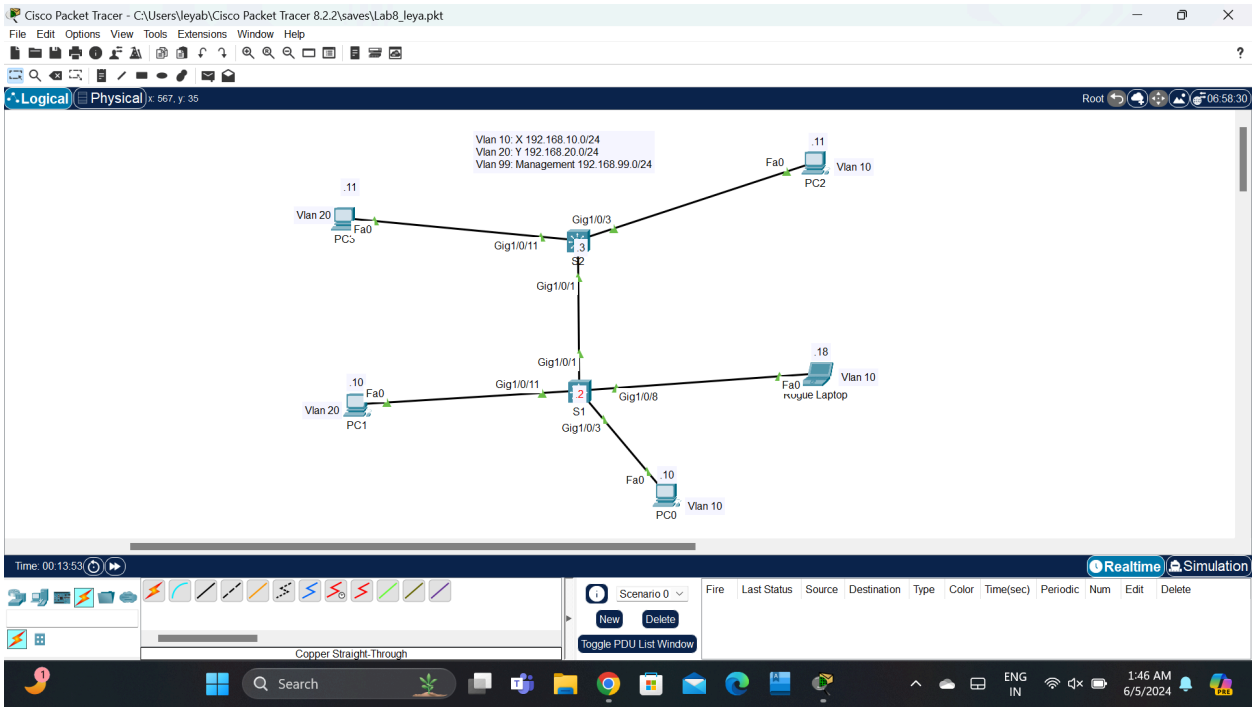
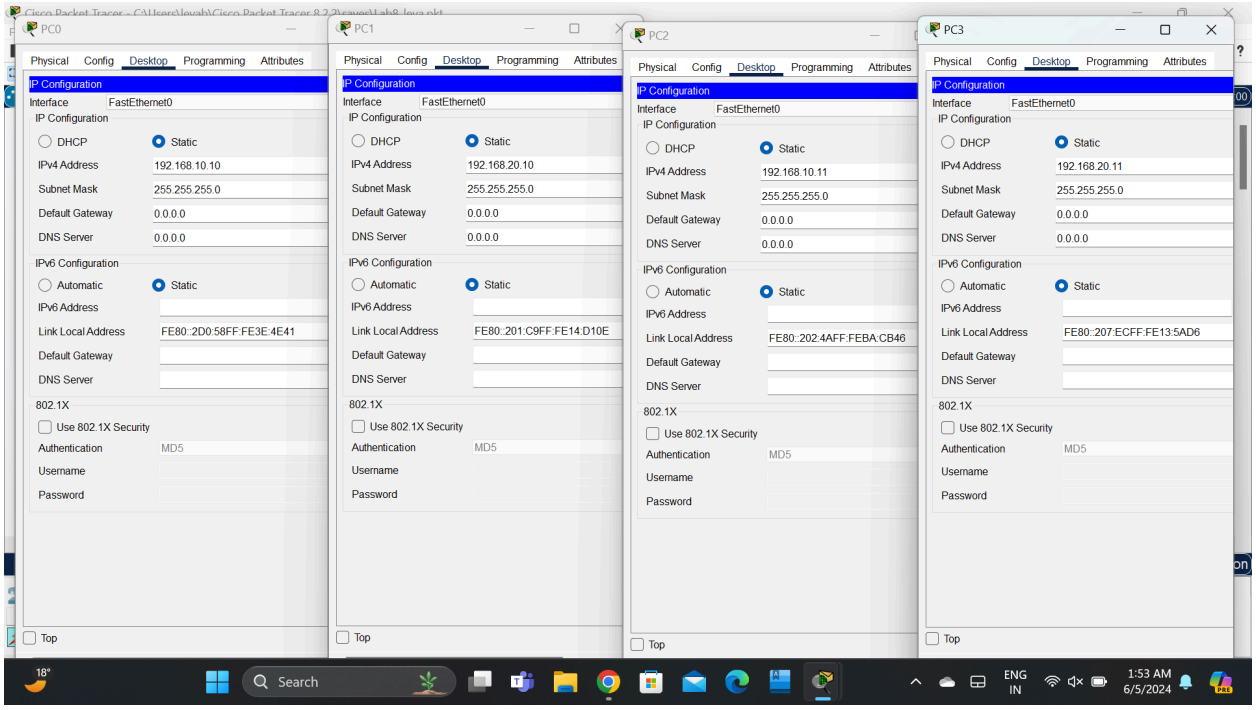
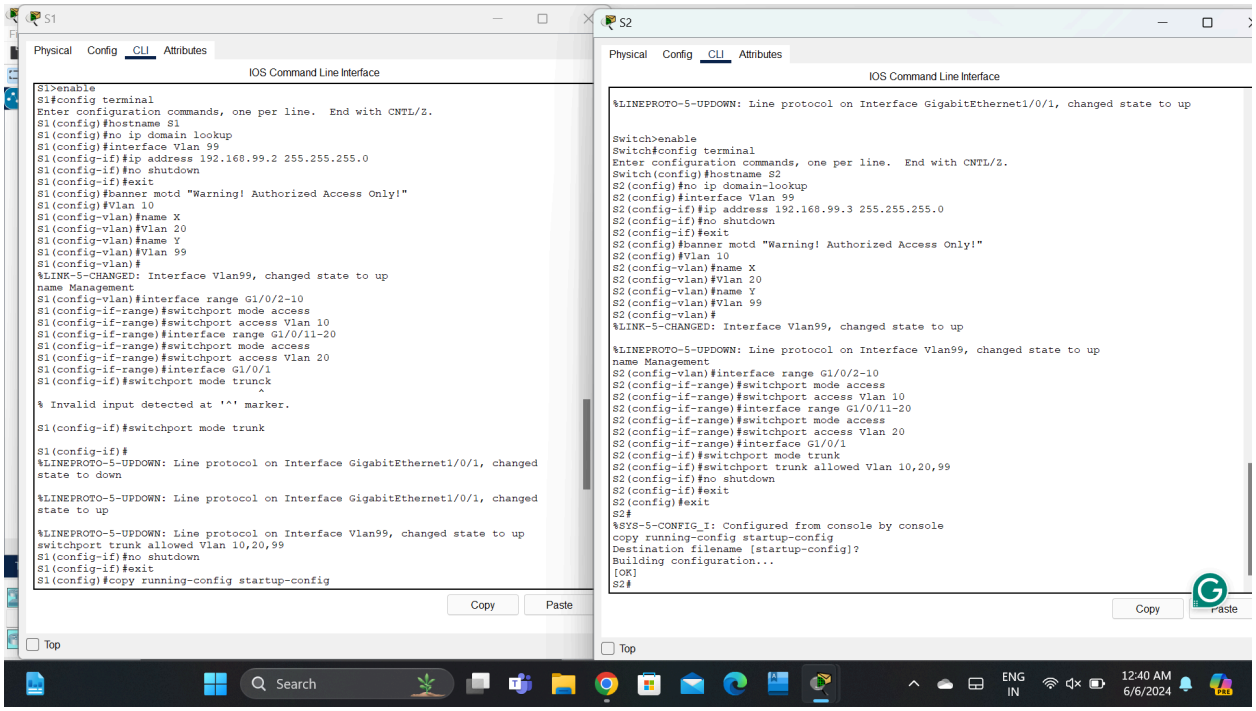
Step 1: Setting Up the Network Topology



