Terraform Module

Task 1.6 → Using terraform module

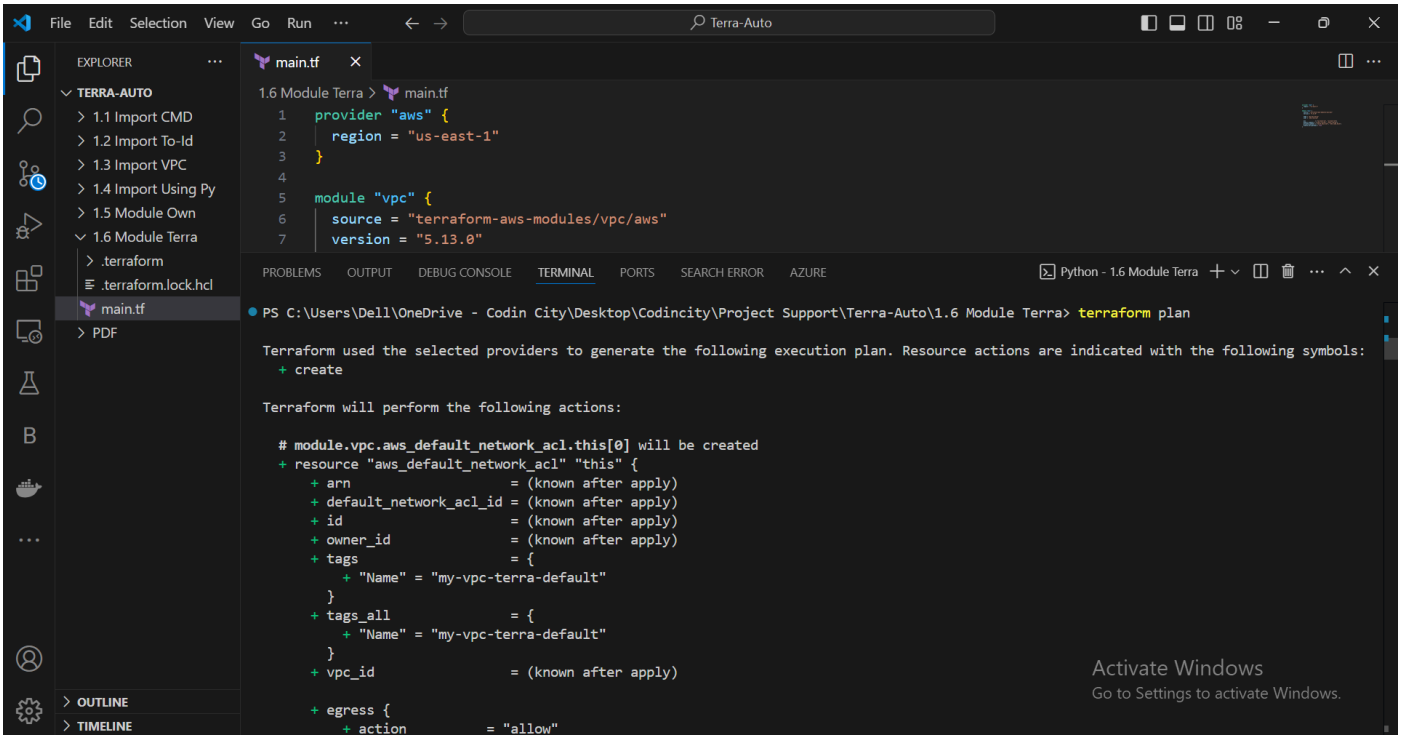
Step:1 I created **main.tf,** Inside it I defined provider & module for creating VPC

```
provider "aws" {
  region = "us-east-1"
}

module "vpc" {
  source = "terraform-aws-modules/vpc/aws"
  version = "5.13.0"

  name = "my-vpc-terra"
  cidr = "10.0.0.0/16"

  azs             = ["us-east-1a", "us-east-1b"]
  public_subnets = ["10.0.1.0/24", "10.0.2.0/24"]
  private_subnets = ["10.0.101.0/24", "10.0.102.0/24"]
  enable_nat_gateway = true
}
```

