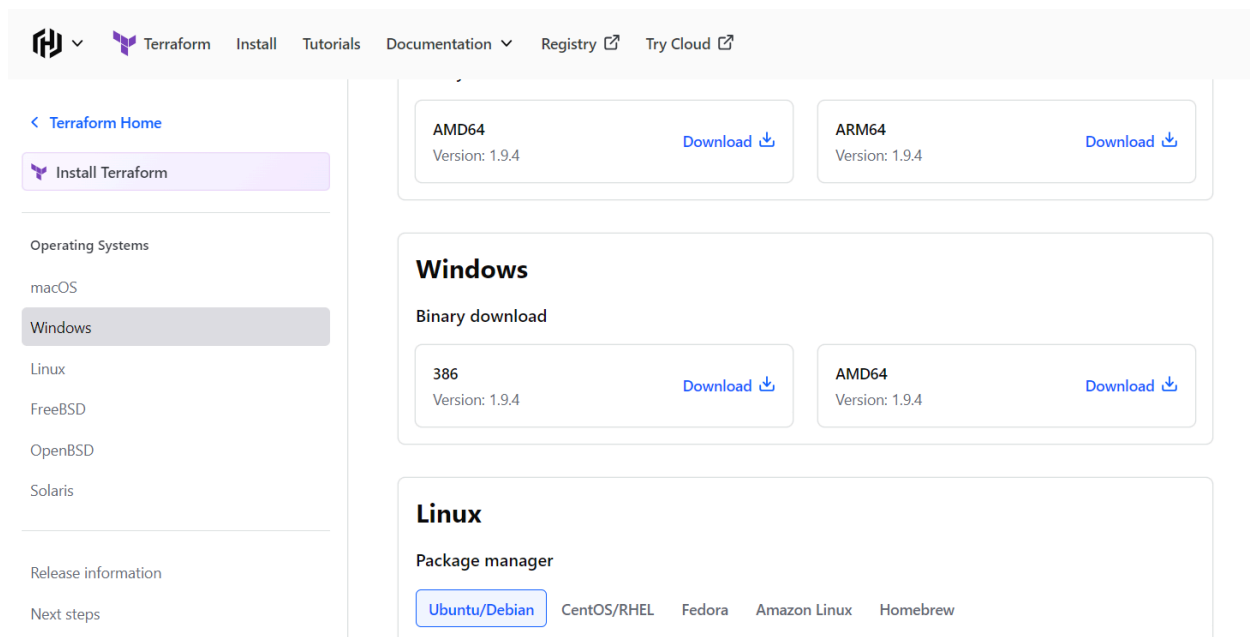# Installation guide of Terraform (Windows).