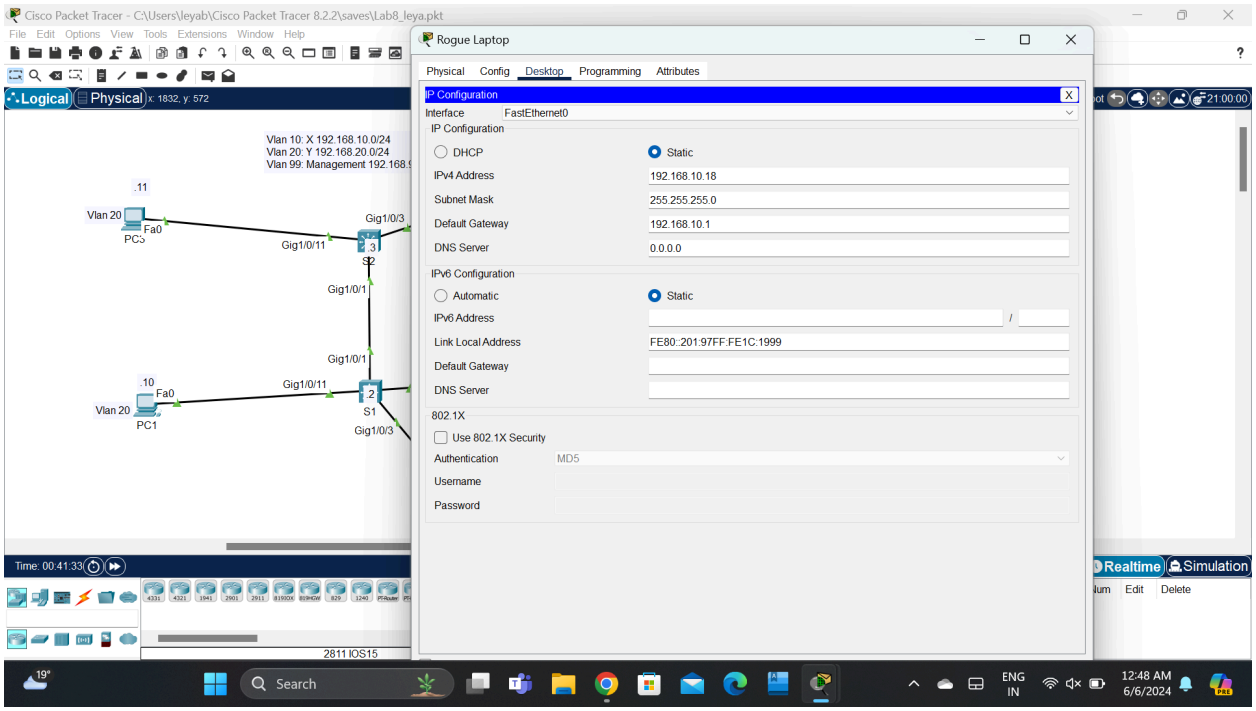
Step 2: Configure PCs



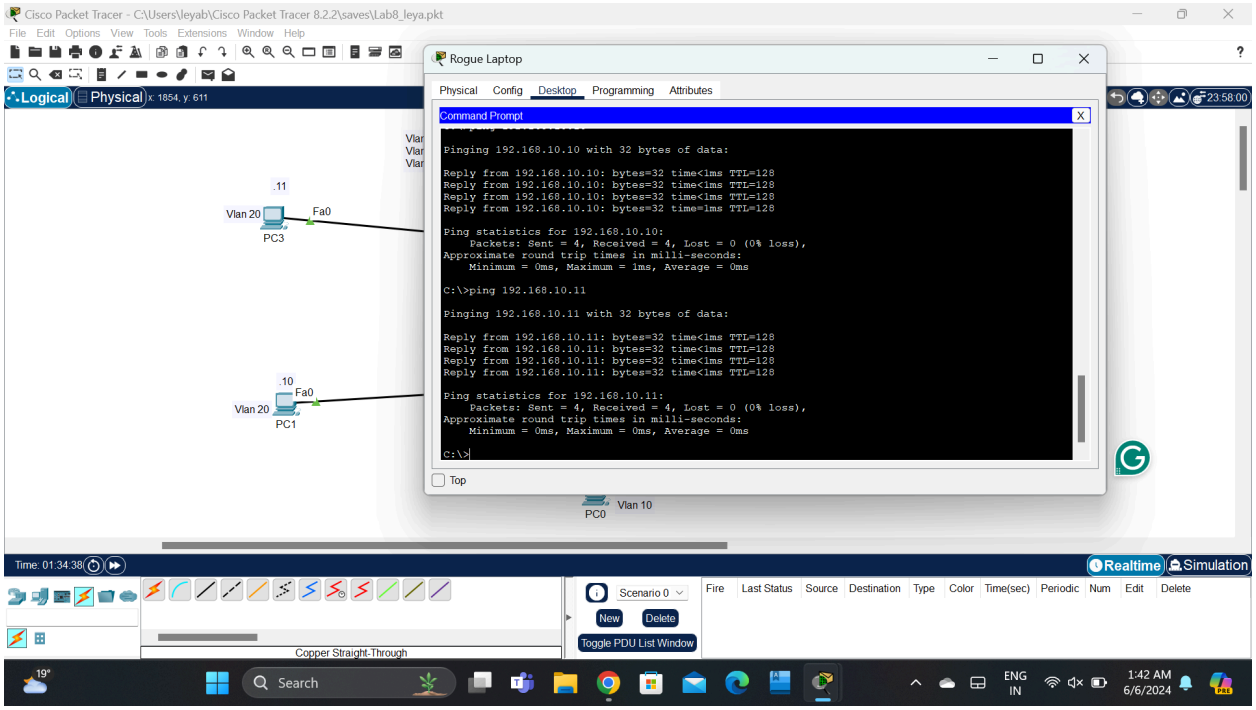
Step 3: Configure and Verify



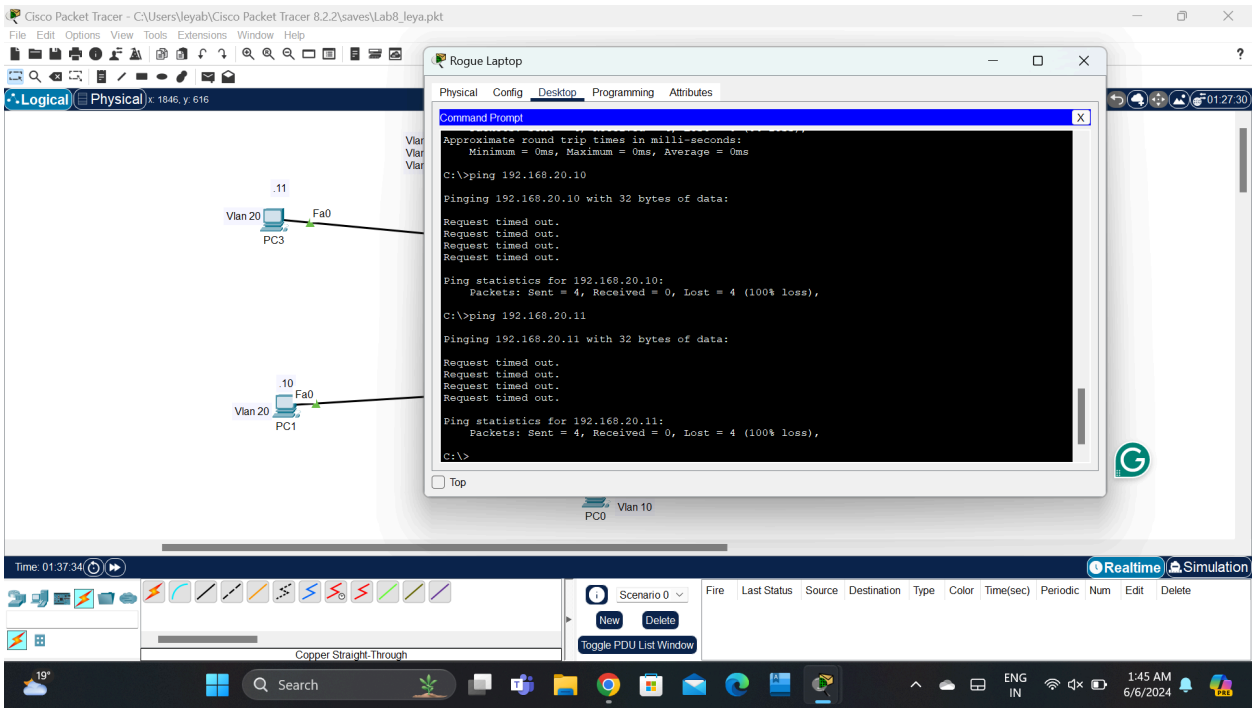
