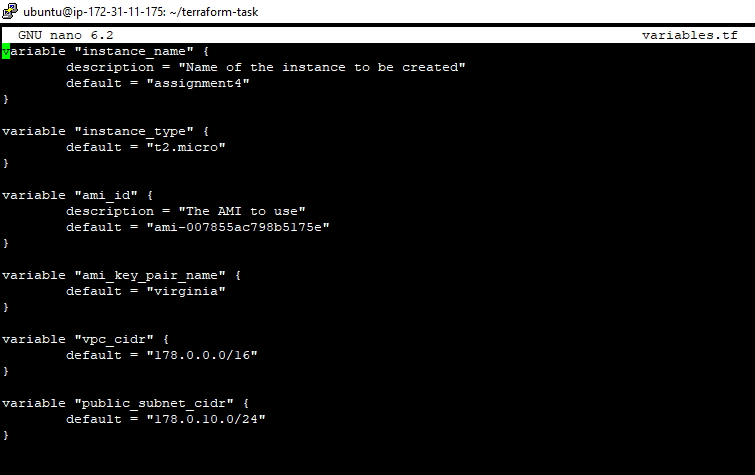
**default = "178.0.0.0/16"**

**}**

**variable "public\_subnet\_cidr" {**

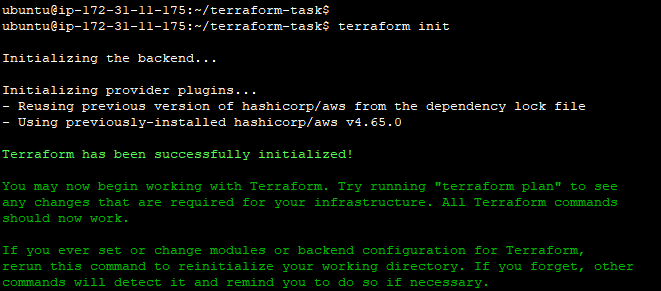
**default = "178.0.10.0/24"**

**}**



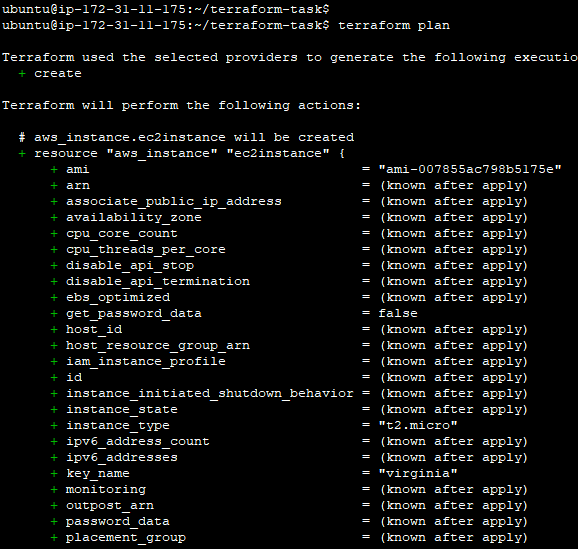
Now initialize terraform.

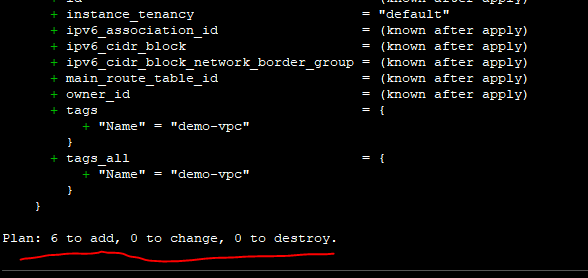
**terraform init**



And run plan to validate what is going to be added.