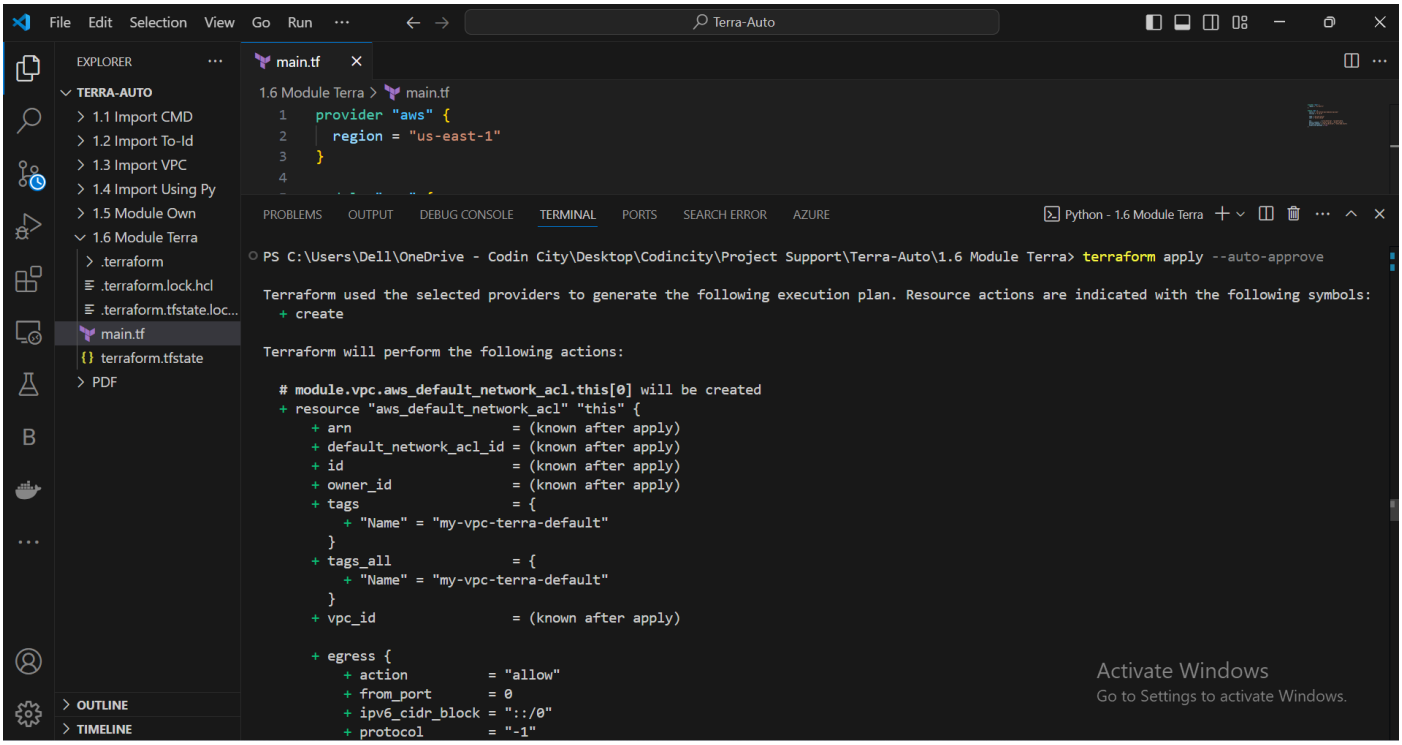
Step:2 After creating module I will initializing the terraform file → **terraform init**

```
PS C:\Users\Dell\OneDrive - Codin City\Desktop\Codincity\Project Support\Terra-Auto\1.6 Module Terra> terraform init
Initializing the backend...
Initializing modules...
Downloading registry.terraform.io/terraform-aws-modules/vpc/aws 5.13.0 for vpc...
- vpc in .terraform\modules\vpc
Initializing provider plugins...
- Finding hashicorp/aws versions matching ">= 5.46.0"...
- Installing hashicorp/aws v5.70.0...
- Installed hashicorp/aws v5.70.0 (signed by HashiCorp)
Terraform has created a lock file .terraform.lock.hcl to record the provider
selections it made above. Include this file in your version control repository
so that Terraform can guarantee to make the same selections by default when
you run "terraform init" in the future.

Terraform has been successfully initialized!

You may now begin working with Terraform. Try running "terraform plan" to see
any changes that are required for your infrastructure. All Terraform commands
should now work.

If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.
```

