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BTech CSE

DevOps Sem 6 (2022-26) B1 NH

ASSIGNMENT 1

System Provisioning & Config. Management

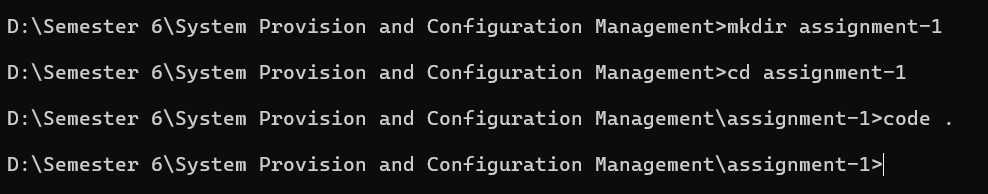
# Write Terraform script to do perform following tasks on AWS cloud Platform

Step 1: Create two T2 Micro EC2 Instances. Step2: Create a VPN on AWS

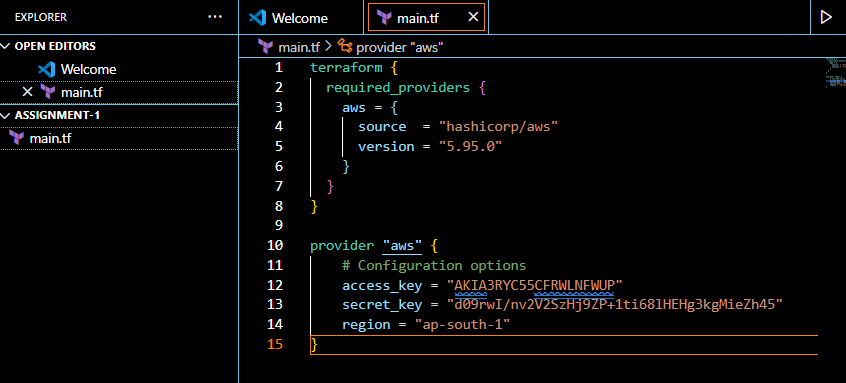
Step 3: Create a S3 Bucket

Step 4: Write the code for step 1,2 and 3 in a IaC terraform file and run terraform commands to execute these steps.

**Create a folder** mkdir assignment-1 cd assignment-1



First create main.tf



terraform { required\_providers {

aws = {

source = "hashicorp/aws" version = "5.95.0"

}

}

}

provider "aws" {

# Configuration options

access\_key = "AKIA3RYC55CFRWLNFWUP”

secret\_key = "d09rwI/nv2V2SzHj9ZP+1ti68lHEHg3kgMieZh45"

region = "ap-south-1"

}

# Step 1: Create two T2 Micro EC2 Instances.

Create ec2.tf

resource "aws\_instance" "example1" {

ami = " ami-0f1dcc636b69a6438"

instance\_type = "t2.micro"

tags = {

Name = "EC2\_Instance\_1"

}

}

resource "aws\_instance" "example2" {

ami = " ami-0f1dcc636b69a6438"

instance\_type = "t2.micro"

tags = {

Name = "EC2\_Instance\_2"

}

}

# Step2: Create a VPN on AWS

Create vpc.tf

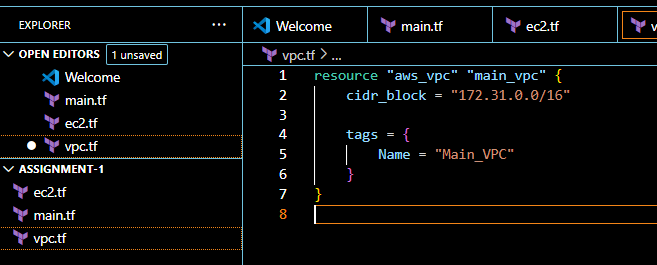
resource "aws\_vpc" "main\_vpc" { cidr\_block = "172.31.0.0/16"

tags = {

Name = "Main\_VPC"

}

}



# Step 3: Create a S3 Bucket

Create s3.tf



resource "aws\_s3\_bucket" "my\_bucket" {

bucket = "my-unique-demo-bucket-anp-${random\_integer.rand.id}"

tags = {

Name

= "Demo\_S3\_Bucket"

Environment = "Dev"