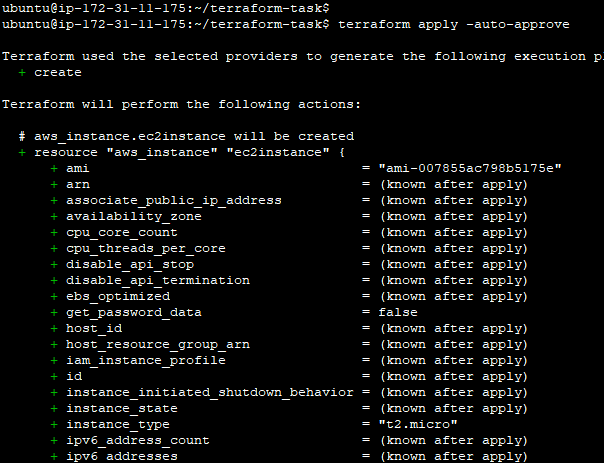
**terraform plan**



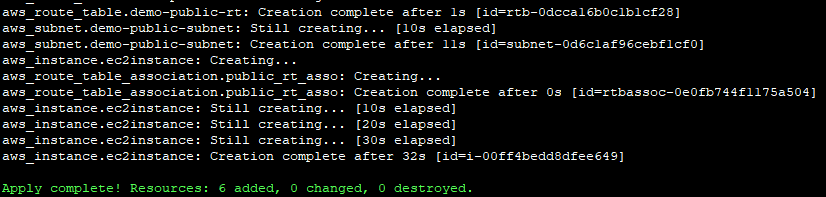


Now run bellow command to execute the code:

**terraform apply -auto-approve**

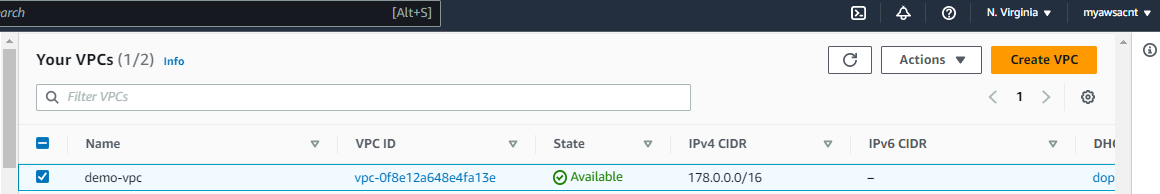


And required AWS resources (VPC, Public subnet, internet gateway, route table, EC2 instance) have been created.

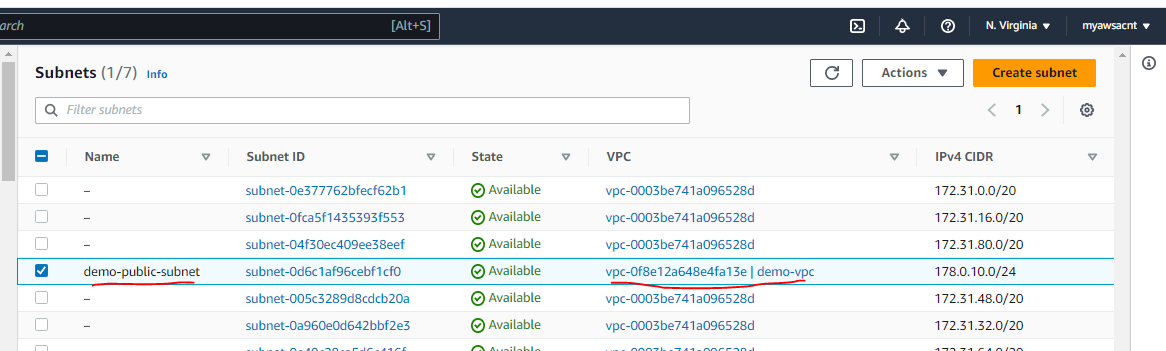


Let’ validate them in AWS management console.

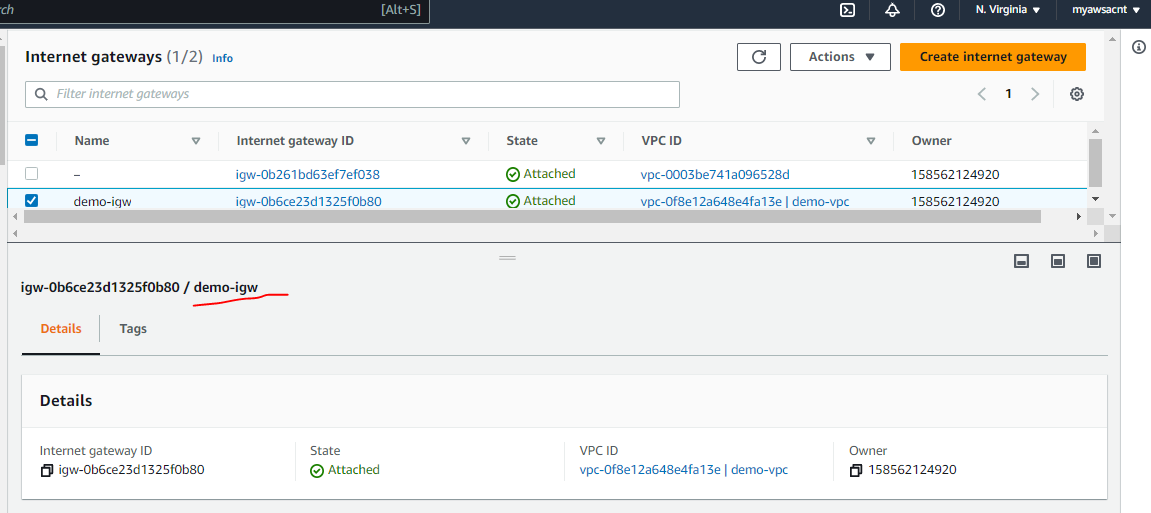
VPC has been created.