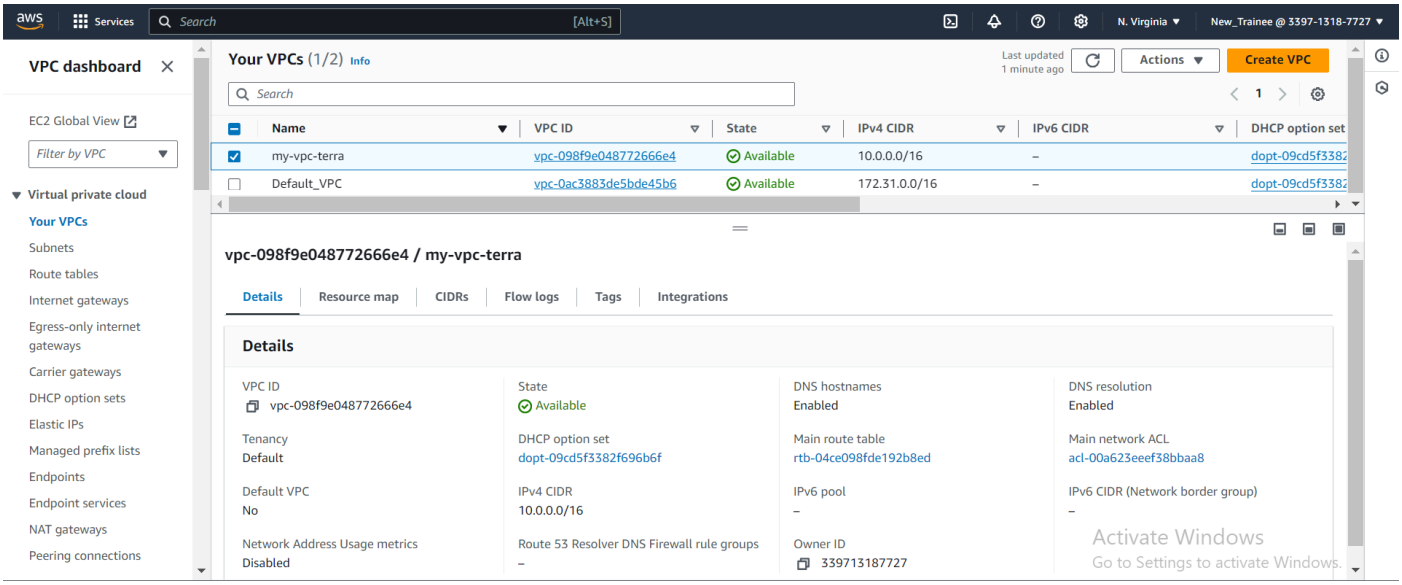
Step:3 → terraform plan



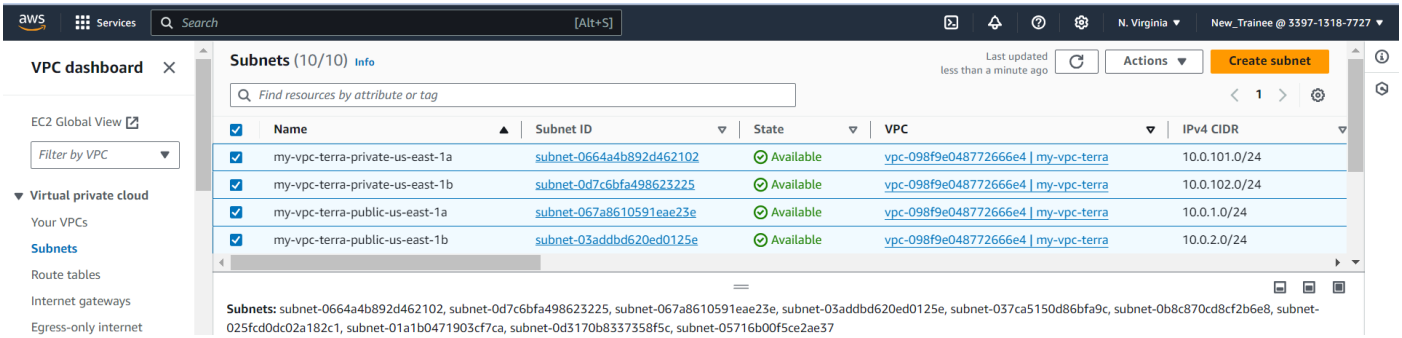
Step:4 → terraform apply –auto-approve



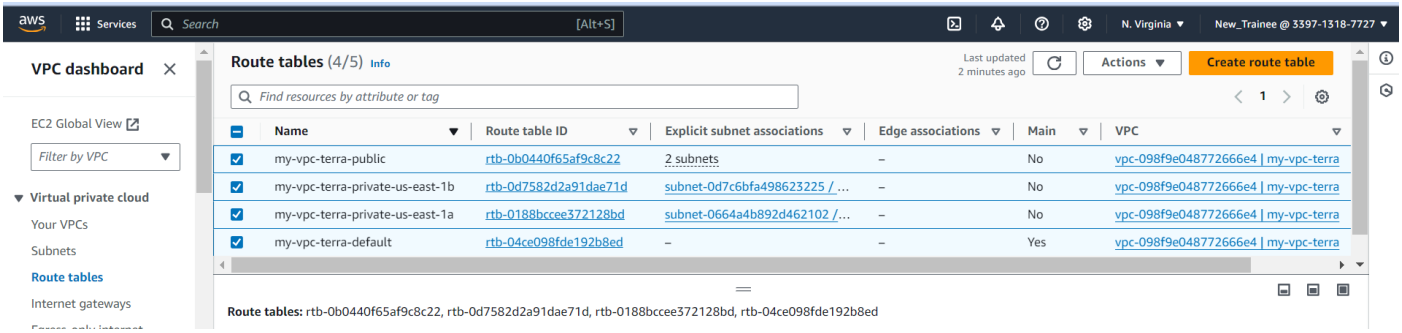
