

SPCM Lab-4

Objective : Define and Use Variables in Terraform configuration

1. Create Terraform directory.

```
vidhant@psyches-safehouse:~$ mkdir terraform-variables
vidhant@psyches-safehouse:~$ cd terraform-variables/
vidhant@psyches-safehouse:~/terraform-variables$
```

Objective : Define and Use

2. Create terraform configuration file (main.tf) :

```
terminal Help
main.tf x
Lab-4 > main.tf > resource "aws_instance" "vidhant-ec2"
1 provider "aws" {
2   region = "us-east-1"
3 }
4
5 resource "aws_instance" "vidhant-ec2" {
6   ami = "ami-0277155c3f0ab2930"
7   instance_type = "t2.micro"
8 }
```

3. Define Variables : create a new file variables.tf and define variables for region, ami and instance_type.

```
main.tf x variables.tf x
Lab-4 > variables.tf > variable "instance_type"
1 variable "region" {
2   description = "AWS region"
3   default = "us-east-1"
4 }
5
6 variable "ami" {
7   description = "AMI ID"
8   default = "ami-0277155c3f0ab2930"
9 }
10
11 variable "instance_type" {
12   description = "EC2 instance type"
13   default = "t2.micro"
14 }
```

4. Use variables in main.tf :

```
main.tf 2 x variables.tf
Lab-4 > main.tf > ...
1 provider "aws" {
2     region = var.region
3     access_key = "AKIA232UVZDK5TANG62"
4     secret_key = "47IqpU10zW503cw6KrCxPQrbQ5M/hajeNL3wxEXn"
5 }
6
7 resource "aws_instance" "vidhant-ec2" {
8     ami = var.ami
9     instance_type = var.instance_type
10 }
11
```

5. Initialize and Apply configuration : (terraform init, terraform validate and terraform apply)

```
vidhant@psyches-safehouse:~/Documents/Terraform/Lab-4$ terraform init

Initializing the backend...

Initializing provider plugins...
- Finding latest version of hashicorp/aws...
- Installing hashicorp/aws v5.35.0...
```

```
vidhant@psyches-safehouse:~/Documents/Terraform/Lab-4$ terraform validate
Success! The configuration is valid.
```

```
vidhant@psyches-safehouse:~/Documents/Terraform/Lab-4$ terraform apply

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 will be created
+ resource "aws_instance" "vidhant-ec2" {
```

6. Checking aws console :

Instances (1/1) Info				
<input type="text" value="Find Instance by attribute or tag (case-sensitive)"/>				
<div>Any state</div>				
<input checked="" type="checkbox"/>	Name	Instance ID	Instance state	
<input checked="" type="checkbox"/>	Vidhant EC2	i-0f13daeabaa487122	Running	t

7. Cleaning up resources (terraform destroy)

```
Apply complete! Resources: 1 added, 0 changed, 0 destroyed.  
vidhant@psyches-safehouse:~/Documents/Terraform/Lab-4$ terraform destroy  
aws_instance.vidhant-ec2: Refreshing state... [id=i-0f13daeabaa487122]  
  
Terraform used the selected providers to generate the following execution  
plan. Resource actions are indicated with the following symbols:  
- destroy  
  
Terraform will perform the following actions:  
  
# aws_instance.vidhant-ec2 will be destroyed  
- resource "aws_instance" "vidhant-ec2" {
```