}

}

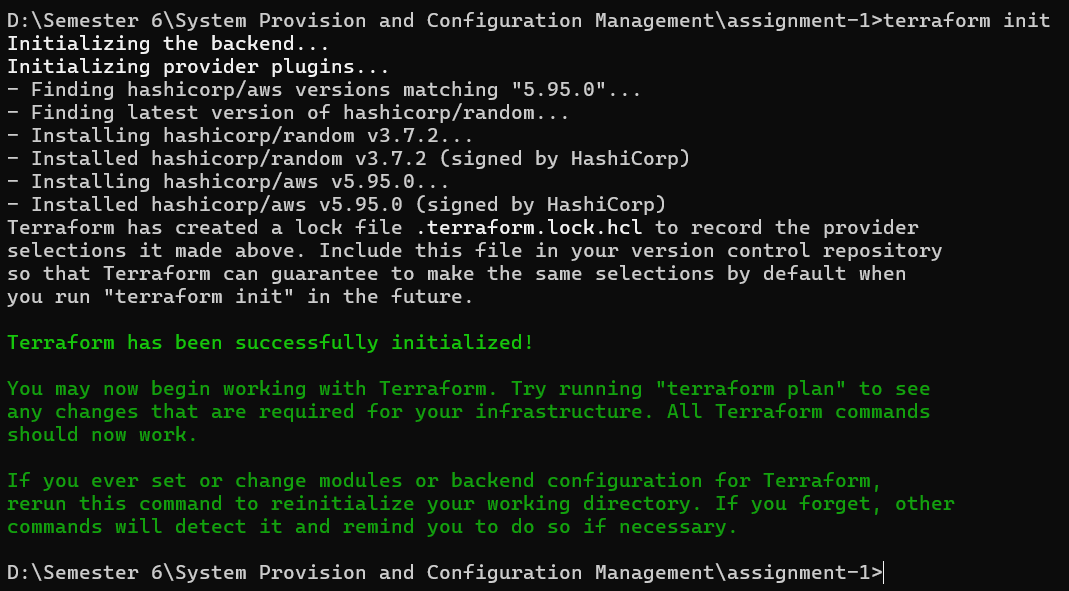
resource "random\_integer" "rand" { min = 1000

