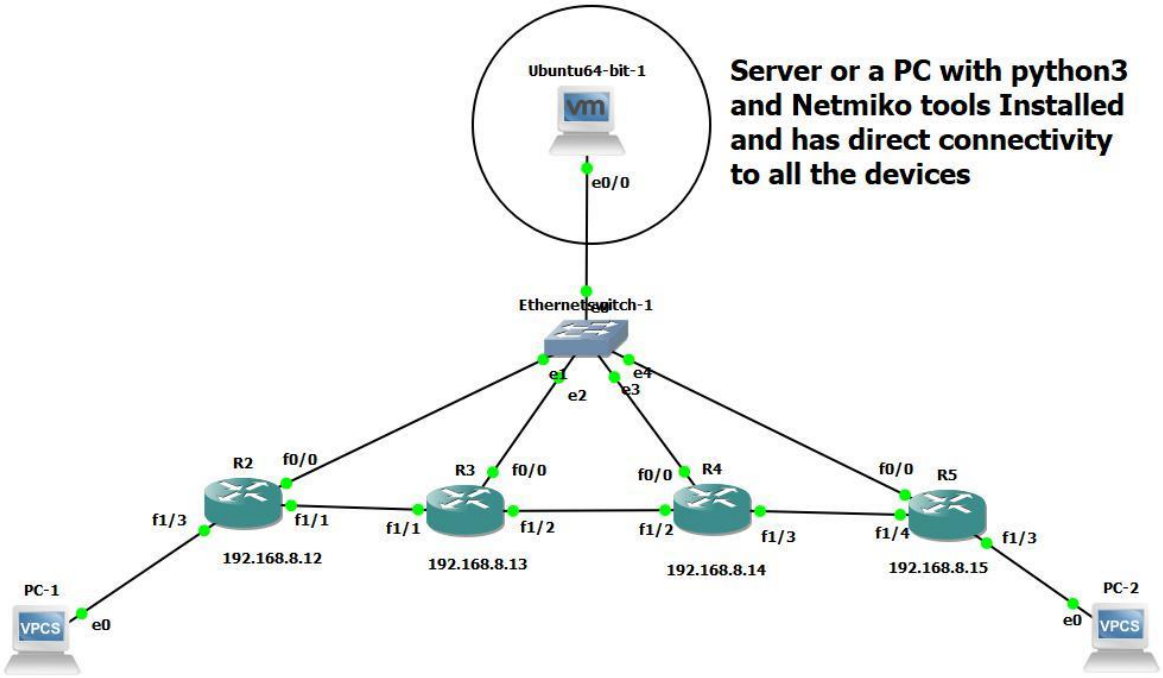
VLAN Troubleshooter

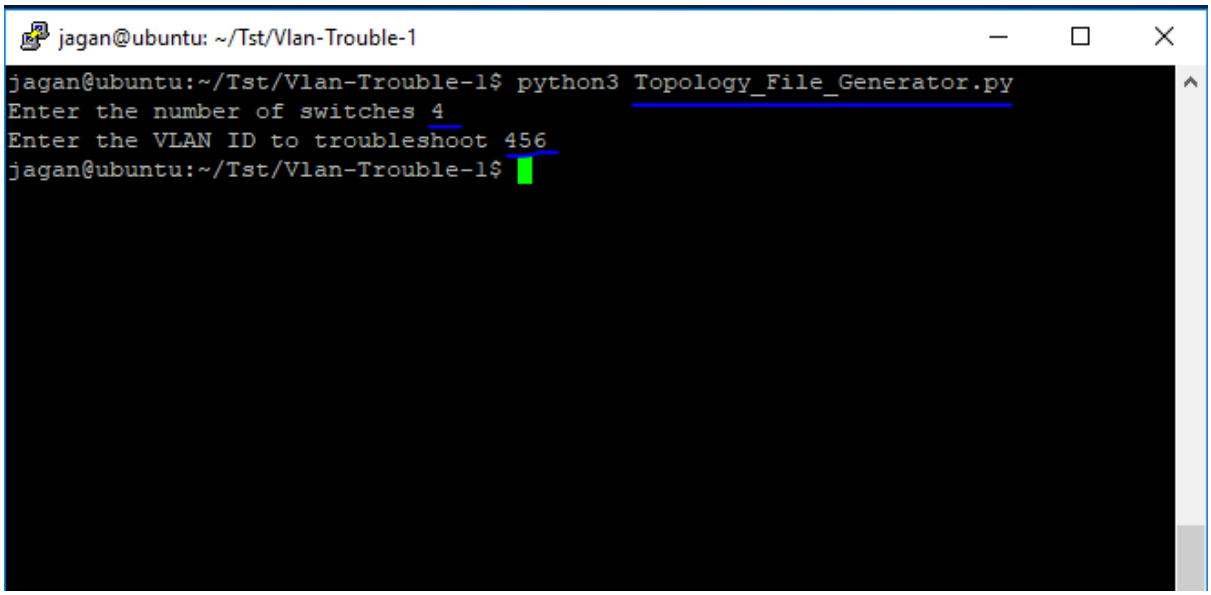
The following image is a sample network topology with an Ubuntu server and four switches. The port details and IP Addresses details are shown in the screenshot.



