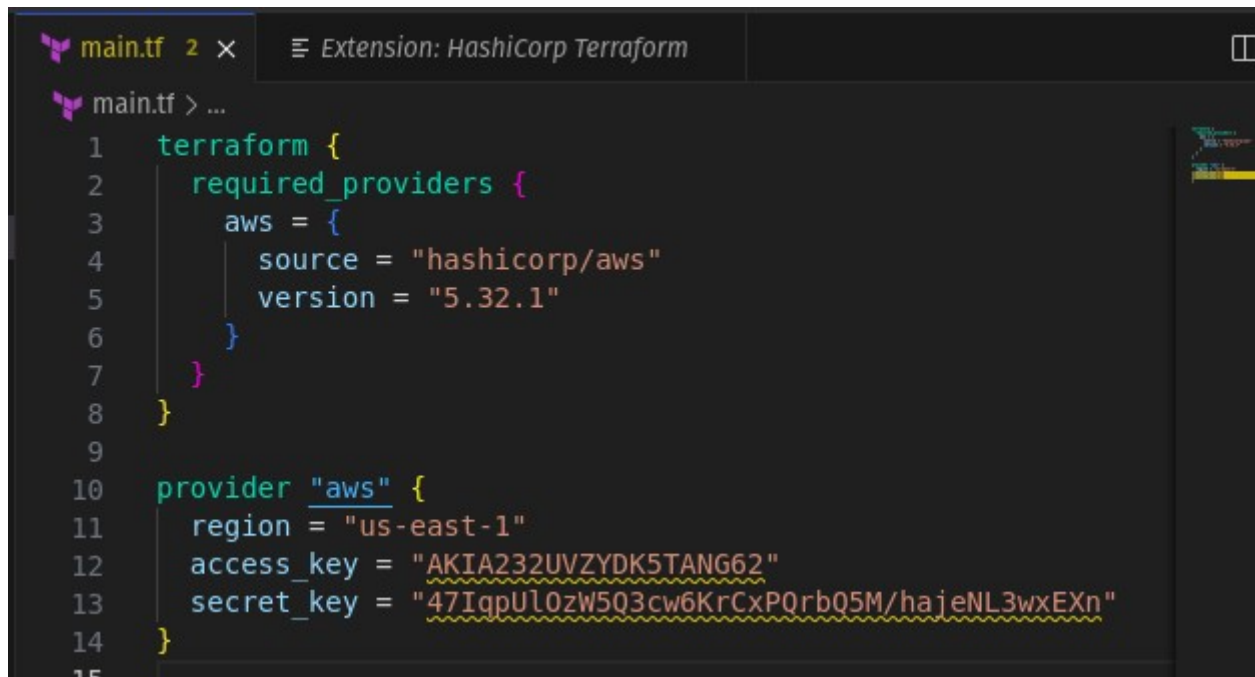


SPCM Lab-3

Objective : Provisioning an EC2 Instance on AWS.

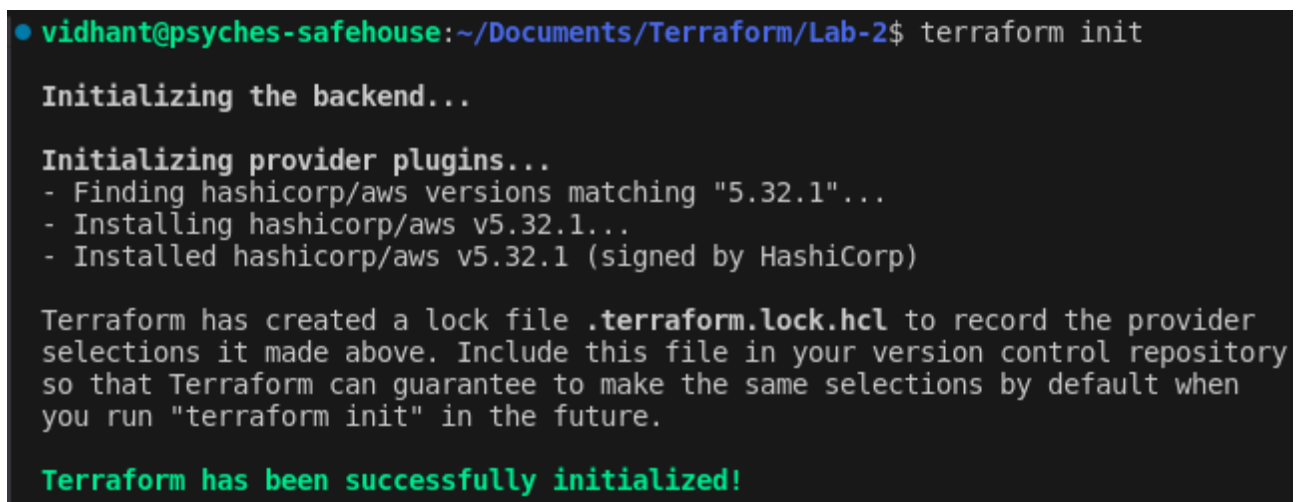
1. create and Initialize a terraform repository on your local Machine.