Step 4: Add a New Laptop



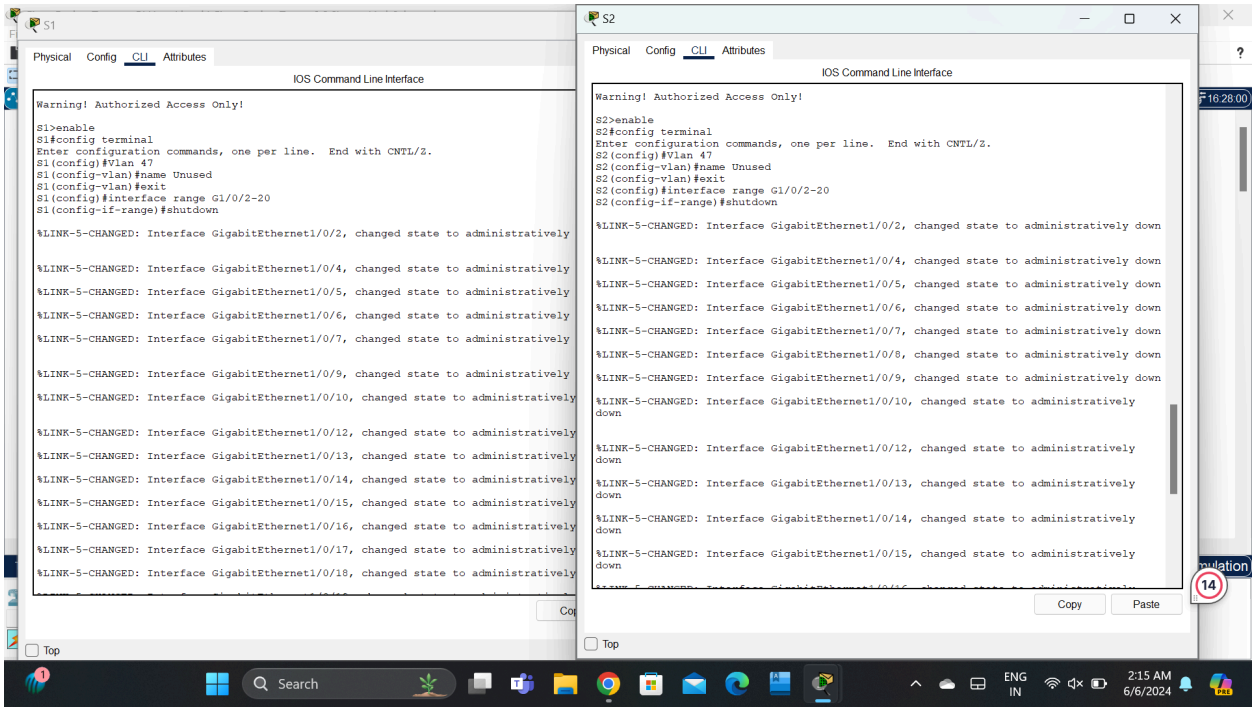
PC0 and 2 are in the same subnet as the rouge laptop allowing them to communicate successfully.