max = 9999

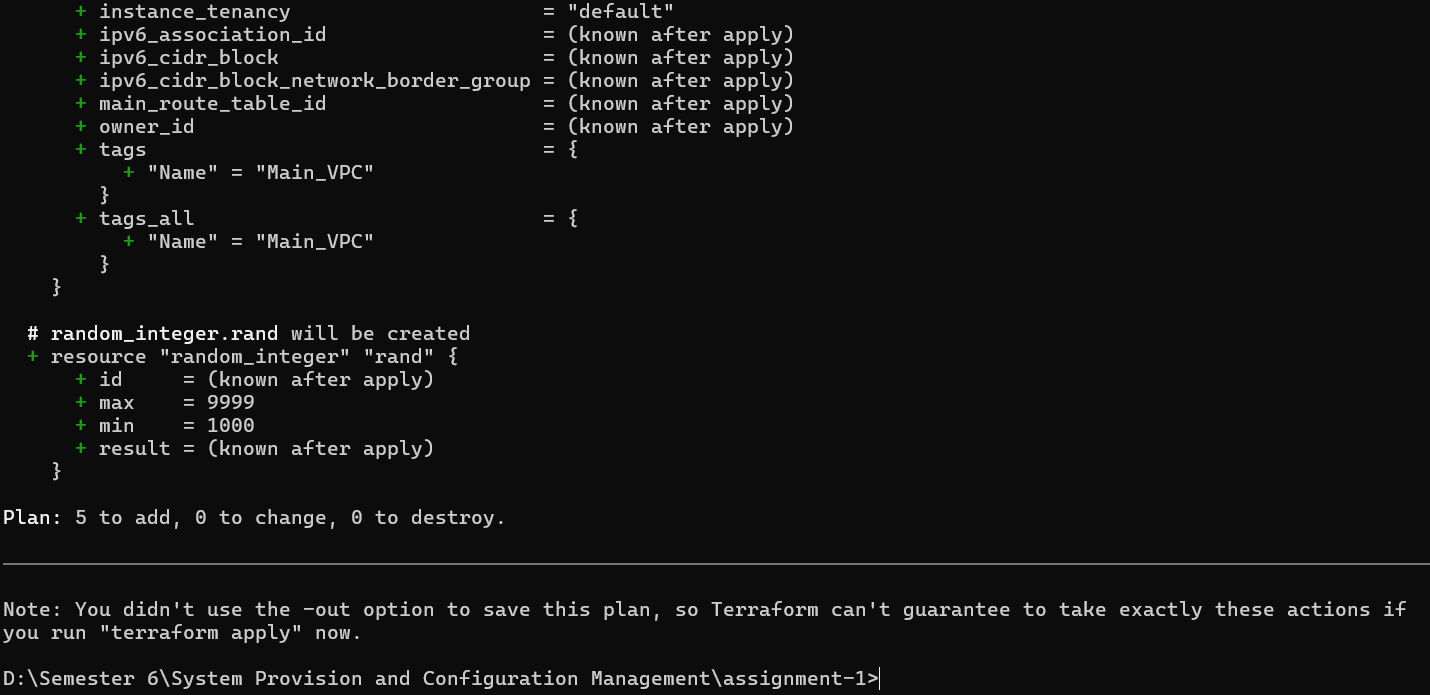
}

Run **terraform init**

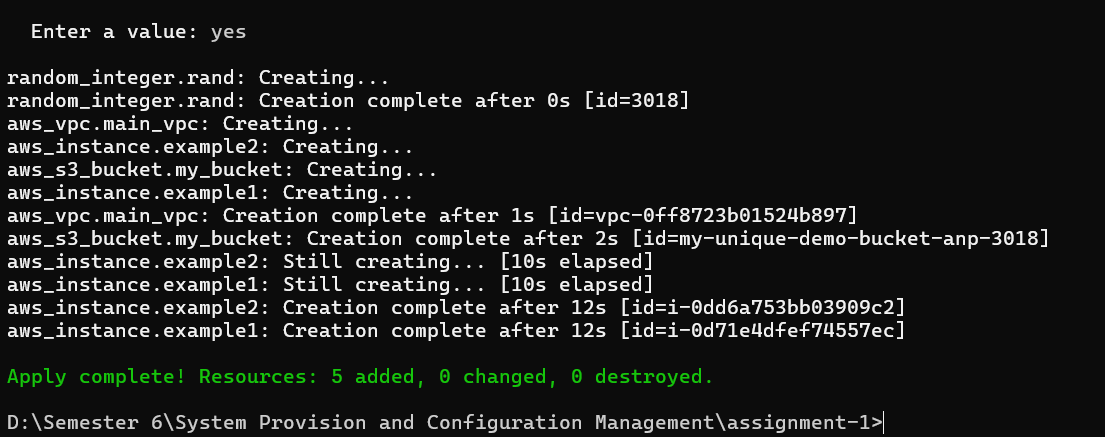
This initializes the Terraform working directory by downloading necessary provider plugins and setting up the backend configuration. It must be run before any other commands