Step 1: Download terraform

To install Terraform, First Download the Terraform Cli Utility for windows
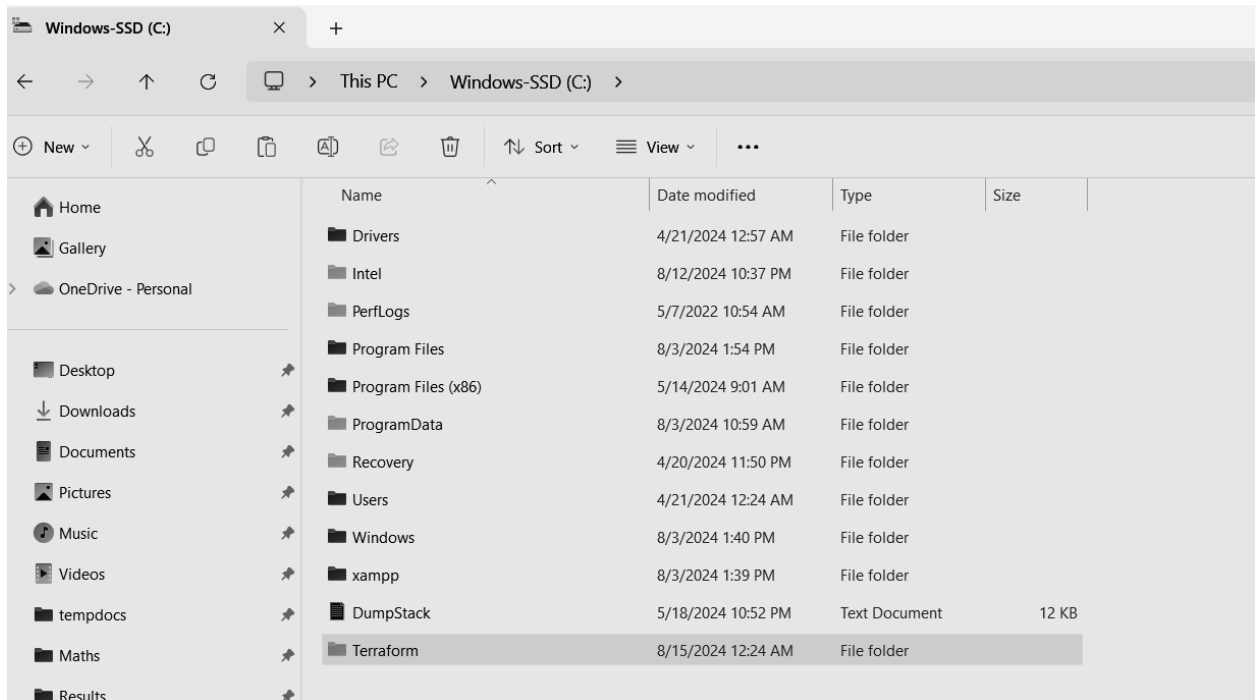from terraforms official website
website:https://www.terraform.io/downloads.html
Select the Operating System Windows followed by either 32bit (386) or 64 bit (AMD64) based
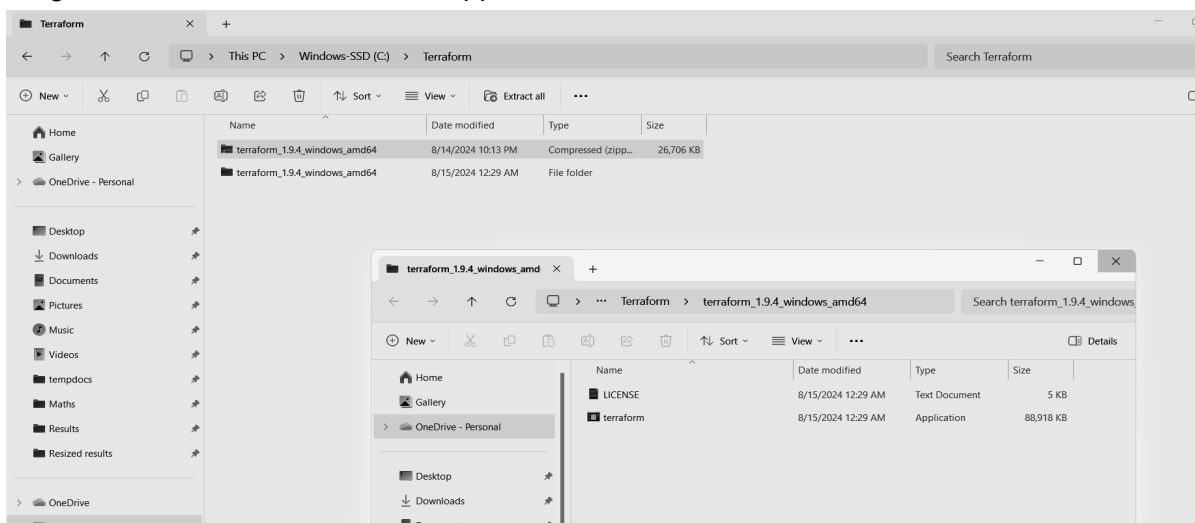on your OS type.

Step 2: Create a folder for Terraform:

- Open **File Explorer** and navigate to `C:\` or another location where you want to store
  Terraform.
- Right-click in the folder, select **New > Folder**, and name the folder something like
  `Terraform`.
- For example, the folder might be `C:\Terraform`.
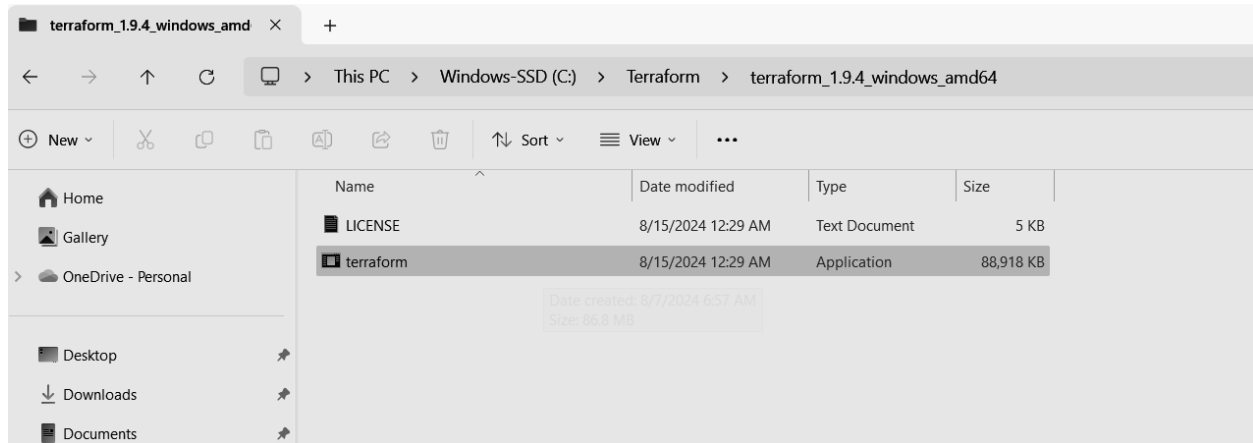
Step 3: Extract Terraform into this folder:

- Make sure to move the zip file from downloads to this new folder if it is not there already.
- After downloading the `.zip` file, right-click the `.zip` and choose **Extract All**.
- Extract the contents of the `.zip` file into the folder you just created (e.g., `C:\Terraform`).

