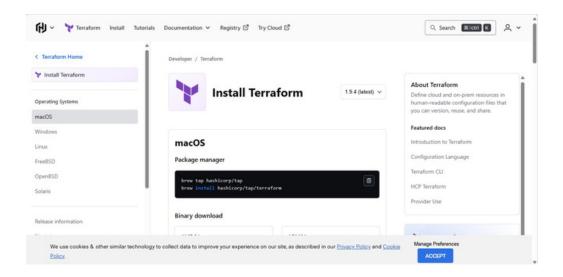
Experiment No: 5

Aim: To understand terraform lifecycle, core concepts/terminologies and install it on a Window/Linux Machine.

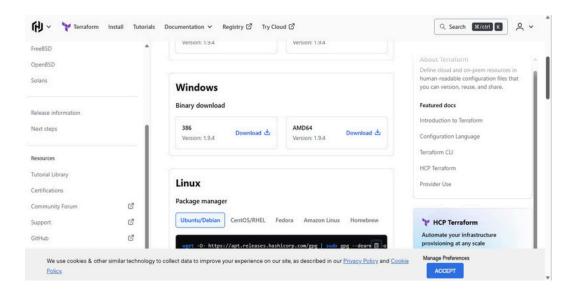
Installation and Configuration Steps of Terraform in Windows:

Step 1: Download terraform

1) To install Terraform, First Download the Terraform Cli Utility for windows from terraforms official website https://www.terraform.io/downloads.html

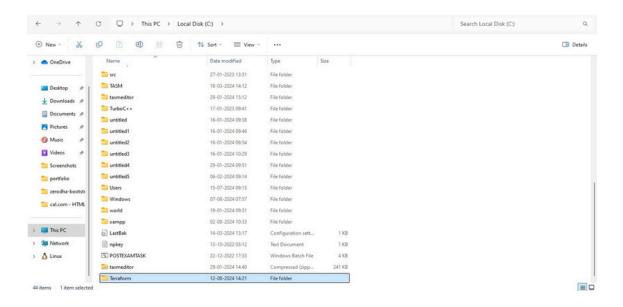


2)Select the Operating System Windows followed by either 32 bit or 64 bit based on your OS type.

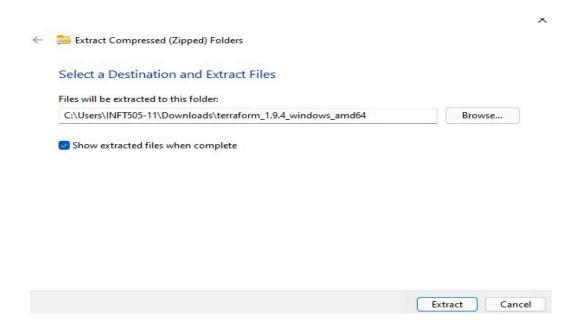


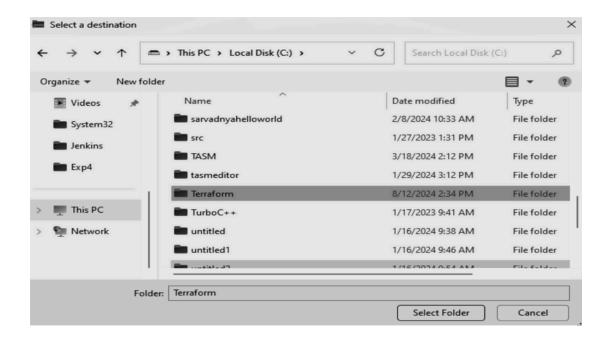
Step 2: Extract the downloaded setup file Terraform.exe in C:\Terraform Directory

1) Go to file manager -> Click on This PC -> move to C drive and create a new folder for example named terraform

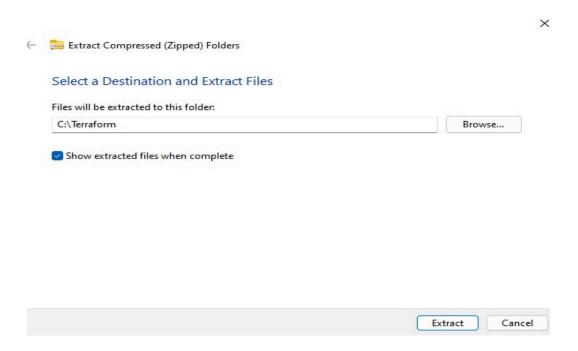


2) Got to location where main file is downloaded, right click on the file name and click on extract all while clicking on extract all it displays the location of the file to be saved, after extraction initially the destination of file to be extracted is not the folder which we have created earlier in previous steps, so to get the exact folder click on Browse and select it.