(a) Create a main.tf file and configure your cloud provider using the Access ID and Secret ID



```
main.tf 2 x Extension: HashiCorp Terraform
main.tf > ...
1 terraform {
2   required_providers {
3     aws = {
4       source = "hashicorp/aws"
5       version = "5.32.1"
6     }
7   }
8 }
9
10 provider "aws" {
11   region = "us-east-1"
12   access_key = "AKIA232UVZYDK5TANG62"
13   secret_key = "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"
14 }
15
```

(b) Initialize Terraform :



```
vidhant@psyches-safehouse:~/Documents/Terraform/Lab-2$ terraform init

Initializing the backend...

Initializing provider plugins...
- Finding hashicorp/aws versions matching "5.32.1"...
- Installing hashicorp/aws v5.32.1...
- Installed hashicorp/aws v5.32.1 (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!
```

2. Create a TerraForm Configuration File for EC2 instance (instance.tf)

```
instance.tf x
instance.tf > resource "aws_instance" "vidhant-ec2"
1 resource "aws_instance" "vidhant-ec2" {
2   instance_type = "t2.micro"
3   ami = "ami-0c7217cdde317cfec"
4   count = 1
5   tags = {
6     Name = "Vidhant-EC2-Instance"
7   }
8 }
```

3. Review Plan : **terraform plan**

```
vidhant@psyches-safehouse:~/Documents/Terraform/Lab-2-3$ terraform plan

Terraform used the selected providers to generate the following
execution plan. Resource actions are indicated with the following
symbols:
  + create

Terraform will perform the following actions:

# aws_instance.vidhant-ec2[0] will be created
+ resource "aws_instance" "vidhant-ec2" {
  ami           = "ami-0c7217cdde317cfec"
  instance_type = "t2.micro"
  tags          = {
    Name = "Vidhant-EC2-Instance"
  }
}
```

4. Apply Changes. **terraform apply**

```
Enter a value: yes

aws_instance.vidhant-ec2[0]: Creating...
aws_instance.vidhant-ec2[0]: Still creating... [10s elapsed]
aws_instance.vidhant-ec2[0]: Still creating... [20s elapsed]
aws_instance.vidhant-ec2[0]: Still creating... [30s elapsed]
aws_instance.vidhant-ec2[0]: Still creating... [40s elapsed]
aws_instance.vidhant-ec2[0]: Creation complete after 41s [id=i-0f0348178401c2a19]






Apply complete! Resources: 1 added, 0 changed, 0 destroyed.
vidhant@psyches-safehouse:~/Documents/Terraform/Lab-2-3$
```

5. Verify Resource Creation.

Instance state = running

X

Clear filters




<input type="checkbox"/>	Name 	Instance ID	Instance state 	Instance type
<input type="checkbox"/>	Vidhant-EC2-Instance	i-0f0348178401c2a19	 Running  	t2.micro

6. CleanUp Resources. **terraform destroy**

```
aws_instance.vidhant-ec2[0]: Destroying... [id=i-0f0348178401c2a19]
aws_instance.vidhant-ec2[0]: Still destroying... [id=i-0f0348178401c2a19, 10s elapsed]
aws_instance.vidhant-ec2[0]: Still destroying... [id=i-0f0348178401c2a19, 20s elapsed]
aws_instance.vidhant-ec2[0]: Still destroying... [id=i-0f0348178401c2a19, 30s elapsed]
aws_instance.vidhant-ec2[0]: Destruction complete after 35s

Destroy complete! Resources: 1 destroyed.
vidhant@psyches-safehouse: ~/Documents/Terraform/Lab-2-3$
```

7. Verify Resource Deletion

<input type="checkbox"/>	Name 	Instance ID	Instance state 
<input type="checkbox"/>	Vidhant-EC2-Instance	i-0f0348178401c2a19	 Terminated 