

README

Lab Hw2

Question 3: Python programming

----- Input -----

Arguments will be IP addresses: < IP address 1 > < IP address 2 > ... < IP address n >

----- Output -----

Print out of adjacency data structure to console

----- Instructions -----

Setup

Install packages:

- sys
- time
- paramiko

Linux command line: (in directory that contains Python source files)

1. python p3.py < IP address 1 > < IP address 2 > < IP address n >

```
PS C:\Users\micha\Desktop> python .\p3.py 169.254.231.151 123.123.123.1
Invalid IP given: 123.123.123.1

#####
{'169.254.231.151': {'Neighbor 1: Sw1.abc.com': {'Local Node Interface': 'FastEthernet0/5', 'Adjacent Node Interface': 'FastEthernet0/7', 'Local VLAN': '1', 'Adjacent VLAN': '1'}, 'Neighbor 2: Sw1.abc.com': {'Local Node Interface': 'FastEthernet0/11', 'Adjacent Node Interface': 'FastEthernet0/11', 'Local VLAN': '20', 'Adjacent VLAN': '20'}}}
#####
PS C:\Users\micha\Desktop>
```

----- Source Code Files -----

readme

p3.py

----- Environment -----

Linux

VCL: Ubuntu 16.04 LTS Base

Python: 3.5.2

Windows 10

Python: 3.6.5

----- Example 1 -----

Linux command line: (in directory that contains Python source files)

1. python p3.py 169.254.231.151 123.123.123.1

```
PS C:\Users\micha\Desktop> python .\p3.py 169.254.231.151 123.123.123.1
Invalid IP given: 123.123.123.1
#####
{'169.254.231.151': {'Neighbor 1: Sw1.abc.com': {'Local Node Interface': 'FastEthernet0/5', 'Adjacent Node Interface': 'FastEthernet0/7', 'Local VLAN': '1', 'Adjacent VLAN': '1'}, 'Neighbor 2: Sw1.abc.com': {'Local Node Interface': 'FastEthernet0/11', 'Adjacent Node Interface': 'FastEthernet0/11', 'Local VLAN': '20', 'Adjacent VLAN': '20'}}}
#####
PS C:\Users\micha\Desktop>
```