

**ASSIGNMENT 1**

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

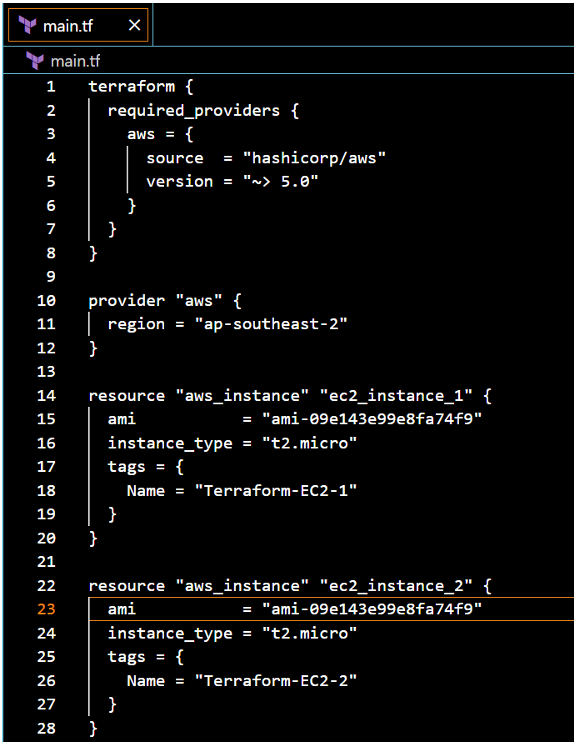
**Name – Khushi Chauhan**

**Sap id – 500105956**

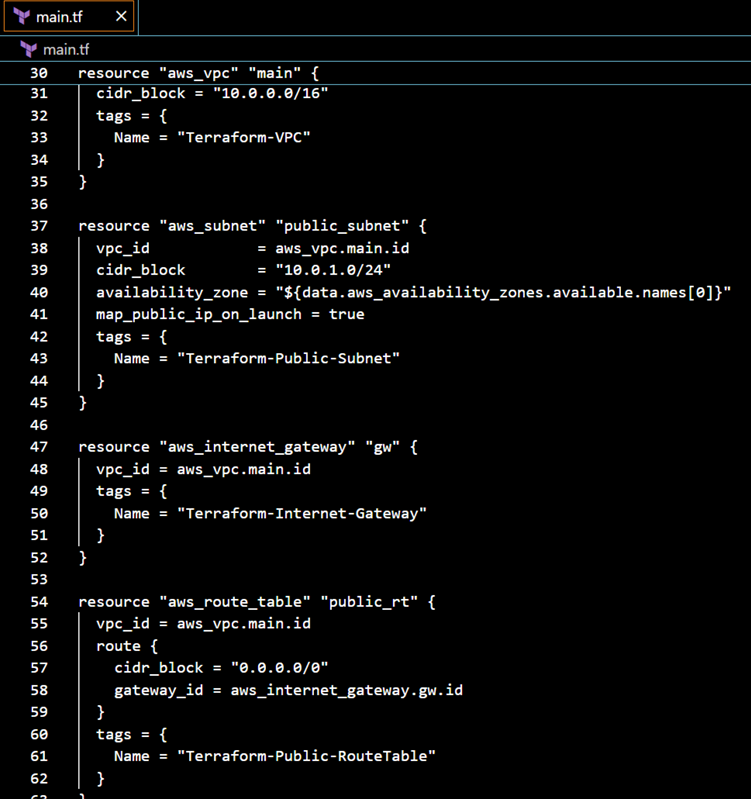
**Batch – DevOps(B1)**

**Submitted to – Prof. Hitesh Sharma**

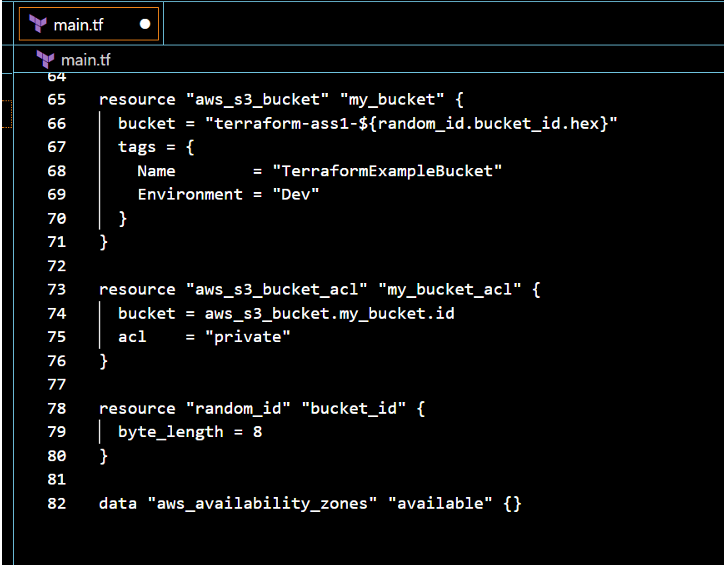
Step 1: Create two T2 Micro EC2 Instances.