Step:5 The VPC has been created named as **my-vpc-terra**



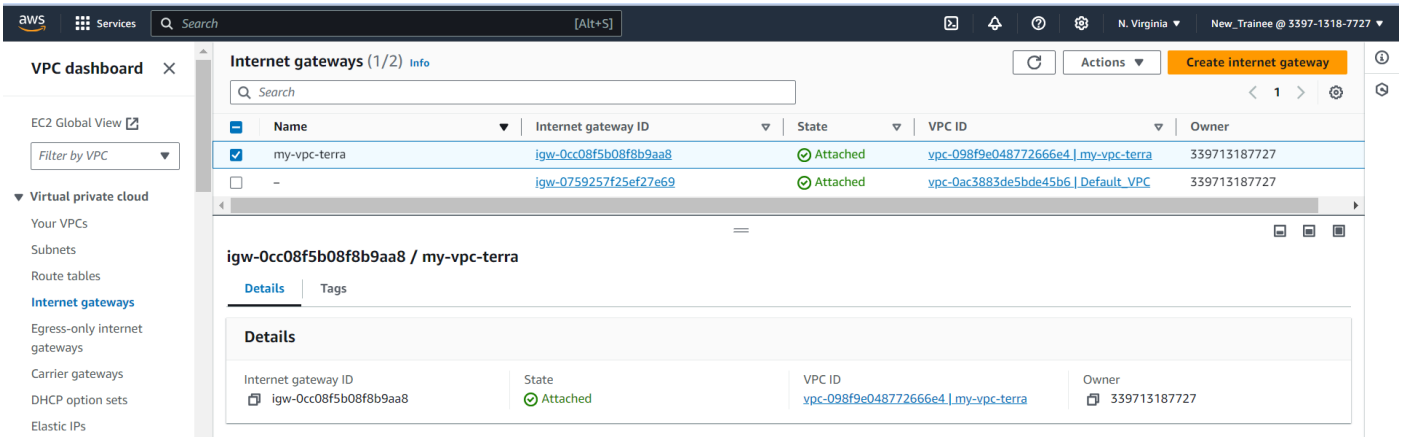
Step:6 Created two public subnets & two private subnets