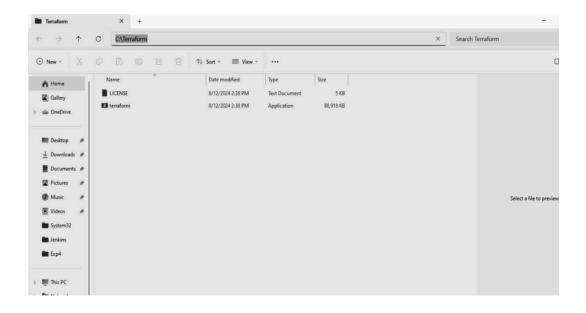




3) Click on extract Button.

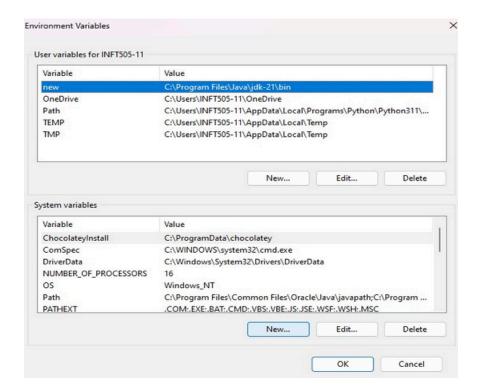


4) After extracting it will redirect to file manager copy the path which will be used for the further steps

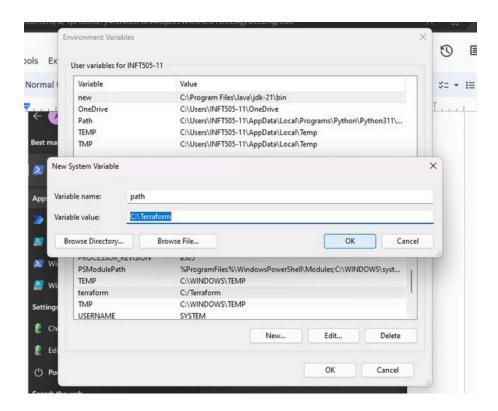


Step 3: Set the System path for Terraform in Environment Variables

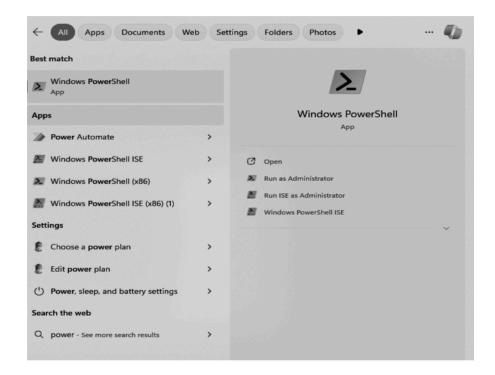
1) Search Environment Variable from search area in the Taskbar then Click on New under System Variables



2) Set the Variable name as path and paste the location of the folder which we copied in previous step after extraction process as the variable value .Click on Ok



Step 4: Open PowerShell with Admin Access



Step 5: Open Terraform in PowerShell and check its functionality

```
PS C:\Users\INFT505-11> 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
apply Create or update infrastructure
destroy Destroy previously-created infrastructure

All other commands:

console Try Terraform expressions at an interactive command prompt
fint Reformat your configuration in the standard style
force-unlock Release a stuck lock on the current workspace
get Install or upgrade remote Terraform modules
graph Generate a Graphviz graph of the steps in an operation
import Associate existing infrastructure with a Terraform resource
login Obtain and save credentials for a remote host
netadata
logout Remove locally-stored credentials for a remote host
metadata
output Show output values from your root module
providers Show the providers required for this configuration
refresh Update the state to match remote systems
show Show the current state or a saved plan
state Advanced state management
taint Mark a resource instance as not fully functional
```

If the case of any Errors, then please recheck or set the path of Terraform in Environment variable again.