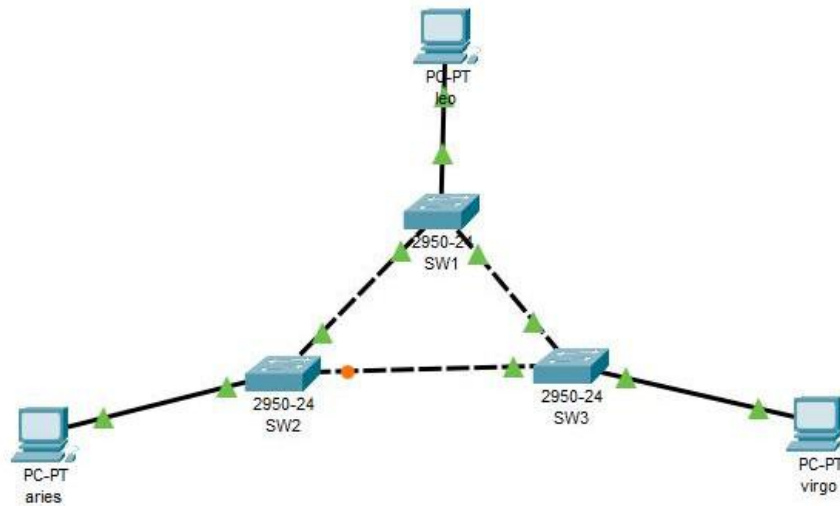


NAMA : Ghani Praselia
NIM : L200180185
KELAS : E

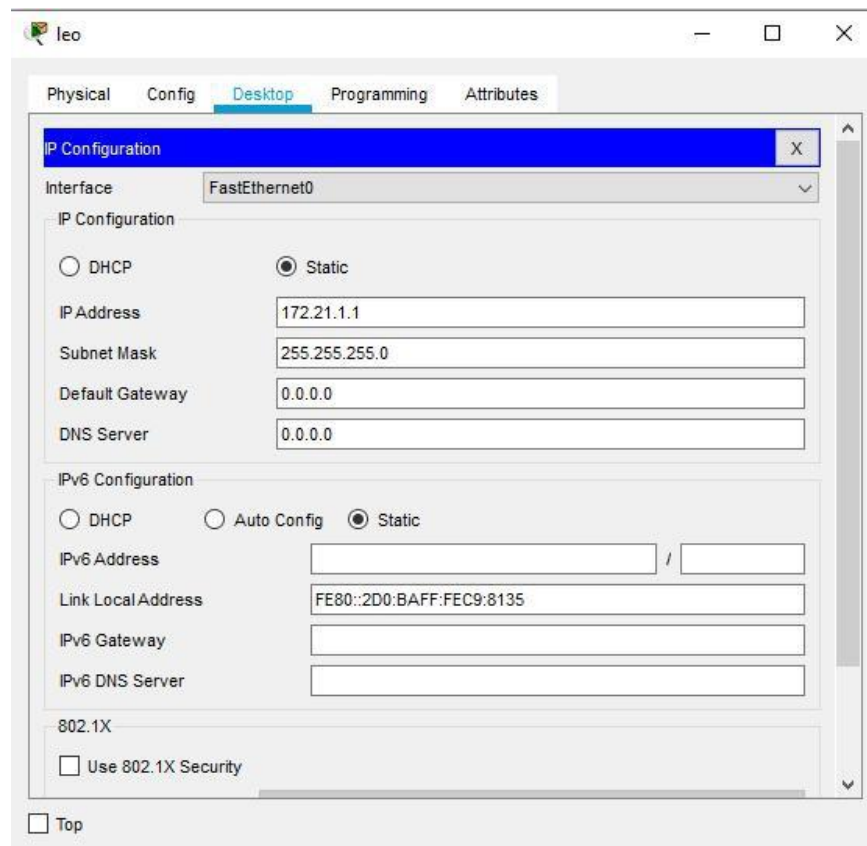
MODUL 6

Kegiatan 1. Topologi 1 Tugas 1A:



Tugas 2A:

PC leo



PC Aries

The screenshot shows the configuration window for PC Aries. The 'Desktop' tab is selected. The 'IP Configuration' section is expanded, showing the 'FastEthernet0' interface. The 'Static' radio button is selected for IP Configuration. The IP Address is 172.21.1.2, Subnet Mask is 255.255.255.0, Default Gateway is 0.0.0.0, and DNS Server is 0.0.0.0. The 'IPv6 Configuration' section is also expanded, showing 'Static' selected. The IPv6 Address is empty, Link Local Address is FE80::201:97FF:FE6E:C918, IPv6 Gateway is empty, and IPv6 DNS Server is empty. The '802.1X' section is expanded, showing 'Use 802.1X Security' unchecked. A 'Top' button is at the bottom left.

aries

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IP Address 172.21.1.2

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::201:97FF:FE6E:C918

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

☐ Top

PC Virgo

The screenshot shows the configuration window for PC Virgo. The 'Desktop' tab is selected. The 'IP Configuration' section is expanded, showing the 'FastEthernet0' interface. The 'Static' radio button is selected for IP Configuration. The IP Address is 172.21.1.3, Subnet Mask is 255.255.255.0, Default Gateway is 0.0.0.0, and DNS Server is 0.0.0.0. The 'IPv6 Configuration' section is also expanded, showing 'Static' selected. The IPv6 Address is empty, Link Local Address is FE80::260:47FF:FE77:8E03, IPv6 Gateway is empty, and IPv6 DNS Server is empty. The '802.1X' section is expanded, showing 'Use 802.1X Security' unchecked. A 'Top' button is at the bottom left.

virgo

Physical Config **Desktop** Programming Attributes

IP Configuration X

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IP Address 172.21.1.3

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::260:47FF:FE77:8E03

IPv6 Gateway

IPv6 DNS Server

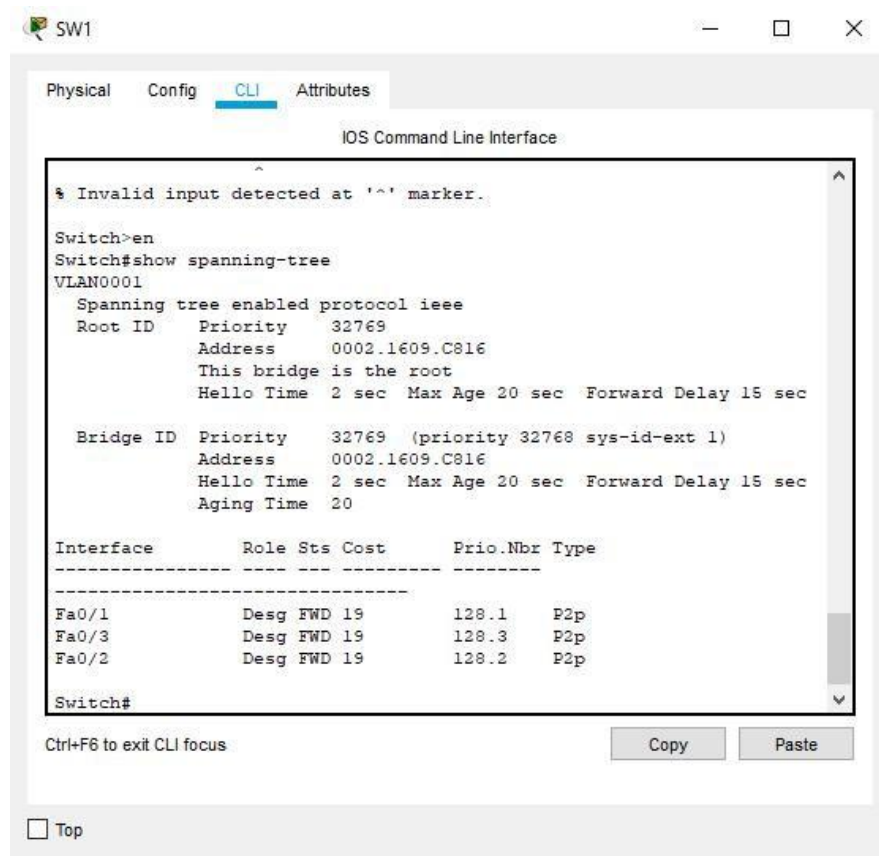
802.1X

☐ Use 802.1X Security

☐ Top

Tugas 4A:

