Lab Exercise 3– Terraform IAM User Setting

Prerequisites: Terraform Installed: Make sure you have Terraform installed on your machine. Follow the official installation guide if needed.

AWS Credentials: Ensure you have AWS credentials (Access Key ID and Secret Access Key) configured. You can set them up using the AWS CLI or by setting environment variables.

Exercise Steps:

Step 1: Create a New Directory:

Create a new directory for your Terraform configuration:

"Terraform-Demo"

Step 2: Create Terraform Configuration File (main.tf):

Create a file named main.tf with the following content:

```
terraform {
 required_providers {
  aws = {
   source = "hashicorp/aws"
   version = "5.31.0"
  }
 }
}
```

```
provider "aws" {
  region     = "ap-south-1"
  access_key = "your IAM access key"
  secret_key = "your secret access key"
}
```

This script defines an AWS provider and provisions an EC2 instance.

Step 3: Initialize Terraform:

Run the following command to initialize your Terraform working directory:

terraform init

```
jc@LAPTOP-EL2MQIQM:~$ terraform -version
Terraform v1.10.4
on linux_amd64
jc@LAPTOP-EL2MQIQM:~$ mkdir Terraform-Demo
cd Terraform-Demo
jc@LAPTOP-EL2MQIQM:~/Terraform-Demo$ gedit main.tf
MESA: error: ZINK: failed to choose pdev
glx: failed to create drisw screen
jc@LAPTOP-EL2MQIQM:~/Terraform-Demo$ ls
main.tf
jc@LAPTOP-EL2MQIQM:~/Terraform-Demo$ terraform init
Initializing the backend...
Initializing provider plugins...
- Finding hashicorp/aws versions matching "5.31.0"...
- Installing hashicorp/aws v5.31.0...
- Installed hashicorp/aws v5.31.0 (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 reposito
ry
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 se
e
```

```
Terraform has been successfully initialized!

You may now begin working with Terraform. Try running "terraform plan" to se
e
any changes that are required for your infrastructure. All Terraform command
s
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, ot
her
commands will detect it and remind you to do so if necessary.
jc@LAPTOP-EL2MQIQM:~/Terraform-Demo$ terraform validate
Success! The configuration is valid.

jc@LAPTOP-EL2MQIQM:~/Terraform-Demo$ terraform apply

No changes. Your infrastructure matches the configuration.

Terraform has compared your real infrastructure against your configuration
and found no differences, so no changes are needed.

Apply complete! Resources: 0 added, 0 changed, 0 destroyed.
jc@LAPTOP-EL2MQIQM:~/Terraform-Demo$
```