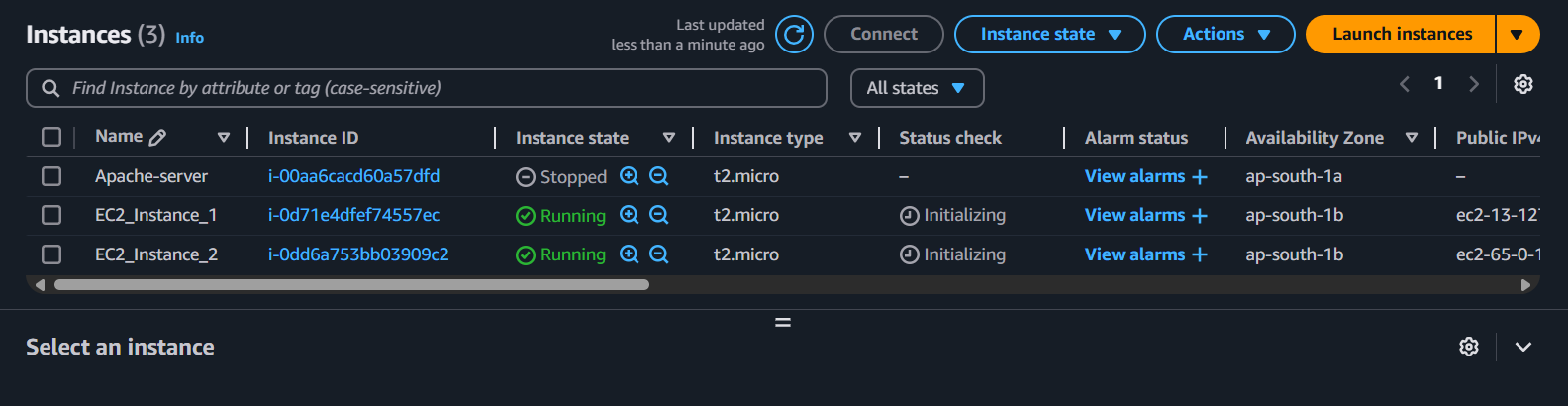


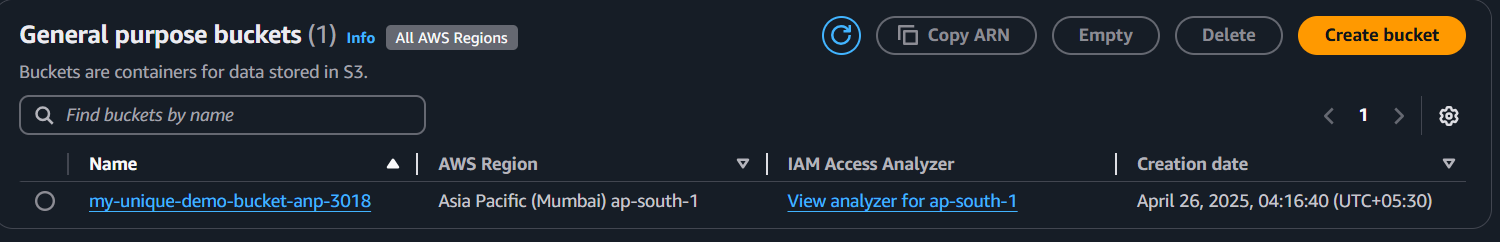
Now **terraform plan** : It's like a dry run to review changes before applying them

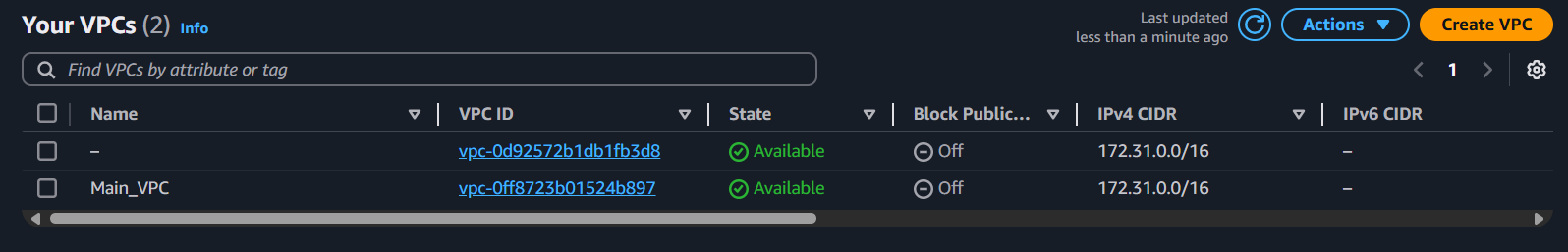


**terraform apply** : Applies the changes required to reach the desired state as defined in the configuration files. It provisions or updates resources on the cloud platform

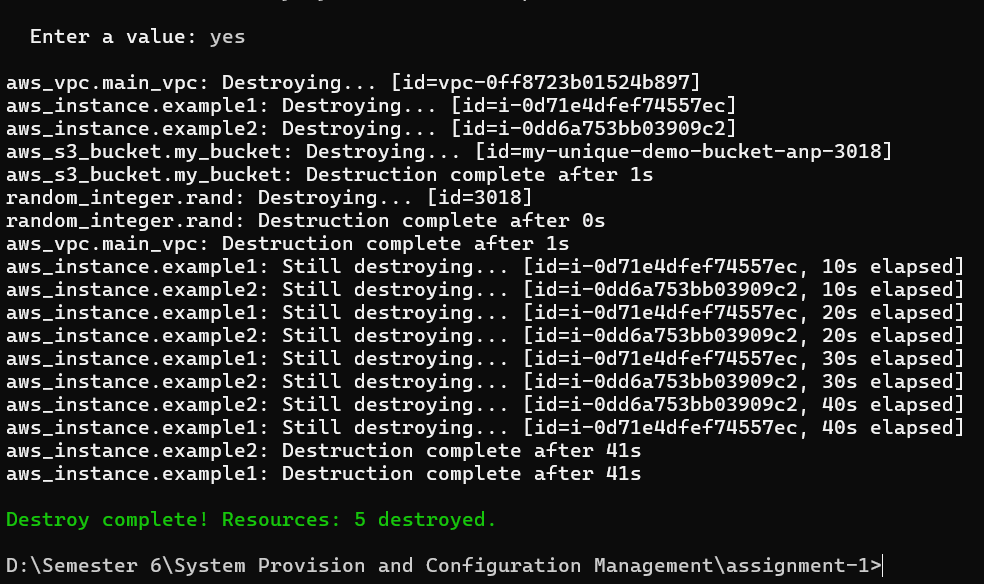








Clean up using **terraform destroy**

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