Status STP SW1



```
SW1
Physical Config CLI Attributes
IOS Command Line Interface
% Invalid input detected at '^' marker.
Switch>en
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
            Address     0002.1609.C816
            This bridge is the root
            Hello Time 2 sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    32769 (priority 32768 sys-id-ext 1)
            Address     0002.1609.C816
            Hello Time 2 sec  Max Age 20 sec  Forward Delay 15 sec
            Aging Time  20

Interface                Role Sts Cost      Prio.Nbr Type
-----
Fa0/1                    Desg FWD 19        128.1    P2p
Fa0/3                    Desg FWD 19        128.3    P2p
Fa0/2                    Desg FWD 19        128.2    P2p

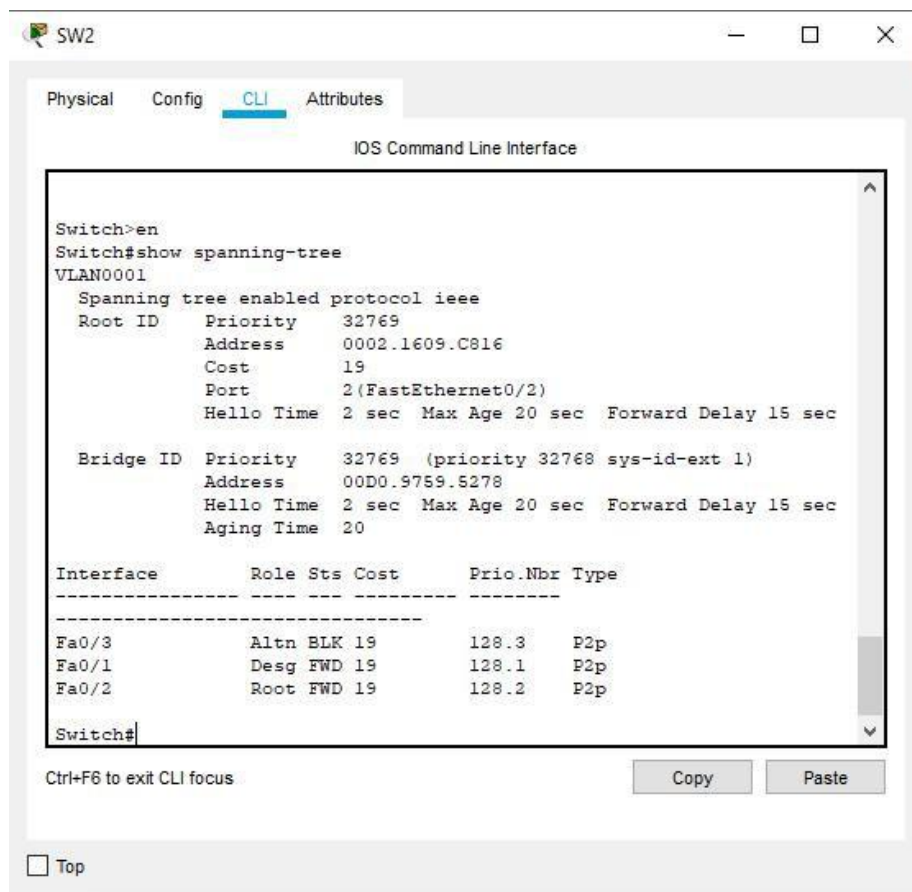
Switch#
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

Status STP SW2



```
SW2
Physical Config CLI Attributes
IOS Command Line Interface
Switch>en
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
            Address     0002.1609.C816
            Cost         19
            Port         2(FastEthernet0/2)
            Hello Time 2 sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    32769 (priority 32768 sys-id-ext 1)
            Address     00D0.9759.5278
            Hello Time 2 sec  Max Age 20 sec  Forward Delay 15 sec
            Aging Time  20

Interface                Role Sts Cost      Prio.Nbr Type
-----
Fa0/3                    Altn BLK 19        128.3    P2p
Fa0/1                    Desg FWD 19        128.1    P2p
Fa0/2                    Root FWD 19        128.2    P2p