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.

terraform {

required\_providers {

aws = {

source = "hashicorp/aws"

version = "~> 5.0"

}

}

}

provider "aws" {

region = "ap-southeast-2"

}

data "aws\_availability\_zones" "available" {}

resource "random\_id" "bucket\_id" {

byte\_length = 8

}

# VPC

resource "aws\_vpc" "main" {

cidr\_block = "10.0.0.0/16"

tags = {

Name = "Terraform-VPC"

}

}

# Subnet

resource "aws\_subnet" "public\_subnet" {

vpc\_id = aws\_vpc.main.id

cidr\_block = "10.0.1.0/24"

availability\_zone = data.aws\_availability\_zones.available.names[0]

map\_public\_ip\_on\_launch = true

tags = {

Name = "Terraform-Public-Subnet"

}

}

# Internet Gateway

resource "aws\_internet\_gateway" "gw" {

vpc\_id = aws\_vpc.main.id

tags = {

Name = "Terraform-Internet-Gateway"

}

}

# Route Table

resource "aws\_route\_table" "public\_rt" {

vpc\_id = aws\_vpc.main.id

route {

cidr\_block = "0.0.0.0/0"

gateway\_id = aws\_internet\_gateway.gw.id

}

tags = {

Name = "Terraform-Public-RouteTable"

}

}

# EC2 Instances

resource "aws\_instance" "ec2\_instance\_1" {

ami = "ami-09e143e99e8fa74f9"

instance\_type = "t2.micro"

tags = {

Name = "Terraform-EC2-1"

}

}

resource "aws\_instance" "ec2\_instance\_2" {

ami = "ami-09e143e99e8fa74f9"

instance\_type = "t2.micro"

tags = {

Name = "Terraform-EC2-2"

}

}

# S3 Bucket

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

bucket = "terraform-ass1-${random\_id.bucket\_id.hex}"

tags = {

Name = "TerraformExampleBucket"

Environment = "Dev"

}

}

# S3 Bucket ACL

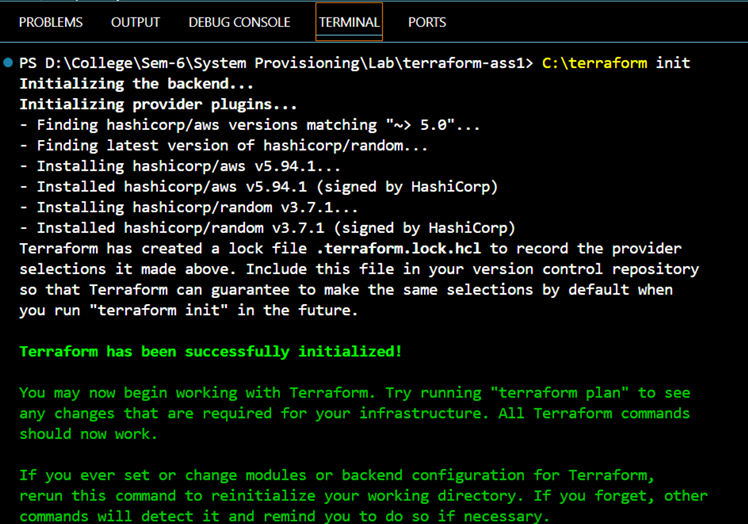
resource "aws\_s3\_bucket\_acl" "my\_bucket\_acl" {

bucket = aws\_s3\_bucket.my\_bucket.id

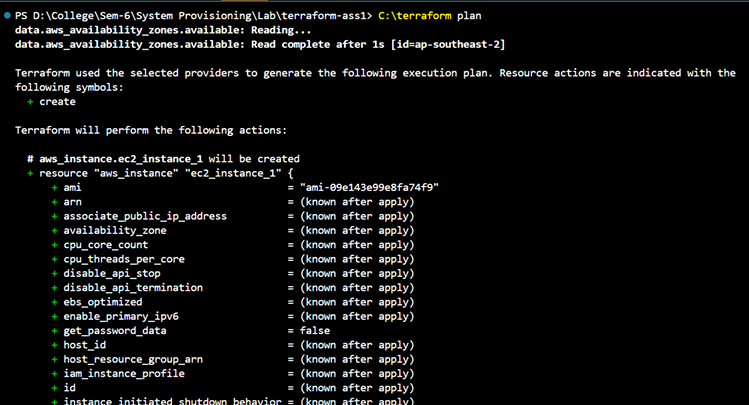
acl = "private"

}

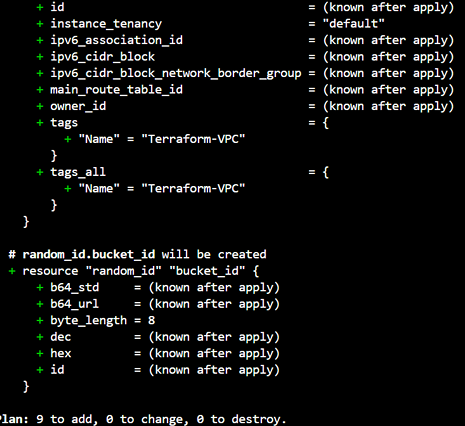
Terraform init:



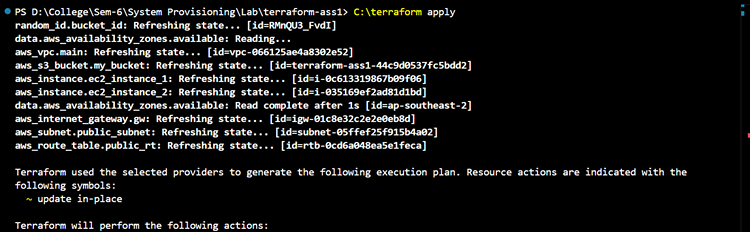
Terraform plan:

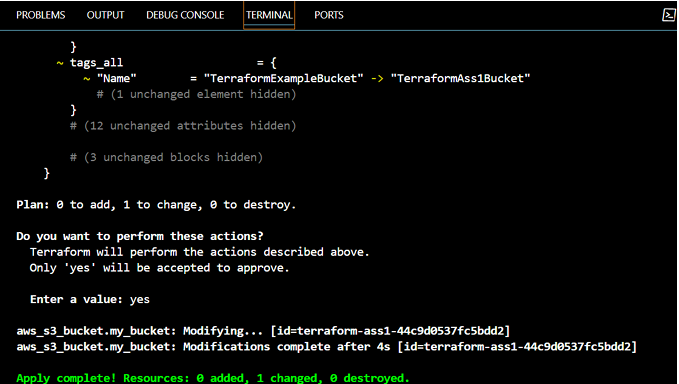


Terraform plan:

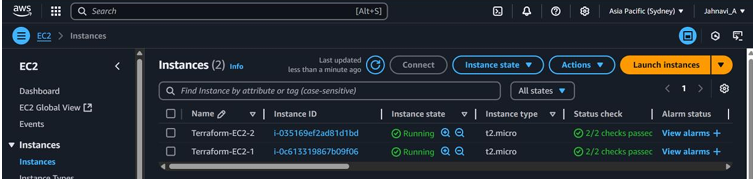


Terraform apply:

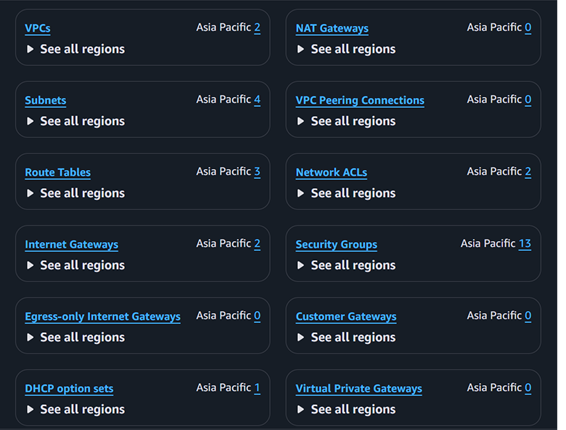


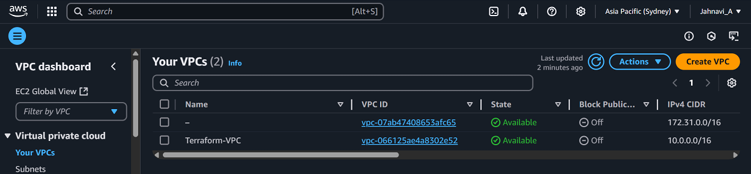
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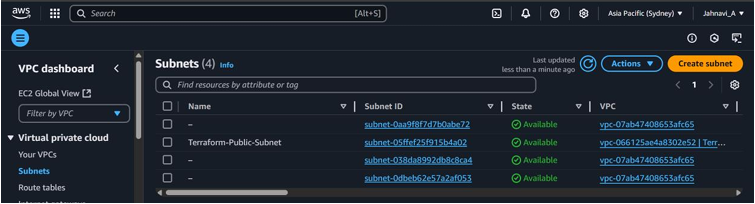
AWS Console Output: Instance-

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VPN-

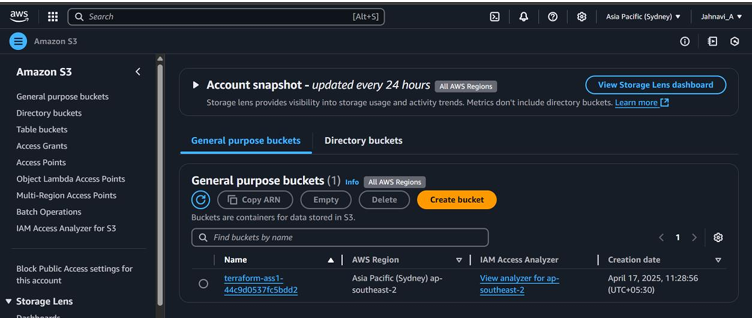








S3 Bucket-



Terraform destroy:

