Name: Anish Kulkarni Roll No.: 29 Class: D15C AY: 2024-25

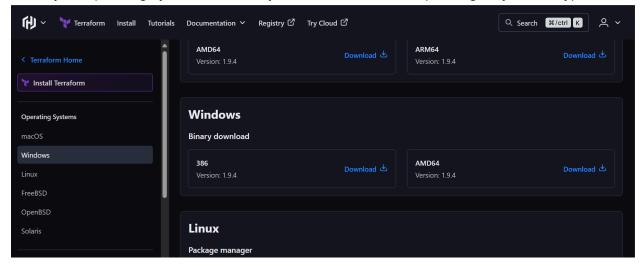
Experiment No. 5

Aim: To understand Terraform lifecycle, core concepts/terminologies and install it on a Linux machine and Windows.

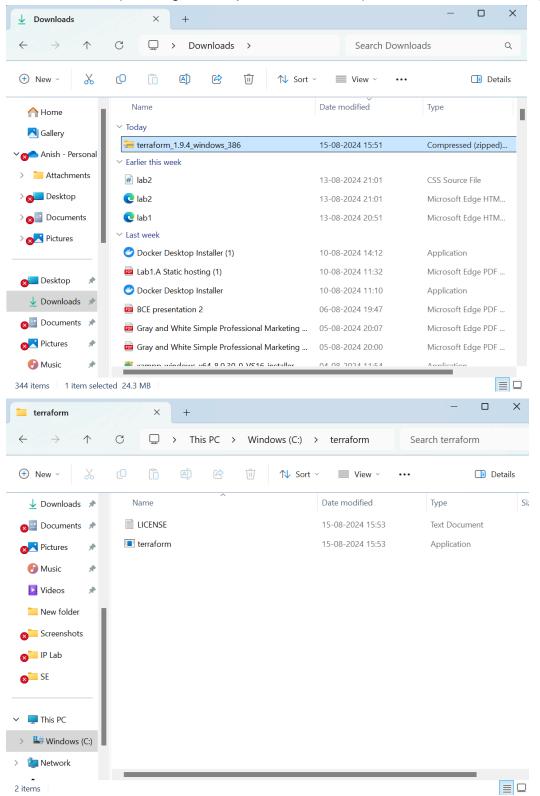
Steps:-

Step 1: Install Terraform from Terraform's official website: https://www.terraform.io/downloads.html.

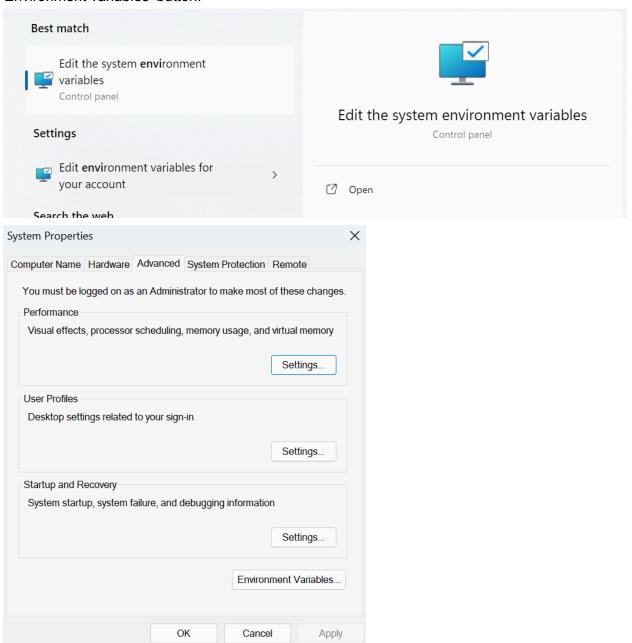
Select your operating system followed by either 32bit or 64bit depending on your OS type.



