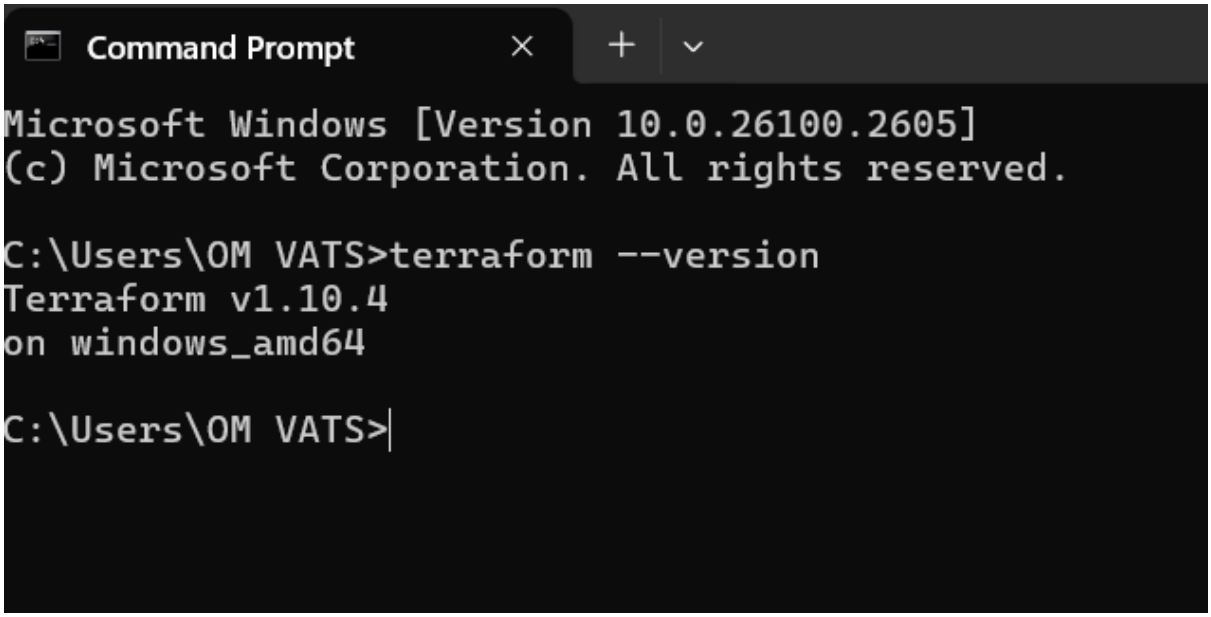
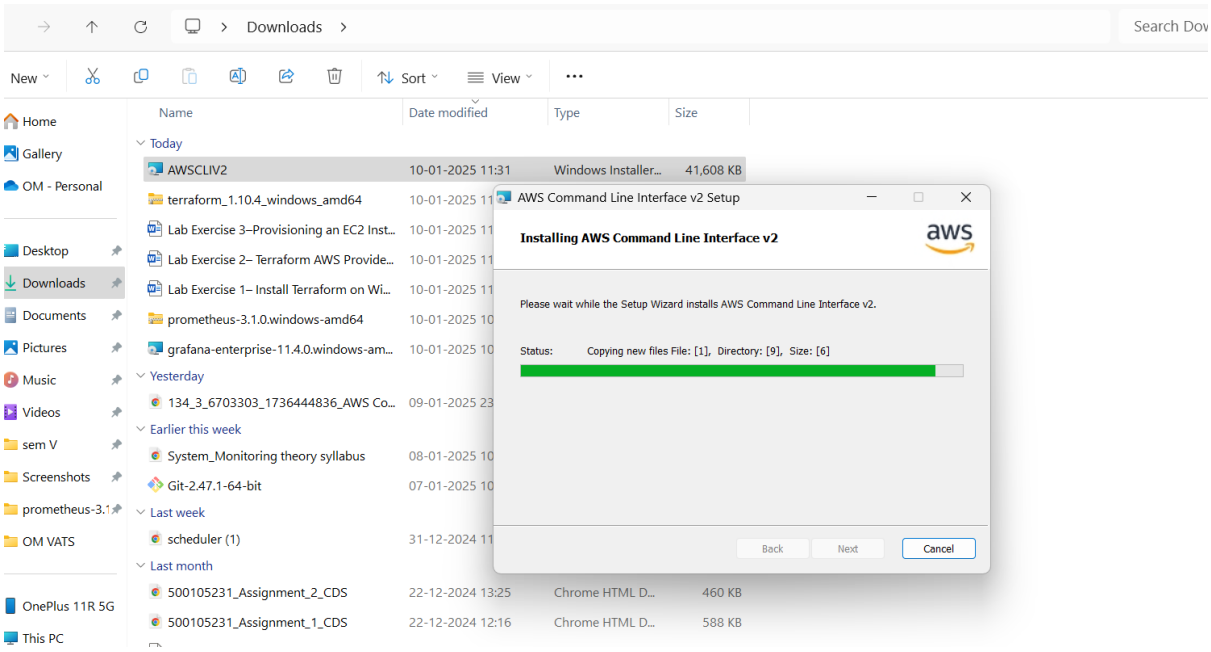
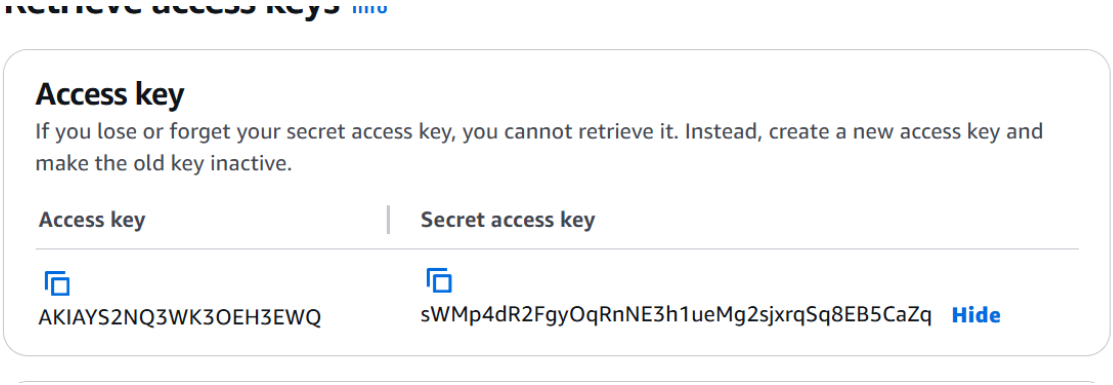
Lab Exercise 2– Terraform AWS Provider and IAM User Setting

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:

```
C:\Users\OM VATS>mkdir aws-terraform-demo
```

```
C:\Users\OM VATS>cd aws-terraform-demo
```

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

```
C:\Users\OM VATS\aws-terraform-demo>echo. > main.tf
```

```
Microsoft Windows [Version 10.0.26100.2605]
(c) Microsoft Corporation. All rights reserved.

C:\Users\OM VATS>aws configure
AWS Access Key ID [None]: AKIAYS2NQ3WK3OEH3EWQ
AWS Secret Access Key [None]: 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
Default region name [None]: Asia Pacific (Tokyo)
Default output format [None]: json
```

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

```
C:\Users\OM VATS\aws-terraform-demo>notepad main.tf
```

File Edit View

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

provider "aws" {
  region     = "ap-south-1"
  access_key = "AKIAYS2NQ3WK3OEH3EWQ"
  secret_key = "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"
}
```

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:

```
C:\Users\OM VATS\aws-terraform-demo>terraform init
Initializing the backend...
Initializing provider plugins...
- Finding hashicorp/aws versions matching "5.31.0"...
- Installing hashicorp/aws v5.31.0...
```

```
C:\Users\OM VATS\aws-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 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.
```