EXPERIMENT NO. 05

Aim: To understand terraform lifecycle, core concepts/terminologies and install it on Windows.

1.Download and Install Terraform:

- If you haven't already, download Terraform from the official website.
- Install Terraform by extracting the downloaded zip file to a directory of your choice. Note the path where Terraform executable (`terraform.exe` on Windows) is located.

2.Find the Terraform Executable Path:

- After installation, locate the directory where Terraform executable (`terraform.exe`) is present. For example, it could be in `C:\terraform` or any other path you chose during installation.
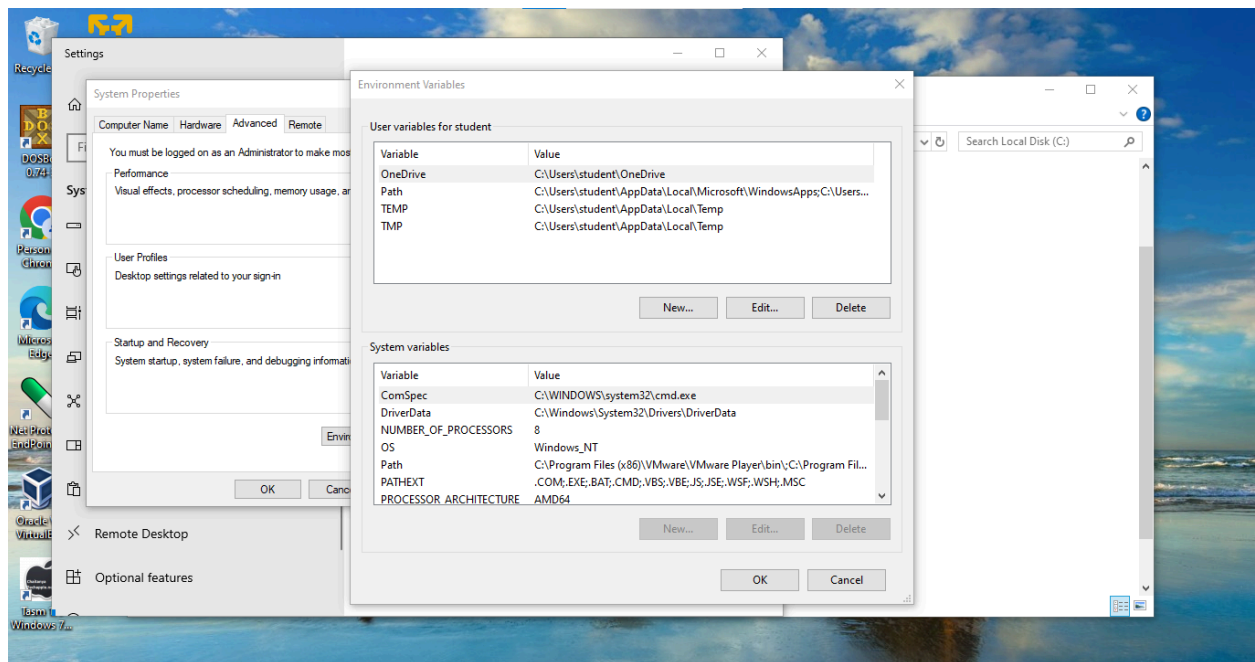
3.Set Environment Variables:

- Right-click on **This PC** or **Computer** on your desktop or in File Explorer, then click **Properties**.
- In the System window, click on **Advanced system settings** on the left-hand side.
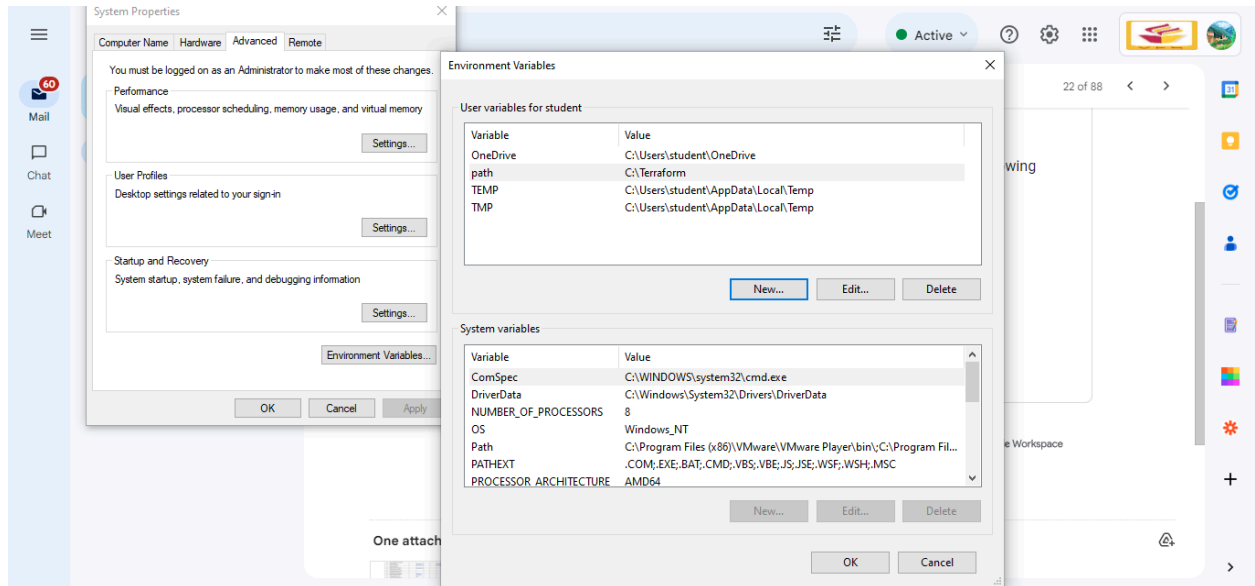- In the System Properties window, click on the **Environment Variables** button.

4.Edit System Environment Variables:

- In the Environment Variables window (System Properties), under the section **System Variables**, find and select the variable named **Path**, then click **Edit**.

5.Add Terraform to Path:

- In the Edit Environment Variable window, click **New** to add a new entry.
- Enter the path to the directory where Terraform executable (`terraform.exe`) is located. For example, if Terraform is installed in `C:\terraform`, add `C:\terraform` to the list.

6.Verify Installation:

- Open a new command prompt (to ensure it picks up the updated environment variables).
- Type `terraform --version` and press **Enter**. You should see the Terraform version information printed on the screen if the path configuration was successful.

If PowerShell is unable to recognize the `terraform` command, even though you've installed Terraform. This issue typically occurs when the directory containing the Terraform executable is not included in the `PATH` environment variable that PowerShell is using.

To resolve this issue, you need to add the directory containing the Terraform executable to your PowerShell session's `PATH` variable.

Set the PATH Variable Temporarily for the Current Session:

- In PowerShell, you can set the `PATH` variable for the current session using the following command:
  powershell
  Copy code
  ```
  $env:PATH += ";C:\Terraform"
  ```

```
PS C:\Users\student> $env:PATH += ";C:\Terraform"
>>
PS C:\Users\student> terraform --version
Terraform v1.9.4
on windows_amd64
PS C:\Users\student>
```