Lab Exercise 7– Terraform Variables with Command Line Arguments

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Batch-2 (DevOps)

Objective:

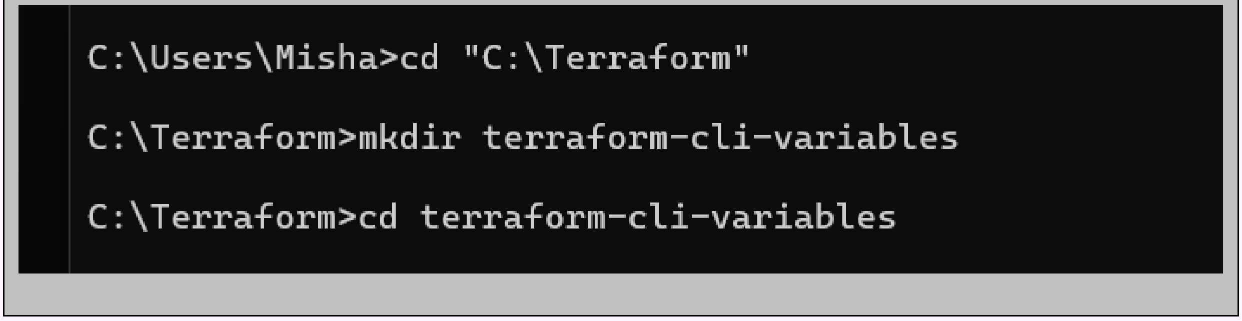
Learn how to pass values to Terraform variables using command line arguments.

Steps:

1. Create a Terraform Directory:

mkdir terraform-cli-variables

cd terraform-cli-variables



```
C:\Users\Misha>cd "C:\Terraform"

C:\Terraform>mkdir terraform-cli-variables

C:\Terraform>cd terraform-cli-variables
```

2. Create Terraform Configuration Files:

- Create a file named main.tf:

# instance.tf

```
resource "aws_instance" "example" {
  ami           = var.ami
  instance_type = var.instance_type
}
```

- Create a file named variables.tf:

# variables.tf

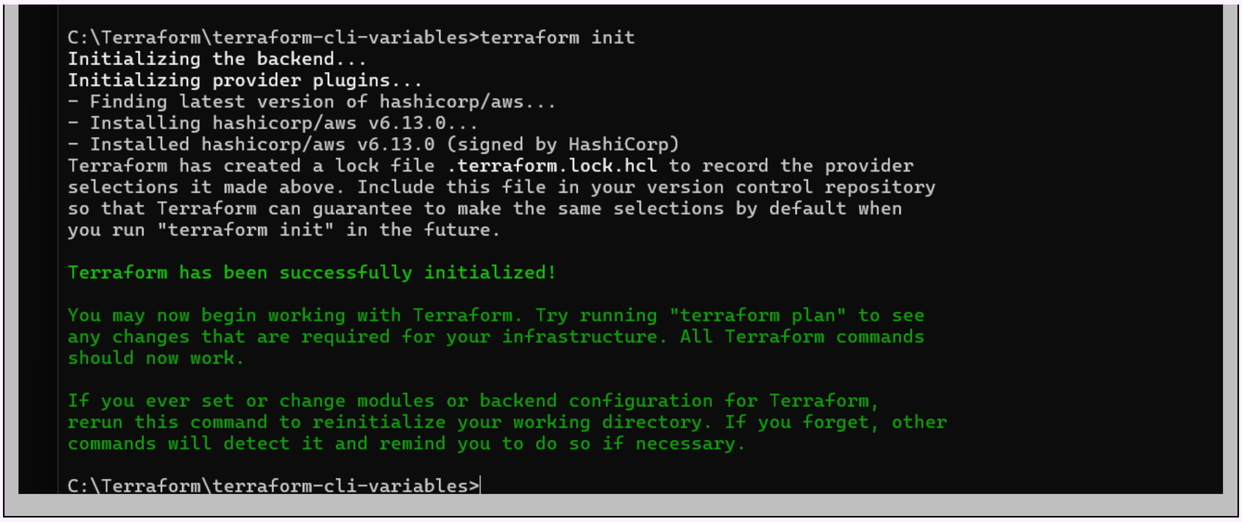
```
variable "ami" {
  description = "AMI ID"
  default     = " ami-08718895af4dfa033"
}

variable "instance_type" {
  description = "EC2 Instance Type"
  default     = "t2.micro"
}
```

3. Use Command Line Arguments:

- Open a terminal and navigate to your Terraform project directory.
- Run the terraform init command:

```
terraform init
```



```
C:\Terraform\terraform-cli-variables>terraform init
Initializing the backend...
Initializing provider plugins...
- Finding latest version of hashicorp/aws...
- Installing hashicorp/aws v6.13.0...
- Installed hashicorp/aws v6.13.0 (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!

You may now begin working with Terraform. Try running "terraform plan" to see
any changes that are required for your infrastructure. All Terraform commands
should now work.

If you ever set or change modules or backend configuration for Terraform,
rerun this command to reinitialize your working directory. If you forget, other
commands will detect it and remind you to do so if necessary.

C:\Terraform\terraform-cli-variables>
```

- Run the terraform apply command with command line arguments to set variable values:

```
terraform plan -var=”ami=ami-0522ab6e1ddcc7055” -var=”instance_type=t3.micro”
```

- Adjust the values based on your preferences.

4. Test and Verify:

- Observe how the command line arguments dynamically set the variable values during the apply process.
- Access the AWS Management Console or use the AWS CLI to verify the creation of resources in the specified region.

5. Clean Up:

After testing, you can clean up resources:

```
terraform destroy
```

Confirm the destruction by typing yes.