Lab Exercise 5– Terraform Variables with Command Line Arguments Objective:

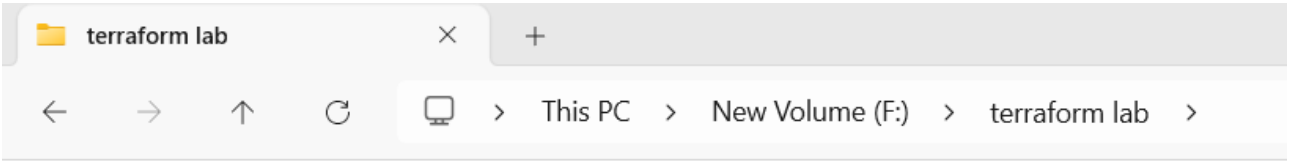
Learn how to pass values to Terraform variables using command line arguments.

Prerequisites:

- Terraform installed on your machine.
- Basic knowledge of Terraform variables.

Steps:

1. Create a Terraform Directory:



2. Create Terraform Configuration Files:

- Create a file named main.tf:

main.tf Create a file named variables.tf:

variables.tf

variable.tf

```
variable "ami" {
 description = "AMI ID"
 default = "ami-03f4878755434977f"
}

variable "instance_ty" {
  description = "ec2-instance"
  default = "t2.micro"
}

variable "region_ec2" {
  description = "ec2-region"
  default = "ap-south-1"
}
```

3. Use Command Line Arguments:

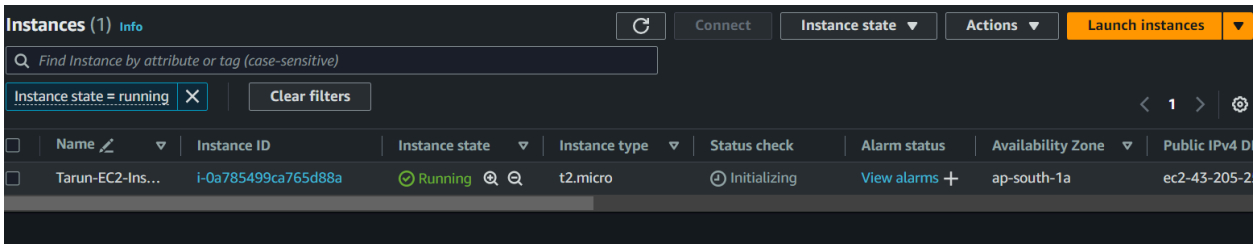
```
PS F:\terraform lab\lab5> terraform apply -var "instance-ty-t2.small" -var "region_ec2-ap-south-1"
```

```
Terraform will perform the following actions:

  # aws_instance.example will be created
  + resource "aws_instance" "example" {
      + ami                                  = "ami-03f4878755434977f"
      + arn                                  = (known after apply)
      + associate_public_ip_address          = (known after apply)
      + availability_zone                    = (known after apply)
      + cpu_core_count                       = (known after apply)
      + cpu_threads_per_core                 = (known after apply)
      + disable_api_stop                     = (known after apply)
      + disable_api_termination              = (known after apply)
      + ebs_optimized                        = (known after apply)
      + get_password_data                    = false
      + host_id                              = (known after apply)
      + host_resource_group_arn              = (known after apply)
      + iam_instance_profile                 = (known after apply)
      + id                                   = (known after apply)
      + instance_initiated_shutdown_behavior = (known after apply)
      + instance_lifecycle                   = (known after apply)
      + instance_state                       = (known after apply)
      + instance_type                        = "t2.small"
      + ipv6_address_count                   = (known after apply)
      + ipv6_addresses                       = (known after apply)
      + key_name                             = (known after apply)
      + monitoring                           = (known after apply)
      + outpost_arn                          = (known after apply)
      + password_data                        = (known after apply)
      + placement_group                      = (known after apply)
      + placement_partition_number           = (known after apply)
      + primary_network_interface_id         = (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: Creation complete after 24s [id=i-0815a18f08a60d7e8]

Apply complete! Resources: 1 added, 0 changed, 0 destroyed.
```

4. Test and Verify:

```
+ instance_type                        = "t2.small"
```



5. Clean Up:

```
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.example will be destroyed
  - resource "aws_instance" "example" {
      - ami                                  = "ami-03f4878755434977f" -> null
      - arn                                  = "arn:aws:ec2:ap-south-1:637423583821:instance/i-0815a18f08a60d7e8" -> null
      - associate_public_ip_address          = true -> null
      - availability_zone                    = "ap-south-1a" -> null
      - cpu_core_count                       = 1 -> null
      - cpu_threads_per_core                 = 1 -> null
      - disable_api_stop                     = false -> null
      - disable_api_termination              = false -> null
      - ebs_optimized                        = false -> null
      - get_password_data                    = false -> null
      - hibernation                          = false -> null
      - id                                   = "i-0815a18f08a60d7e8" -> null
      - instance_initiated_shutdown_behavior = "stop" -> null
      - instance_state                       = "running" -> null
      - instance_type                        = "t2.small" -> null
      - ipv6_address_count                   = 0 -> null
      - ipv6_addresses                       = [] -> null
      - monitoring                           = false -> null
      - placement_partition_number           = 0 -> null
```

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

Do you really want to destroy all resources?
  Terraform will destroy all your managed infrastructure, as shown above.
  There is no undo. Only 'yes' will be accepted to confirm.

  Enter a value: yes

aws_instance.example: Destroying... [id=i-0815a18f08a60d7e8]
aws_instance.example: Still destroying... [id=i-0815a18f08a60d7e8, 10s elapsed]
aws_instance.example: Still destroying... [id=i-0815a18f08a60d7e8, 20s elapsed]
aws_instance.example: Still destroying... [id=i-0815a18f08a60d7e8, 30s elapsed]
aws_instance.example: Still destroying... [id=i-0815a18f08a60d7e8, 40s elapsed]
aws_instance.example: Destruction complete after 40s

Destroy complete! Resources: 1 destroyed.
```