*the background is the terraform folder in the c drive where we unzip the file and the forefront image is of contents inside this unzipped folder.
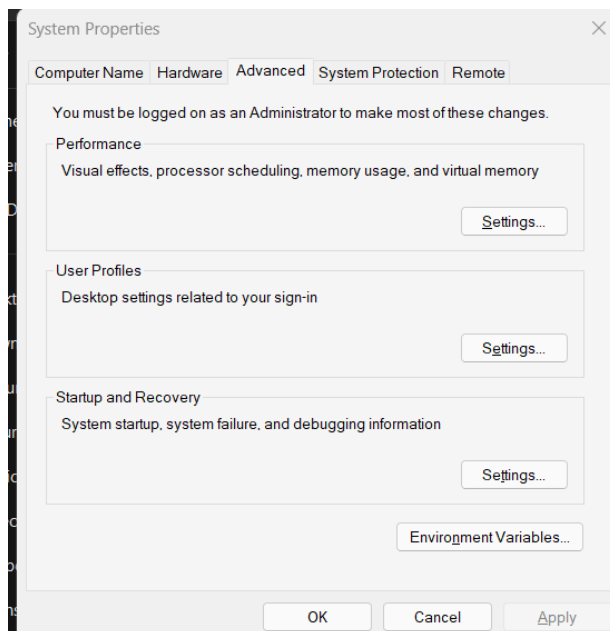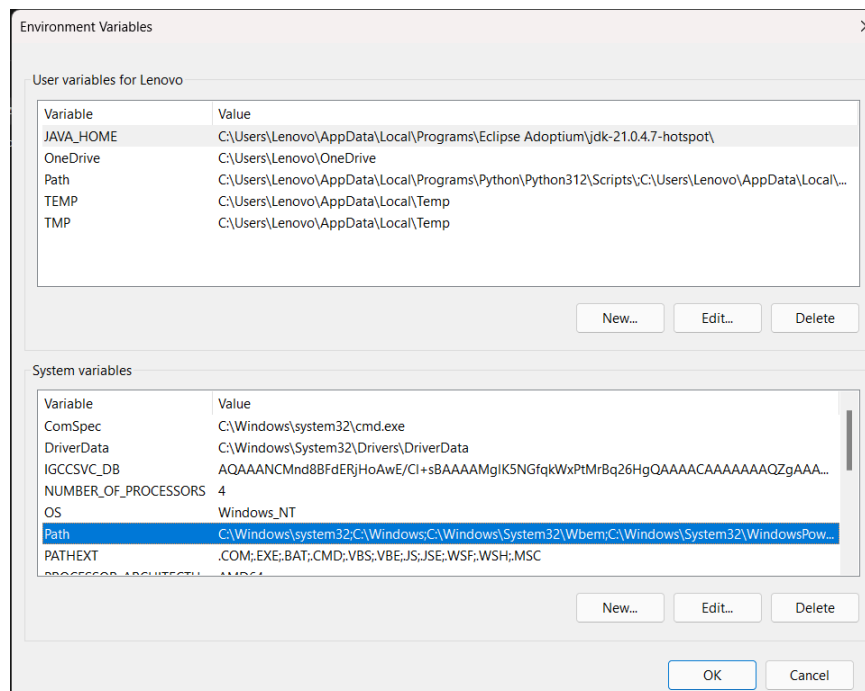
Step 4: Add to path

- Theory : the system uses top level search for finding the executable files, so rule of thumb is to add the directory which is a direct parent to the terraform exe.
- Hence, we first locate the terraform.exe and only copy the path till its parent directory.

the highlighted file is the executable file and we will just copy that terraform_1.9.4_windows_amd64 visible in the path above.

