SPCM LAB

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Lab Exercise 5– Terraform Variables with Command Line Arguments

1. Create a Terraform Directory:
   mkdir terraform-cli-variables
   cd terraform-cli-variables

2. Create Terraform Configuration Files:
   • Create a file named main.tf:


```
terraform-cli-variables >  main.tf
   1    provider "aws" {
   2    region = var.region
   3    access_key = "AKIAYS2NV47DL6IMWZUT"
   4    secret_key = "/QPd3G4RWG+EBH0VOkYojkAI75GSDhZtlZS88ugS
   5    }
   6    resource "aws_instance" "example" {
   7    ami        |
   8    = var.ami
   9    instance_type = var.instance_type
  10    }
  11
```

   • Create a file named variables.tf:


```
terraform-cli-variables >  variable.tf
   1    variable "region" {
   2      description = "AWS region"
   3      default     = "us-west-2"
   4    }
   5
   6    variable "ami" {
   7      description = "AMI ID"
   8      default     = "ami-052c9ea013e6e3567"
   9    }
  10
  11    variable "instance_type" {
  12      description = "EC2 Instance Type"
  13      default     = "t2.small"
  14    }
```

3. Use Command Line Arguments:
terraform init

```
PS D:\6 th sem\SPCM\SPCM LAB\teraform lab files\terraform-cli-variable
s> terraform init

Initializing the backend...

Initializing provider plugins...
- Finding latest version of hashicorp/aws...
- Installing hashicorp/aws v5.38.0...
- Installed hashicorp/aws v5.38.0 (signed by HashiCorp)

Terraform has created a lock file .terraform.lock.hcl to record the pr
ovider
selections it made above. Include this file in your version control re
pository
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!
```

terraform apply -var 'region=us-east-1' -var 'ami=ami-0440d3b780d96b29d' -var 'instance_type=t2.micro

```
PS D:\6 th sem\SPCM\SPCM LAB\teraform lab files\terraform-cli-variable
s> terraform apply -var 'region=us-east-1' -var 'ami=ami-0440d3b780d96
b29d' -var 'instance_type=t2.micro'

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.example will be created
  + resource "aws_instance" "example" {
      + ami                          = "ami-0440d3b780d96b29d"
      + arn                          = (known after apply)
      + associate_public_ip_address  = (known after apply)
```

```
Plan: 1 to add, 0 to change, 0 to destroy.

Do you want to perform these actions?
  Terraform will perform the actions described above.
  Only 'yes' will be accepted to approve.

  Enter a value: yes

aws_instance.example: Creating...
aws_instance.example: Still creating... [10s elapsed]
aws_instance.example: Still creating... [20s elapsed]
aws_instance.example: Still creating... [30s elapsed]
aws_instance.example: Creation complete after 37s [id=i-0a9f5e2956f4e3
25f]

Apply complete! Resources: 1 added, 0 changed, 0 destroyed.
PS D:\6 th sem\SPCM\SPCM LAB\teraform lab files\terraform-cli-variable
s>
```

4. Test and Verify:

	Name		Instance ID	Instance state		Instance type		Status check	Alarm status	Availability Zone		Public I
			i-0a9f5e2956f4e325f	⊘ Running ⊕ ⊖		t2.micro		⏱ Initializing	View alarms +	us-east-1a		ec2-54-

Instances (1) Info

Any state

5. Clean Up:

```
PS D:\6 th sem\SPCM\SPCM LAB\teraform lab files\terraform-cli-variable
s> terraform destroy
aws_instance.example: Refreshing state... [id=i-0a9f5e2956f4e325f]

No changes. No objects need to be destroyed.

Either you have not created any objects yet or the existing objects
were already deleted outside of Terraform.

Destroy complete! Resources: 0 destroyed.
PS D:\6 th sem\SPCM\SPCM LAB\teraform lab files\terraform-cli-variable
s>
```

Instances (1) Info

Any state

	Name		Instance ID	Instance state		Instance type		Status check	Alarm status	Availability Zone		Public IPv4
			i-0a9f5e2956f4e325f	⏱ Shutting-d... ⊕ ⊖		t2.micro		⊘ 2/2 checks passed	View alarms +	us-east-1a		ec2-54-205-