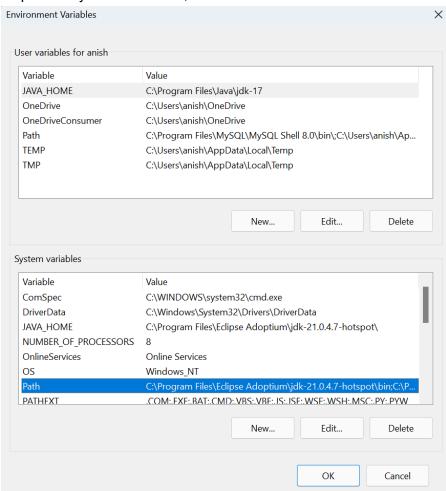
Step 2: Once the download is complete, navigate to the downloaded zipped terraform folder and extract the folder (including the setup file Terraform.exe) into 'C:\Terraform' directory.



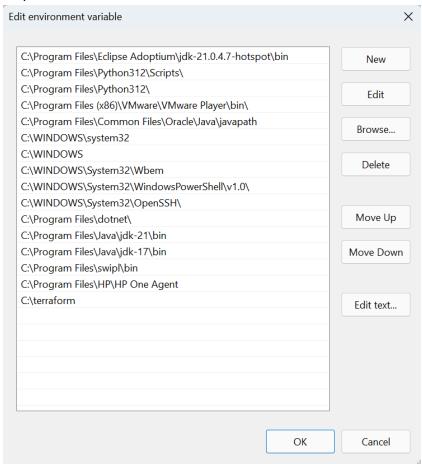
Step 3: Navigate to 'Edit the system environment variables' in your device and click on the 'Environment variables' button.



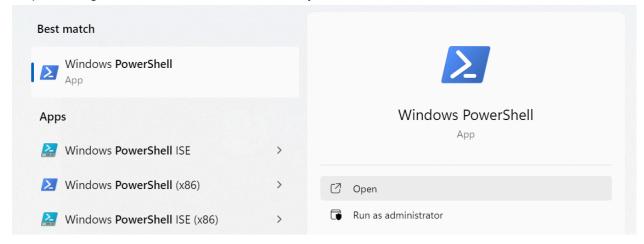
Step 4: In 'System variables', click on 'Path' and then click on the 'Edit' button.



Step 5: Click on 'New' and enter 'C:\terraform' and click on 'OK'.



Step 6: Navigate to 'Windows PowerShell' on your device and click on 'Run as administrator'.



Step 7: Open Terraform in PowerShell. This displays all the main commands, other commands and global options. This being your output means that you have successfully installed Terraform on your system.

```
Administrator: Windows PowerShell
Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.
Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows
PS C:\WINDOWS\system32> terraform
Usage: terraform [global options] <subcommand> [args]
The available commands for execution are listed below.
The primary workflow commands are given first, followed by
less common or more advanced commands.
Main commands:
 init
                Prepare your working directory for other commands
 validate
                Check whether the configuration is valid
 plan
                Show changes required by the current configuration
                Create or update infrastructure
 apply
 destroy
               Destroy previously-created infrastructure
All other commands:
 console
                Try Terraform expressions at an interactive command prompt
                Reformat your configuration in the standard style
  force-unlock Release a stuck lock on the current workspace
                Install or upgrade remote Terraform modules
 get
 graph
                Generate a Graphviz graph of the steps in an operation
                Associate existing infrastructure with a Terraform resource
  import
 login
                Obtain and save credentials for a remote host
 logout
                Remove locally-stored credentials for a remote host
 metadata
                Metadata related commands
                Show output values from your root module
 output
                Show the providers required for this configuration
 providers
                Update the state to match remote systems
 refresh
 show
                Show the current state or a saved plan
                Advanced state management
 state
 taint
                Mark a resource instance as not fully functional
                Execute integration tests for Terraform modules Remove the 'tainted' state from a resource instance
 test
 untaint
                Show the current Terraform version
 version
 workspace
                Workspace management
```