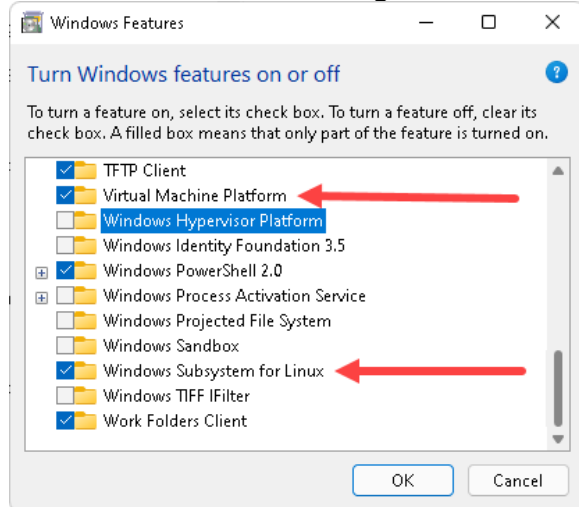# Lab Setup for Network Automation with Python

1. Activate the Windows Subsystem for Linux (WSL) from the Control Panel:

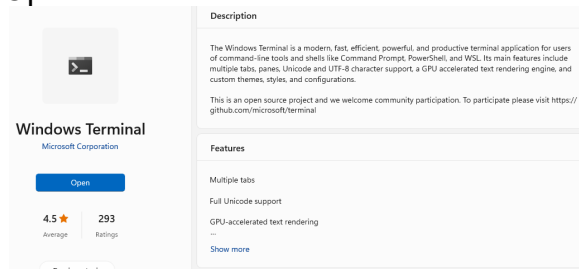   `Control Panel\All Control Panel Items\Programs and Features > Turn Windows features on or off >`
   Check the checkbox for `Virtual Machine Platform` and `Windows Subsystem for Linux`
   Note: You must be running Windows 10 64-bit

   Restart as needed.

2. Open the Microsoft Store. Download and install the **Windows Terminal** app and **Ubuntu**.

3. After Ubuntu is installed, launch it and configure the username as **cisco** and the password as **cisco**.

4. Close Ubuntu.

5. Open **Windows Terminal**.

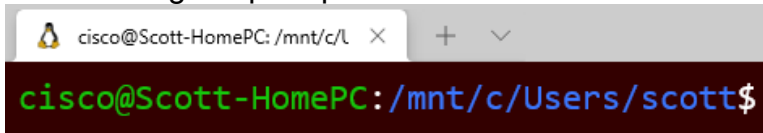   `Right-click Start > Windows Terminal` or `run > wt`

6. Open an Ubuntu console by clicking the dropdown and selecting **Ubuntu**.
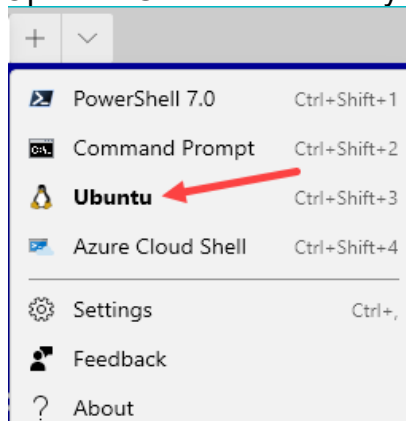
   Note: It will take a few moments to install. You may have to restart the Terminal for changes to take effect.

Lab Setup for Network Automation with Python

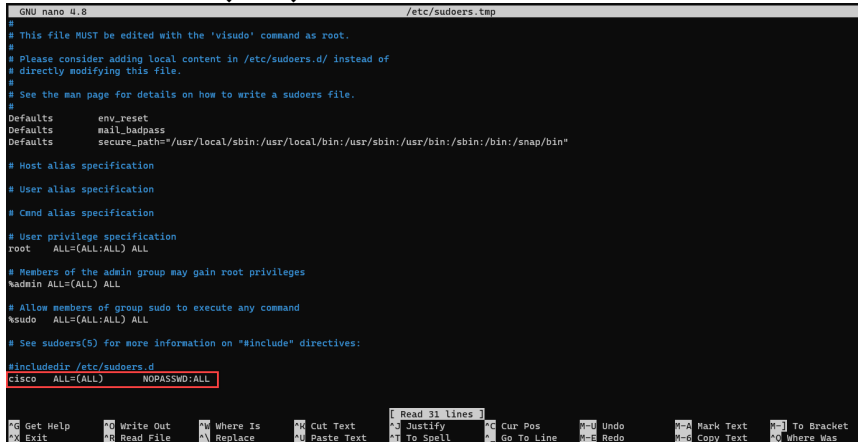7. You should get a prompt similar to this:

8. Remove the requirement to enter a password for sudo. Open the /etc/sudoers file and at the end of the file add this line:
   Note: This file is hidden until you add your code.

   ```
   sudo visudo
   ```
   Type this at the bottom of the file:
   ```
   cisco   ALL=(ALL) NOPASSWD:ALL
   ```


9. Save, Close, and reopen Windows Terminal.
10. Add user to the sudo group:

    ```
    sudo usermod -aG sudo cisco
    ```

11. Check the user was added to the group:

    ```
    grep '^sudo' /etc/group
      sudo:x:27:cisco
    ```

12. Update Ubuntu:

    ```
    sudo apt update && sudo apt upgrade -y
    ```

13. Check Python and PIP versions:
    ```
    python3 --version
      Python 3.8.10 (or later)
    ```

    ```
    pip3 --version
      pip 22.0.4 from /usr/local/lib/python3.8/dist-packages/pip (python 3.8) (or later)
    ```

14. If needed, install Python:
    ```
    sudo apt install python3 -y        (sudo apt reinstall python3)
    ```

15. If needed, install PiP3:
    ```
    sudo apt install python3-pip -y    (python3 -m pip install --upgrade pip)
    ```

16. Install Netmiko and Git:

    ```
    sudo apt install python3-netmiko git-all -y
    ```