Task-1 Terraform

Installing and connecting Terraform with aws:

Data Engg Task — main.tf

File Edit View

```
provider "aws" {
  access_key = "AKIA36KU44PYLR6ZF2PU"
  secret_key = "N8sGwCnrU11cLJ89SfXrgMTIxxdrzj8YM2arAegF"
  region     = "us-east-2"
}

Create a new EC2 instance
resource "aws_instance" "example" {
  ami           = "ami-0e820afa569e84cc1"  # Replace with desired AMI ID
  instance_type = "t2.micro"                # Replace with desired instance type
  key_name      = "srinadh"             # Replace with your key pair name

  tags = {
    Name = "my-instance1"  # Replace with desired instance name
  }
}
```

Launching EC2 using cmd :

```
D:\DE\DataEngineering>terraform init

Initializing the backend...

Initializing provider plugins...
- Finding latest version of hashicorp/aws...
- Installing hashicorp/aws v5.4.0...
- Installed hashicorp/aws v5.4.0 (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.

D:\DE\DataEngineering>terraform plan

Terraform used the selected providers to generate the following execution plan. Resource actions are indicated with the
following symbols:
  + create
```

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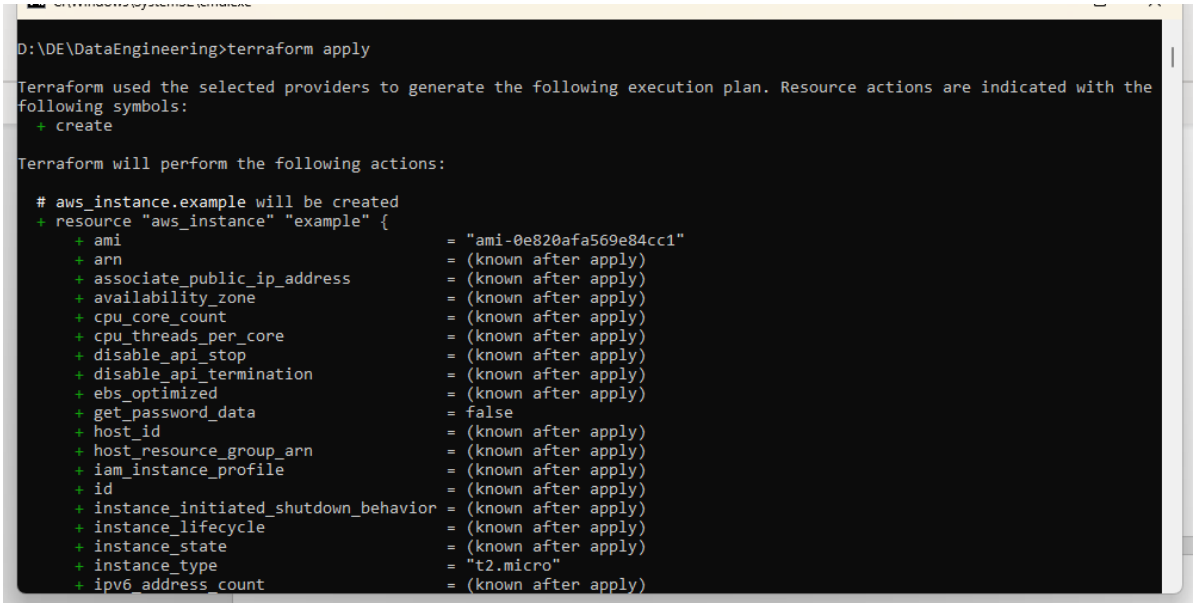
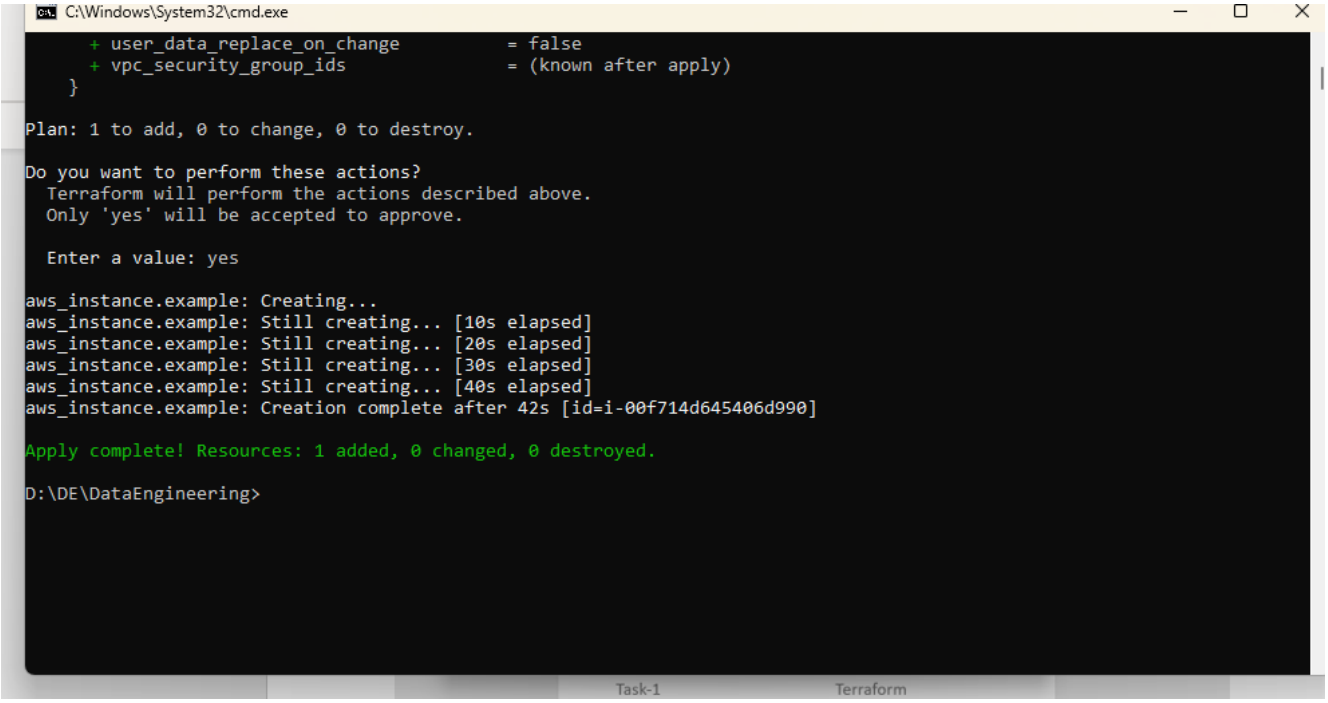


```
D:\DE\DataEngineering>terraform apply

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.example will be created
  + resource "aws_instance" "example" {
      + ami                                  = "ami-0e820afa569e84cc1"
      + 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.micro"
      + ipv6_address_count                   = (known after apply)
```



```
C:\Windows\System32\cmd.exe
      + user_data_replace_on_change          = false
      + vpc_security_group_ids               = (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: Still creating... [40s elapsed]
aws_instance.example: Creation complete after 42s [id=i-00f714d645406d990]

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

D:\DE\DataEngineering>
```