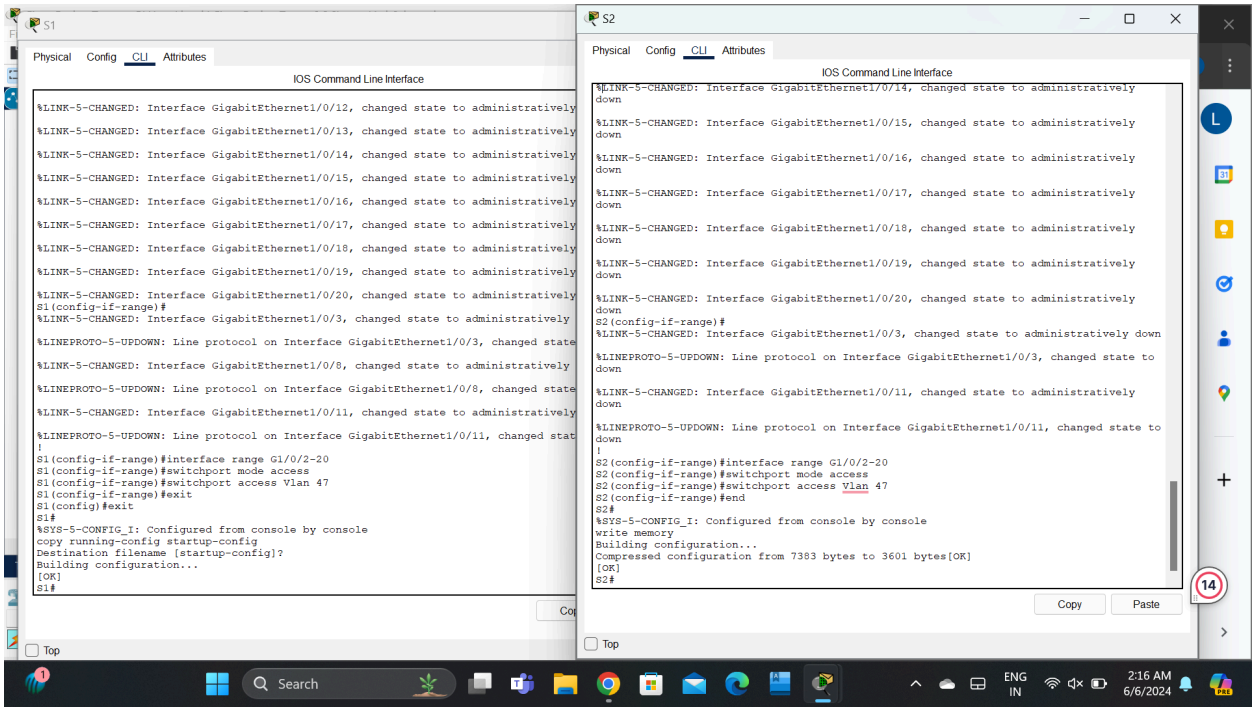


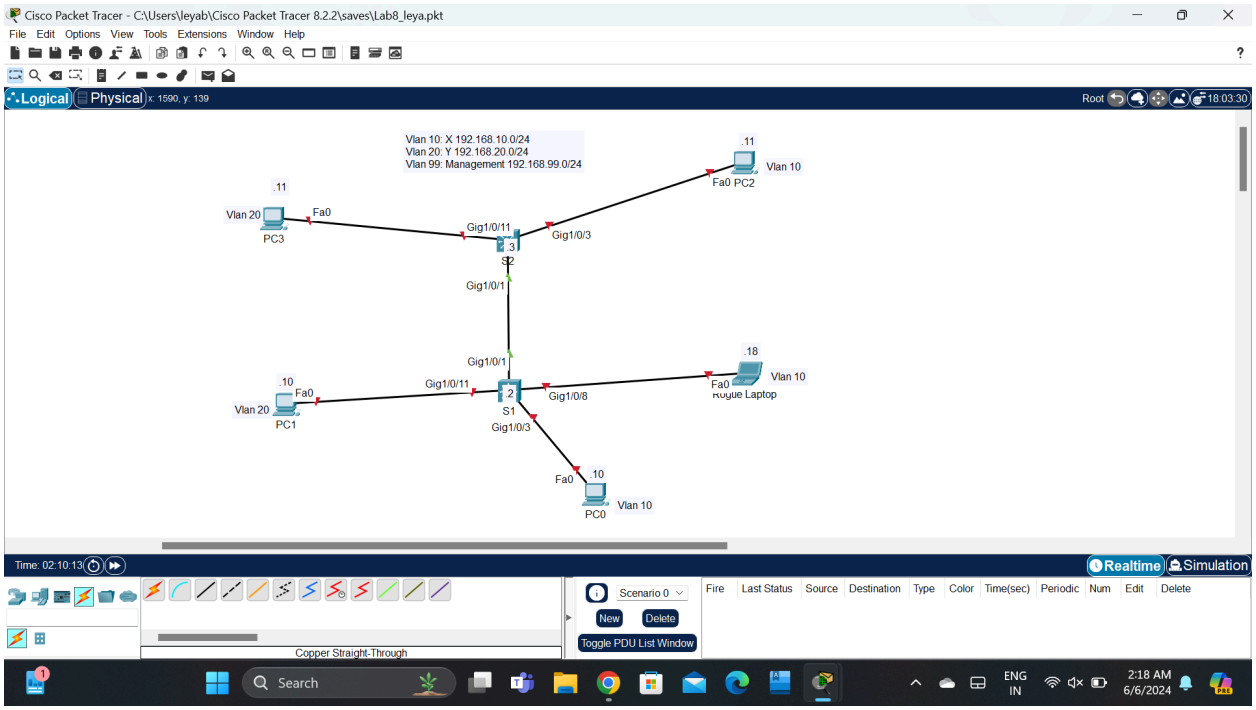
PC 1 and 3 are in a different subnet than the rouge laptop so they cannot communicate directly without a layer 3 device.