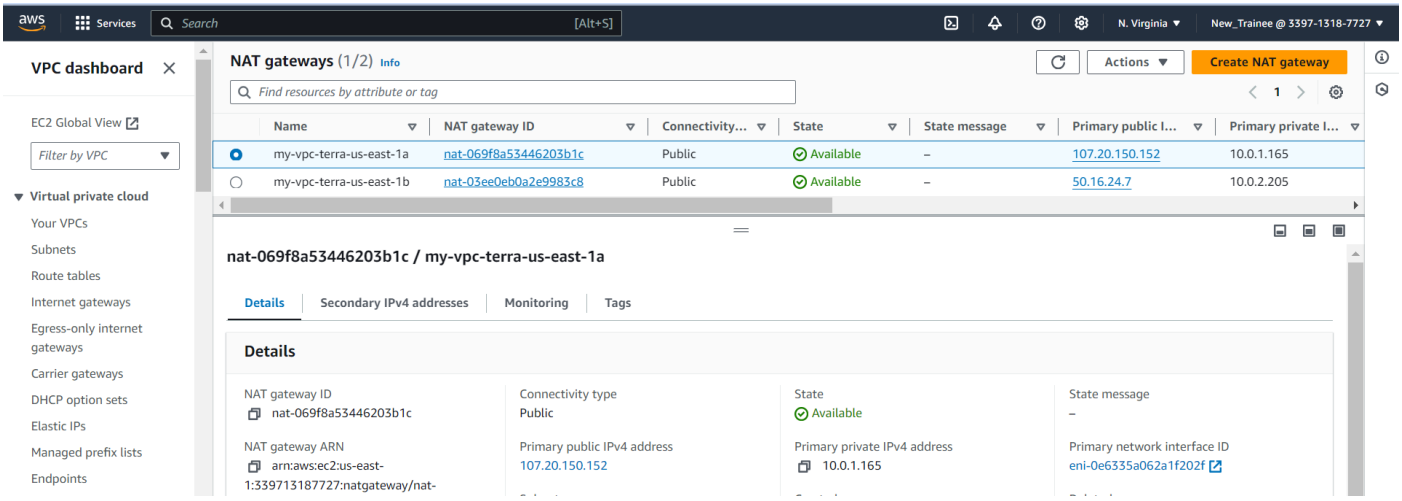
Step:7 Route table has been created & associated with corresponding subnets



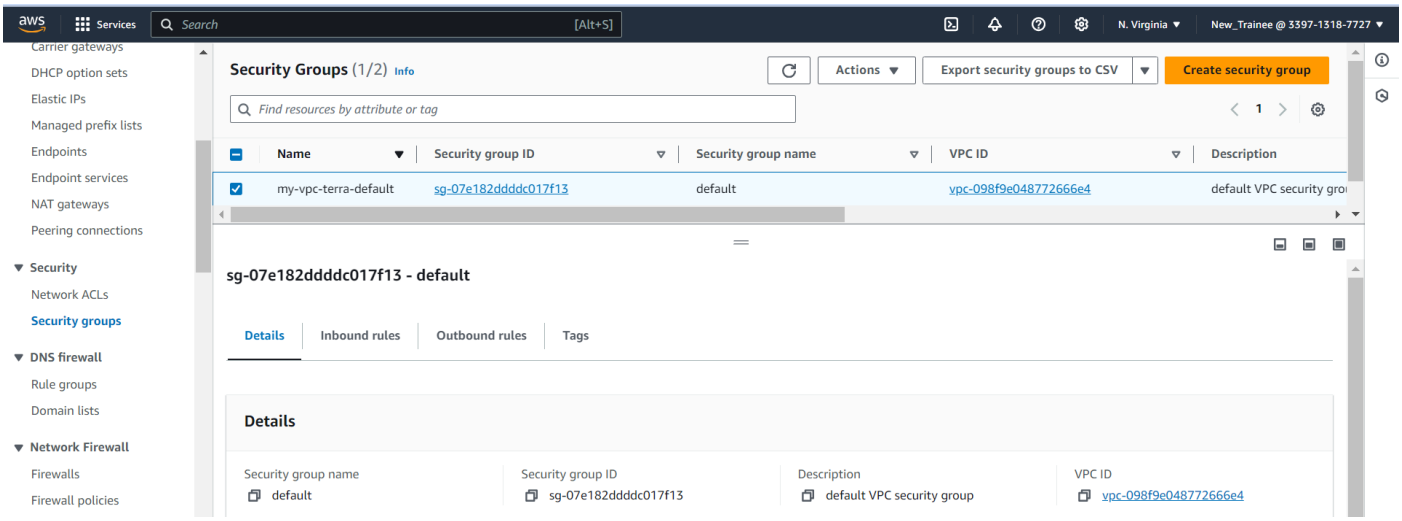
Step:8 Internet Gateway has been created & associated with public subnets



Step:9 NAT Gateway has been created in public subnets & Associated with Private subnets



Step:10 Default Security Group has been created



Step:11 This is the flow of using modules