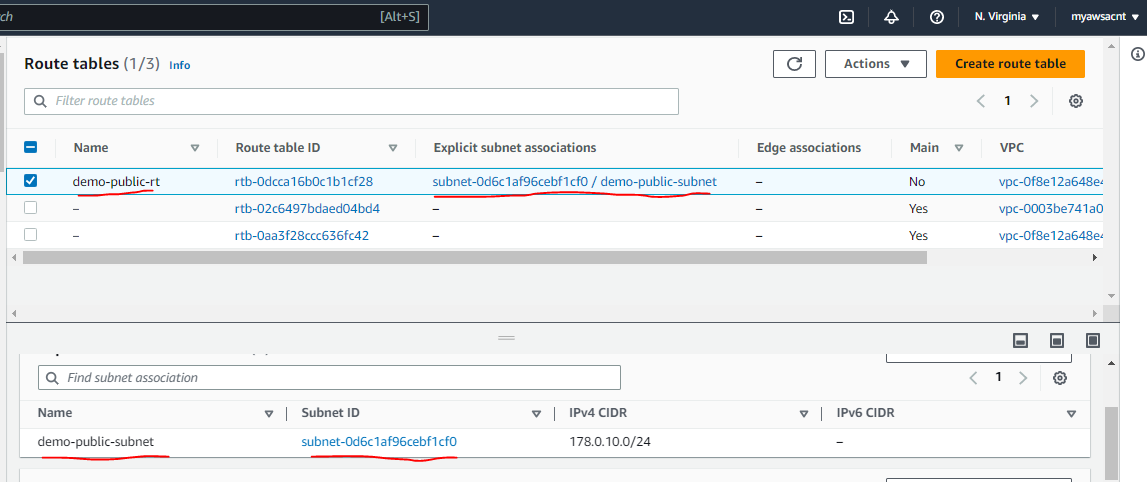
Subnet has been created for our VPC.



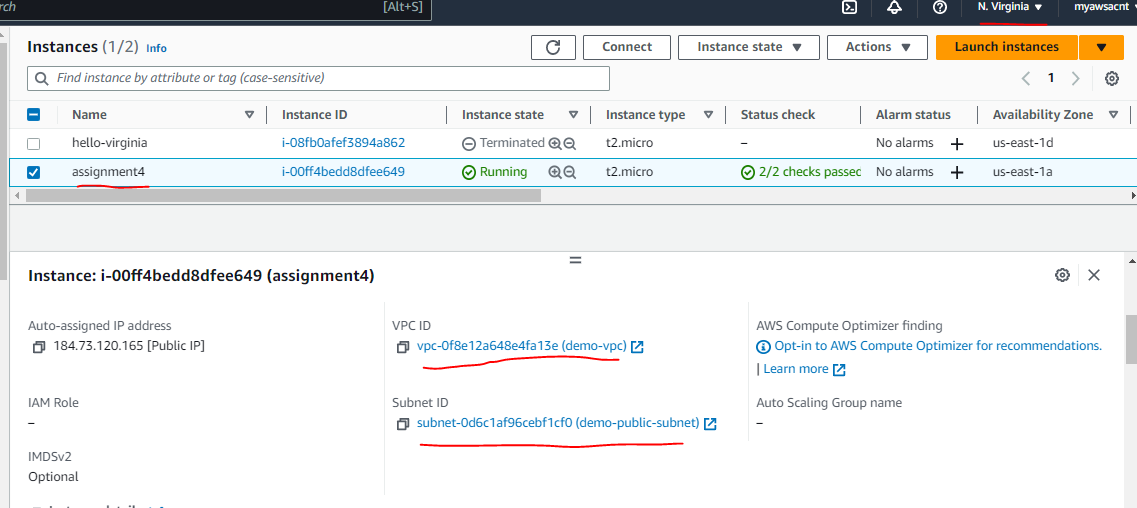
Internet gateway has been created and attached to VPC.



Route table has been created and associated with subnet.



And finally EC2 instance has been created in our VPC.



So all our objectives have been met.