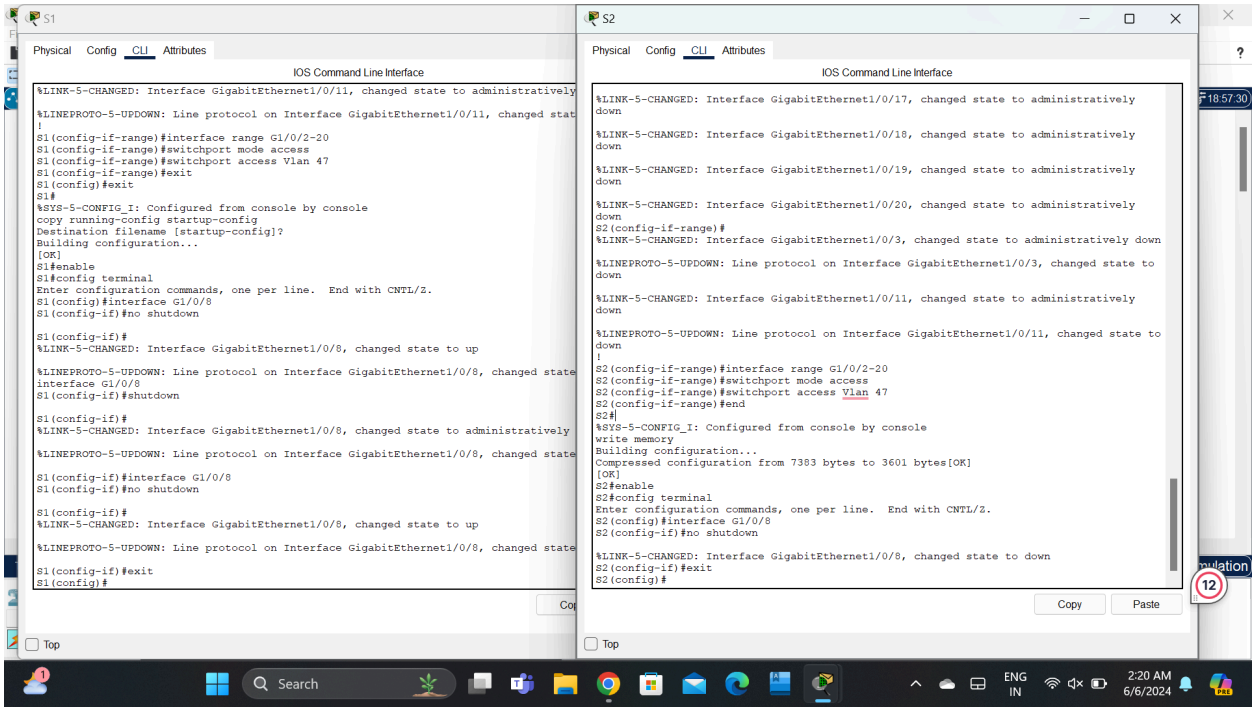


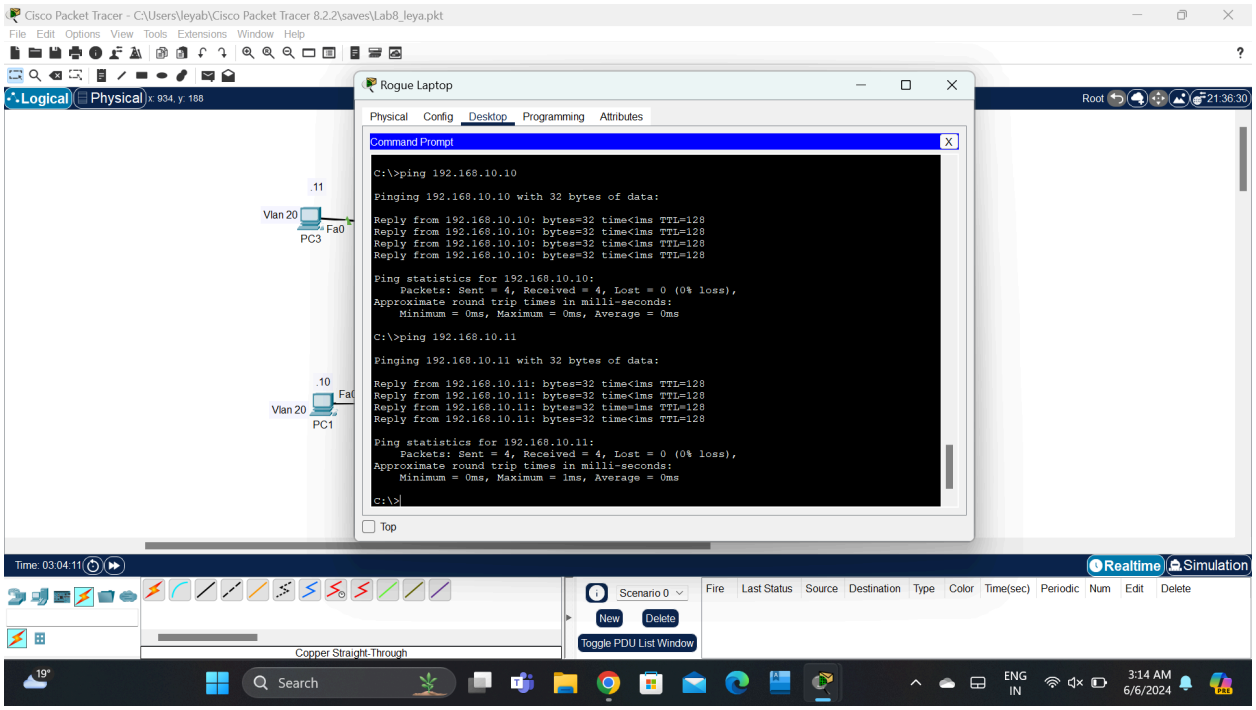
Select all unused ports, using only one command.



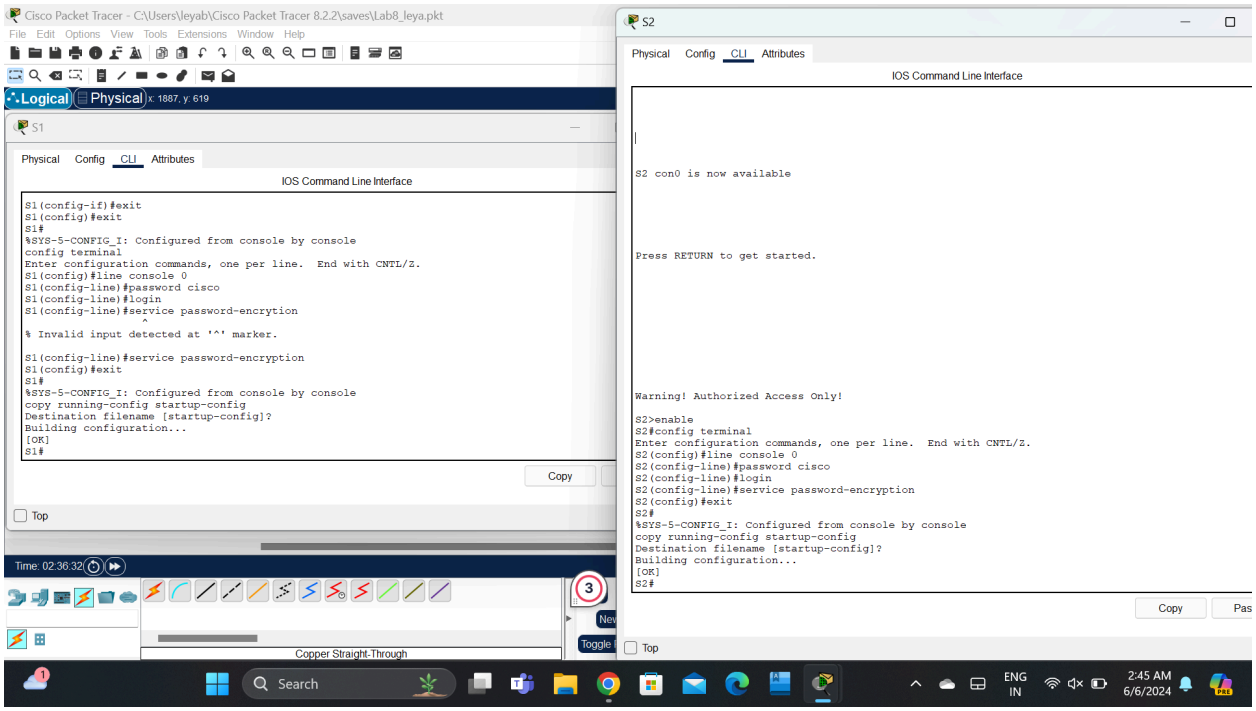



Cisco Packet Tracer - C:\Users\leyab\Cisco Packet Tracer 8.2.2\saves\Lab8_leya.pkt
File Edit Options View Tools Extensions Window Help
Logical Physical x: 1590, y: 139
Root 18:03:30
Vlan 10: X 192.168.10.0/24
Vlan 20: Y 192.168.20.0/24
Vlan 99: Management 192.168.99.0/24
.11
Vlan 10
Fa0 PC2
.11
Vlan 20
Fa0
PC3
Gig1/0/11
Gig1/0/3
.3
S2
Gig1/0/1
Gig1/0/1
.18
Vlan 10
Fa0
Rogue Laptop
.10
Fa0
Vlan 20
PC1
Gig1/0/11
.2
S1
Gig1/0/8
Gig1/0/3
Fa0
.10
PC0
Vlan 10
Time: 02:10:13
Realtime
Simulation
Copper Straight-Through
Scenario 0
New
Delete
Toggle PDU List Window
Fire
Last Status
Source
Destination
Type
Color
Time(sec)
Periodic
Num
Edit
Delete
Search
ENG
IN
2:18 AM
6/6/2024