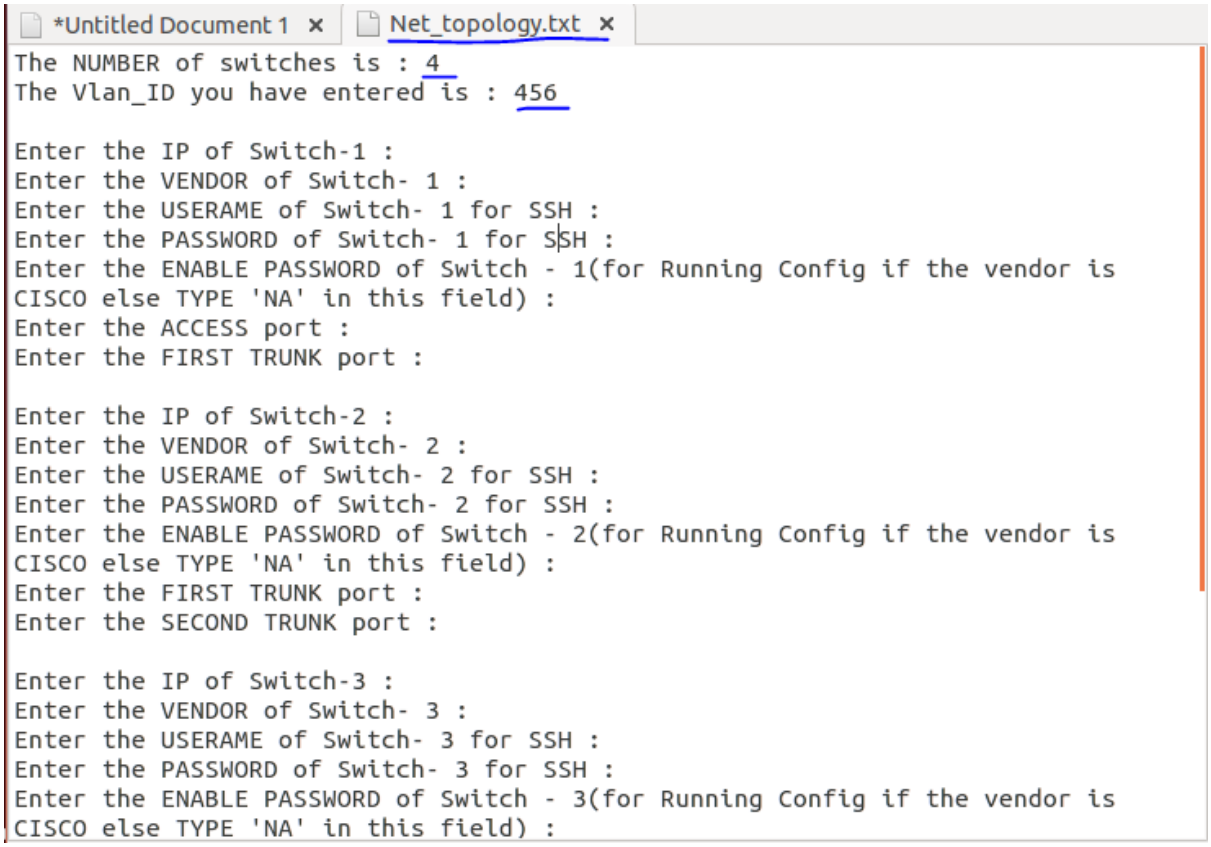
The Automated VLAN Troubleshooter works within the following three simple steps.

Step-1 :

Execute **Topology_File_Generator.py** and input the details as required and as per the topology.