- Now search for edit environment variables and click on it.
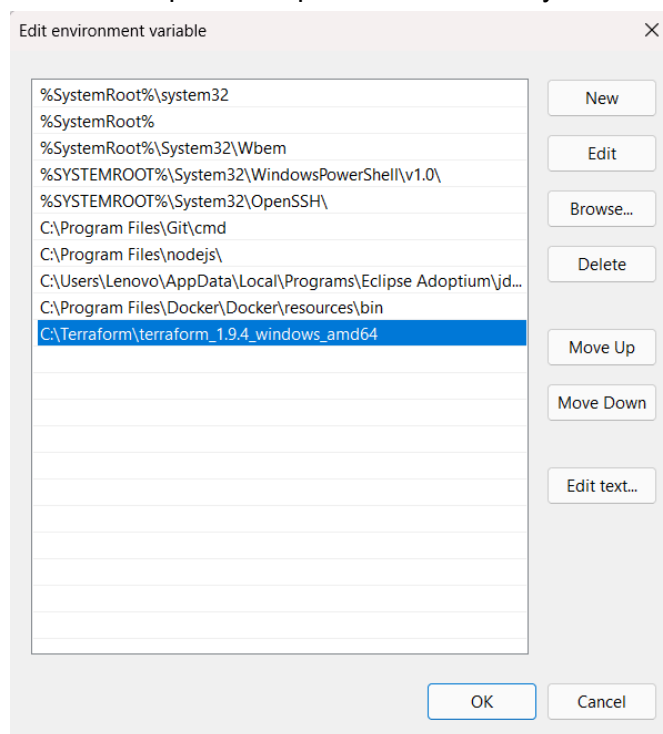- Now click on environment variables.

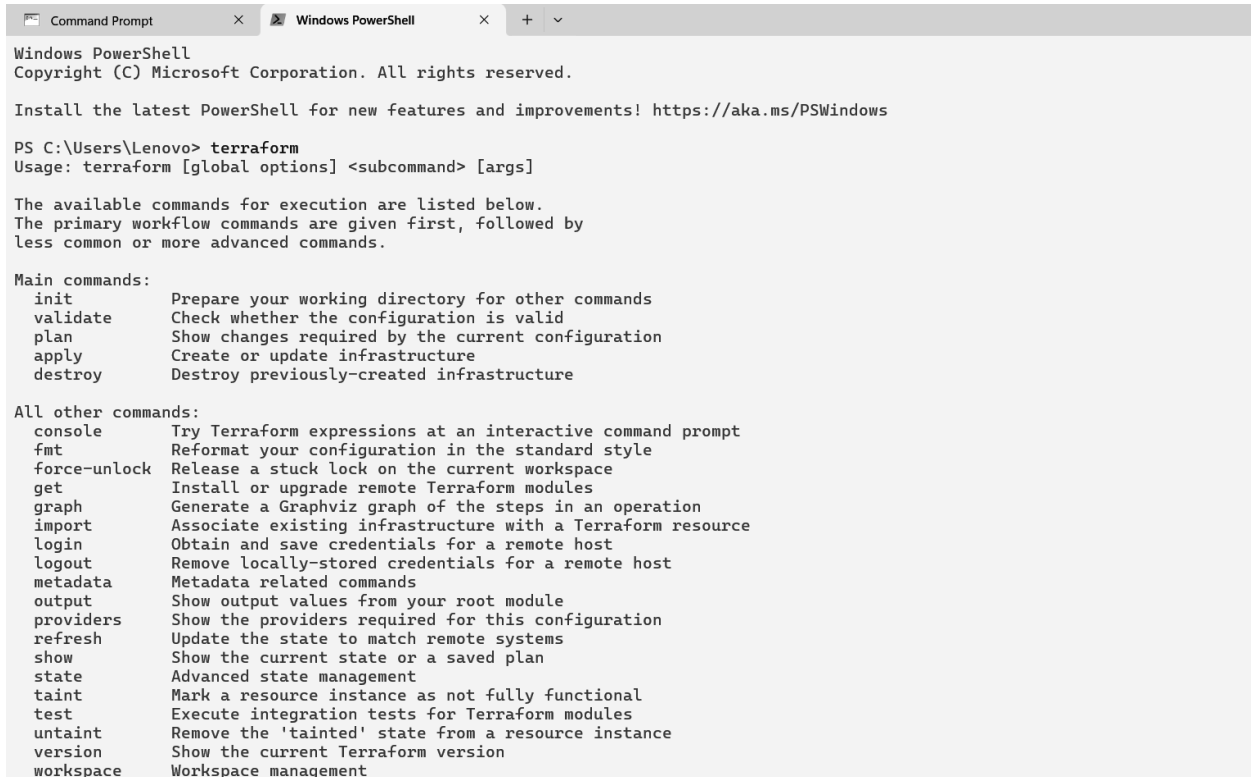- Now select path from the system variables and click on edit.

*Note click on edit and not new!

- ● Now paste the path to the directory that we copied.

Step 5: Run terraform command in shell to see if it works

```
Windows PowerShell
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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\Lenovo> 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
  fmt           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
  logout        Remove locally-stored credentials for a remote host
  metadata      Metadata related commands
  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
  test          Execute integration tests for Terraform modules
  untaint       Remove the 'tainted' state from a resource instance
  version       Show the current Terraform version
  workspace     Workspace management
```