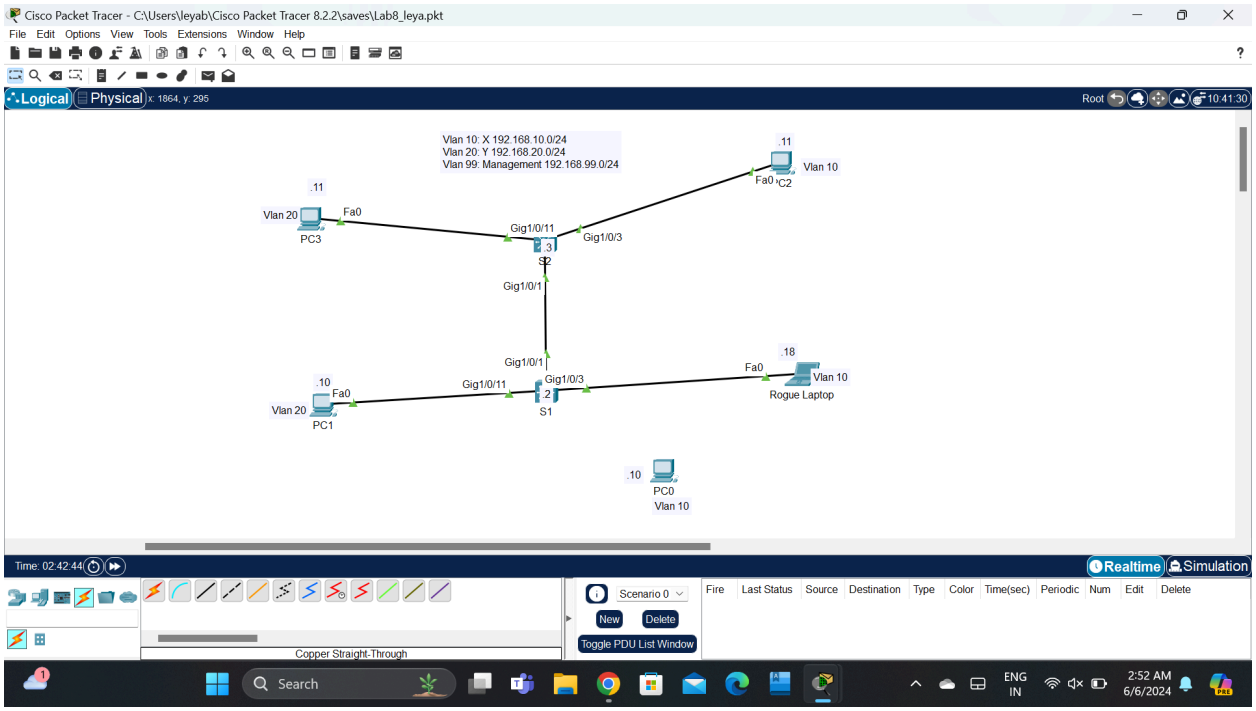

S1
Physical Config CLI Attributes
IOS Command Line Interface
%LINK-5-CHANGED: Interface GigabitEthernet1/0/11, changed state to administratively
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0/11, changed stat
!
S1(config-if-range)#interface range G1/0/2-20
S1(config-if-range)#switchport mode access
S1(config-if-range)#switchport access Vlan 47
S1(config-if-range)#exit
S1(config)#exit
S1#
%SYS-5-CONFIG_I: Configured from console by console
copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
S1#enable
S1#config terminal
Enter configuration commands, one per line. End with CNTL/Z.
S1(config)#interface G1/0/8
S1(config-if)#no shutdown
S1(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet1/0/8, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0/8, changed state
interface G1/0/8
S1(config-if)#shutdown
S1(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet1/0/8, changed state to administratively
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0/8, changed state
S1(config-if)#interface G1/0/8
S1(config-if)#no shutdown
S1(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet1/0/8, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0/8, changed state
S1(config-if)#exit
S1(config)#
Top
S2
Physical Config CLI Attributes
IOS Command Line Interface
%LINK-5-CHANGED: Interface GigabitEthernet1/0/17, changed state to administratively down
%LINK-5-CHANGED: Interface GigabitEthernet1/0/18, changed state to administratively down
%LINK-5-CHANGED: Interface GigabitEthernet1/0/19, changed state to administratively down
%LINK-5-CHANGED: Interface GigabitEthernet1/0/20, changed state to administratively down
S2(config-if-range)#
%LINK-5-CHANGED: Interface GigabitEthernet1/0/3, changed state to administratively down
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0/3, changed state to down
%LINK-5-CHANGED: Interface GigabitEthernet1/0/11, changed state to administratively down
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet1/0/11, changed state to down
!
S2(config-if-range)#interface range G1/0/2-20
S2(config-if-range)#switchport mode access
S2(config-if-range)#switchport access Vlan 47
S2(config-if-range)#end
S2#
%SYS-5-CONFIG_I: Configured from console by console
write memory
Building configuration...
Compressed configuration from 7383 bytes to 3601 bytes[OK]
[OK]
S2#enable
S2#config terminal
Enter configuration commands, one per line. End with CNTL/Z.
S2(config)#interface G1/0/8
S2(config-if)#no shutdown
%LINK-5-CHANGED: Interface GigabitEthernet1/0/8, changed state to down
S2(config-if)#exit
S2(config)#
Copy
Paste
Top
Search
ENG
IN
2:20 AM
6/6/2024