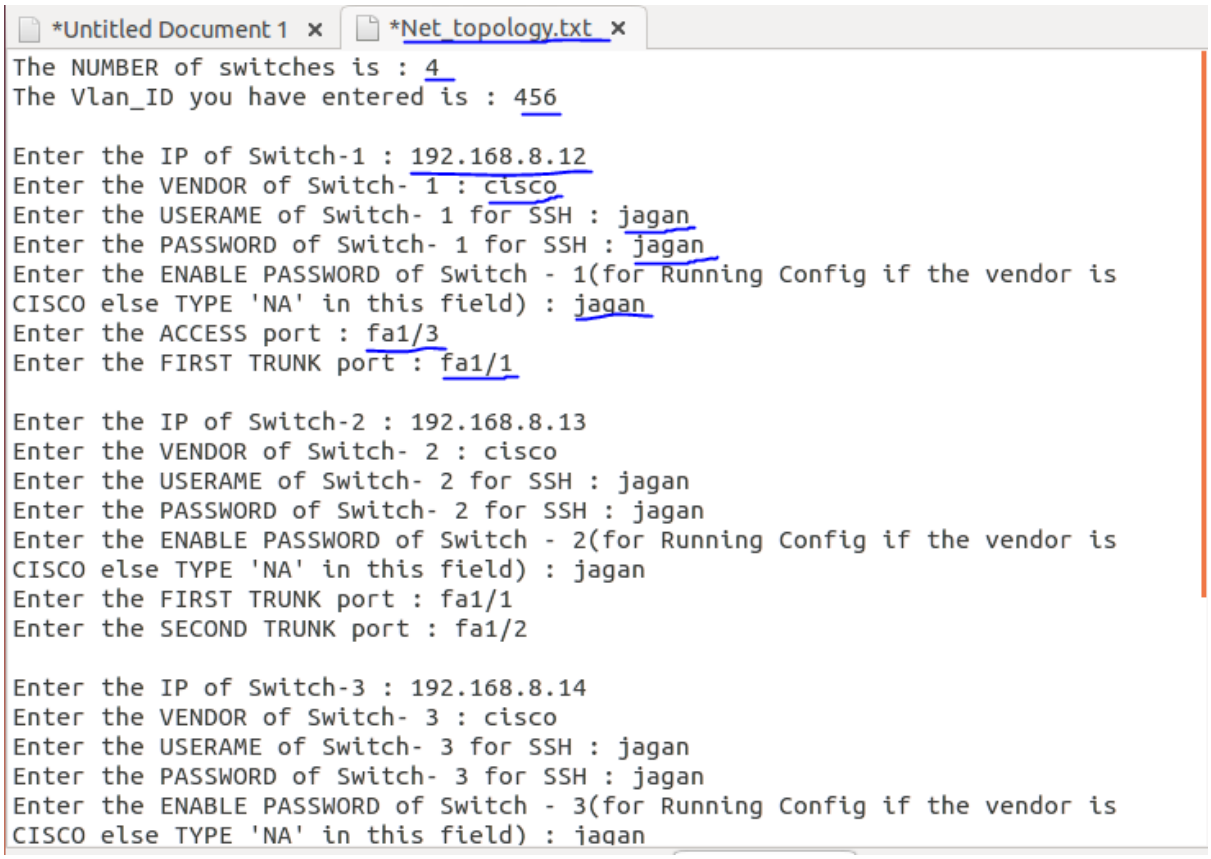


Once the **Topology_File_Generator.py** is run successfully, the following text file will be generated named as **Net_topology.txt**.



Step-2 :

Fill the generated **Net_topology.txt** file with the information to identify and access the Switches and Port details in the respective fields without leaving any as below.



Step-3 :

After filling the **Net_topology.txt** file, run **Switch_Data_Generator.py** program to make the troubleshooter complete its job using the data from topology file. The program accesses the switches remotely and outlines the results.

```
jagan@ubuntu:~/Tst/Vlan-Trouble-1$ python3 Switch_Data_Generator.py
-----------------------------------------------------------------------------------------------
data in the SSH Connection  cisco_ios   192.168.8.12   jagan   jagan   jagan   T-port1:  fa1/1   T-port2:     A-port3:  fa1/3
Connected to  192.168.8.12

For the switch IP 192.168.8.12
Interface FASTETHERNET1/1 IS configured as a TRUNK port
And Vlan 456 IS passed through the Interface FASTETHERNET1/1

For the switch IP 192.168.8.12
Interface FASTETHERNET1/3 is configured as an ACCESS Port
And Vlan 456 IS passed through the Interface FASTETHERNET1/3
-----------------------------------------------------------------------------------------------
data in the SSH Connection  cisco_ios   192.168.8.13   jagan   jagan   jagan   T-port1:  fa1/1   T-port2:  fa1/2   A-port3:
Connected to  192.168.8.13

For the switch IP 192.168.8.13
Interface FASTETHERNET1/1 IS configured as a TRUNK port
But Vlan 456 IS NOT passed through the Interface FASTETHERNET1/1 kindly configure the port by passing the vlan 456

For the switch IP 192.168.8.13
Interface FASTETHERNET1/2 IS configured as a TRUNK port
But Vlan 456 IS NOT passed through the Interface FASTETHERNET1/2 kindly configure the port by passing the vlan 456
-----------------------------------------------------------------------------------------------
data in the SSH Connection  cisco_ios   192.168.8.14   jagan   jagan   jagan   T-port1:  fa1/2   T-port2:  fa1/3   A-port3:
Connected to  192.168.8.14

For the switch IP 192.168.8.14
Interface FASTETHERNET1/2 IS configured as a TRUNK port
And Vlan 456 IS passed through the Interface FASTETHERNET1/2

For the switch IP 192.168.8.14
Interface FASTETHERNET1/3 IS configured as a TRUNK port
And Vlan 456 IS passed through the Interface FASTETHERNET1/3
-----------------------------------------------------------------------------------------------
data in the SSH Connection  cisco_ios   192.168.8.15   jagan   jagan   jagan   T-port1:  fa1/4   T-port2:     A-port3:  fa1/3
Connected to  192.168.8.15

For the switch IP 192.168.8.15
Interface FASTETHERNET1/4 IS configured as a TRUNK port
But Vlan 456 IS NOT passed through the Interface FASTETHERNET1/4 kindly configure the port by passing the vlan 456

For the switch IP 192.168.8.15
Interface FASTETHERNET1/3 is configured as an ACCESS Port
And Vlan 456 IS passed through the Interface FASTETHERNET1/3
```