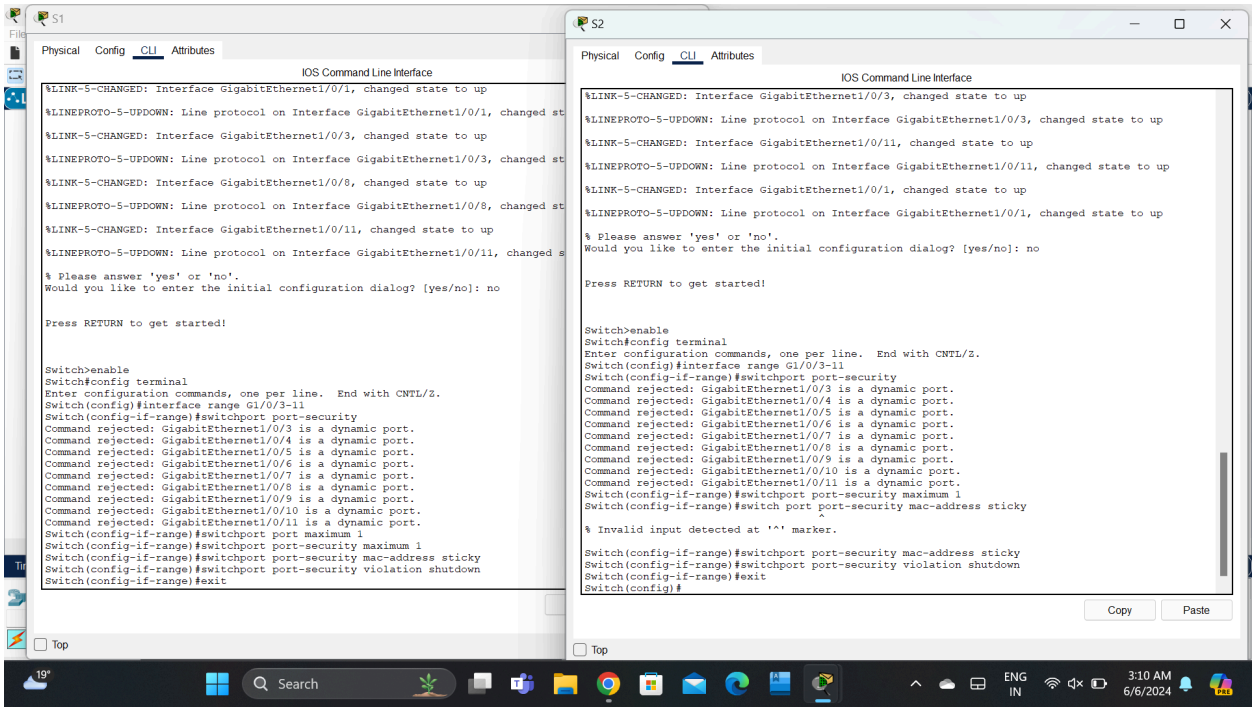
Secure the console port:

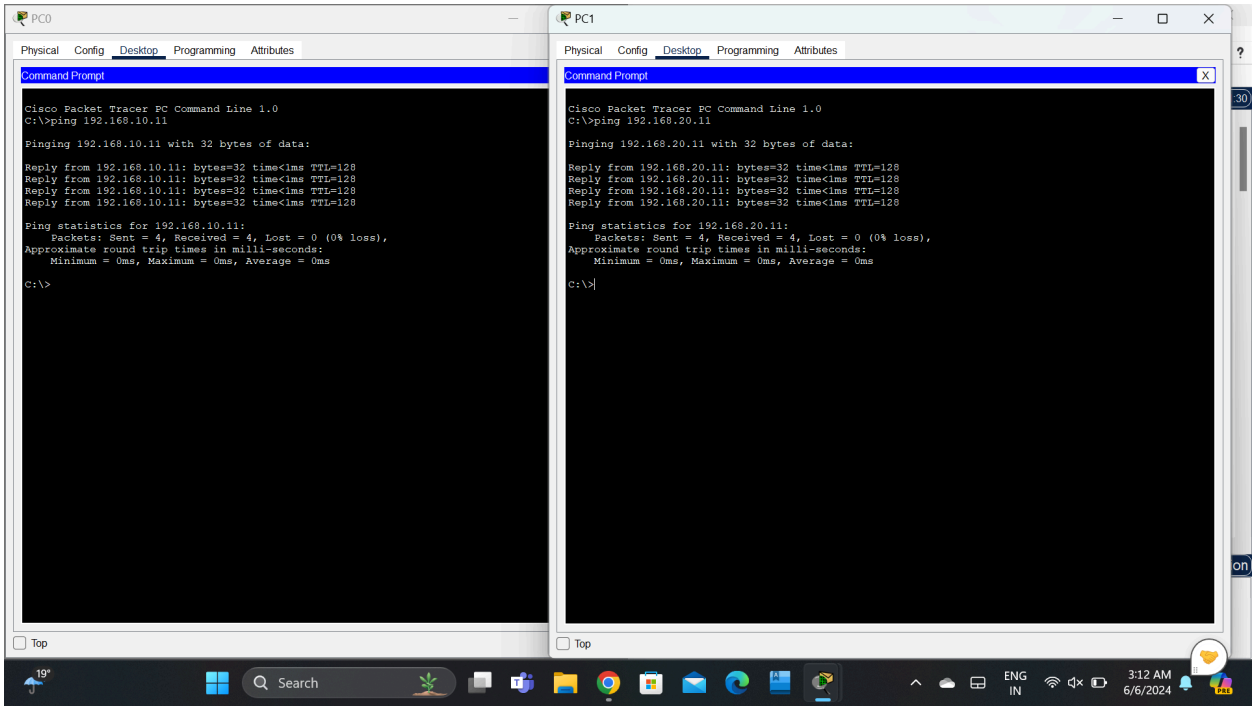


Disconnect the Ethernet cable between the Rogue laptop and S1



Step 5: Configure Switchport Security





PC1 and 3 were unsuccessful.