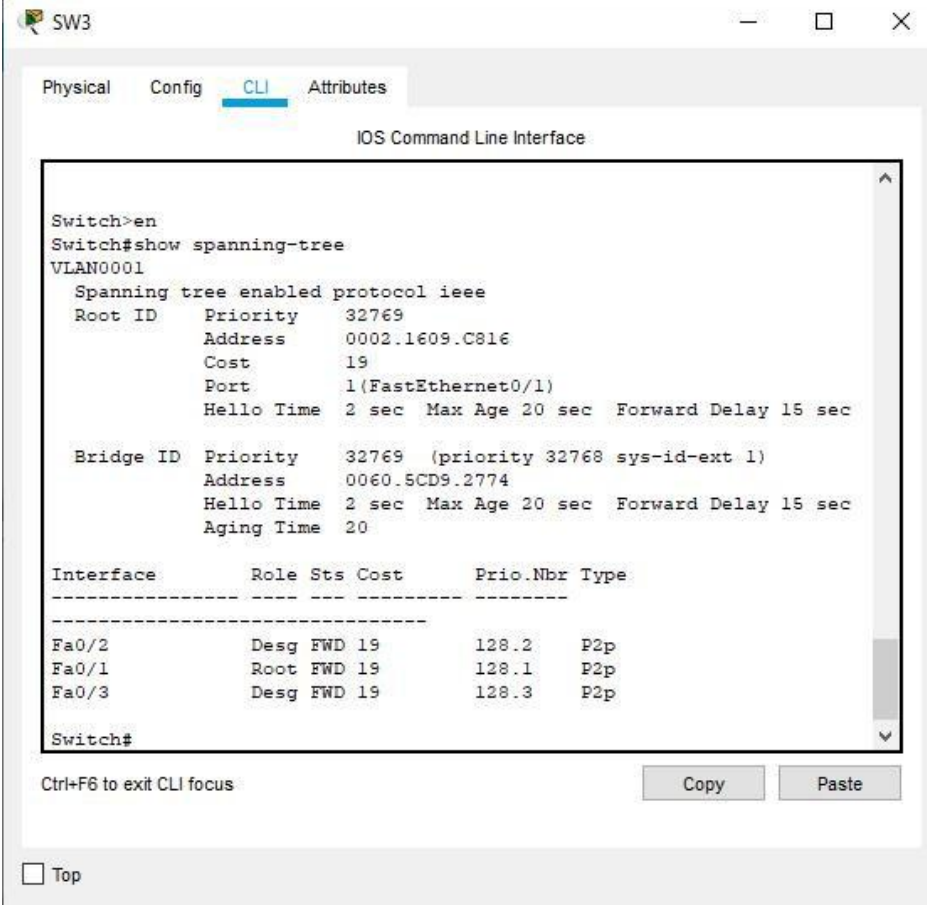
Switch#
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

Status STP SW3



The screenshot shows a network switch configuration window titled 'SW3'. The 'CLI' tab is selected, displaying the 'IOS Command Line Interface'. The command 'show spanning-tree' has been executed, showing the following output:

```
Switch>en
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0002.1609.C816
             Cost        19
             Port        1(FastEthernet0/1)
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    32769 (priority 32768 sys-id-ext 1)
             Address     0060.5CD9.2774
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
             Aging Time  20

Interface      Role Sts Cost      Prio.Nbr Type
-----
Fa0/2          Desg FWD 19        128.2    P2p
Fa0/1          Root FWD 19        128.1    P2p
Fa0/3          Desg FWD 19        128.3    P2p

Switch#
```

Below the CLI window, there are buttons for 'Copy' and 'Paste', and a checkbox labeled 'Top'.

Tugas 4B:

SW1

No	Variable	Nilai
1	Root ID	
2	Priority	32769
3	MAC Address	0002.1609.C816
4	Bridge ID	
5	Cost (0/1;0/2;0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

SW2

No	Variable	Nilai
1	Root ID	
2	Priority	32769
3	MAC Address	0002.1609.C816
4	Bridge ID	
5	Cost (0/1;0/2;0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

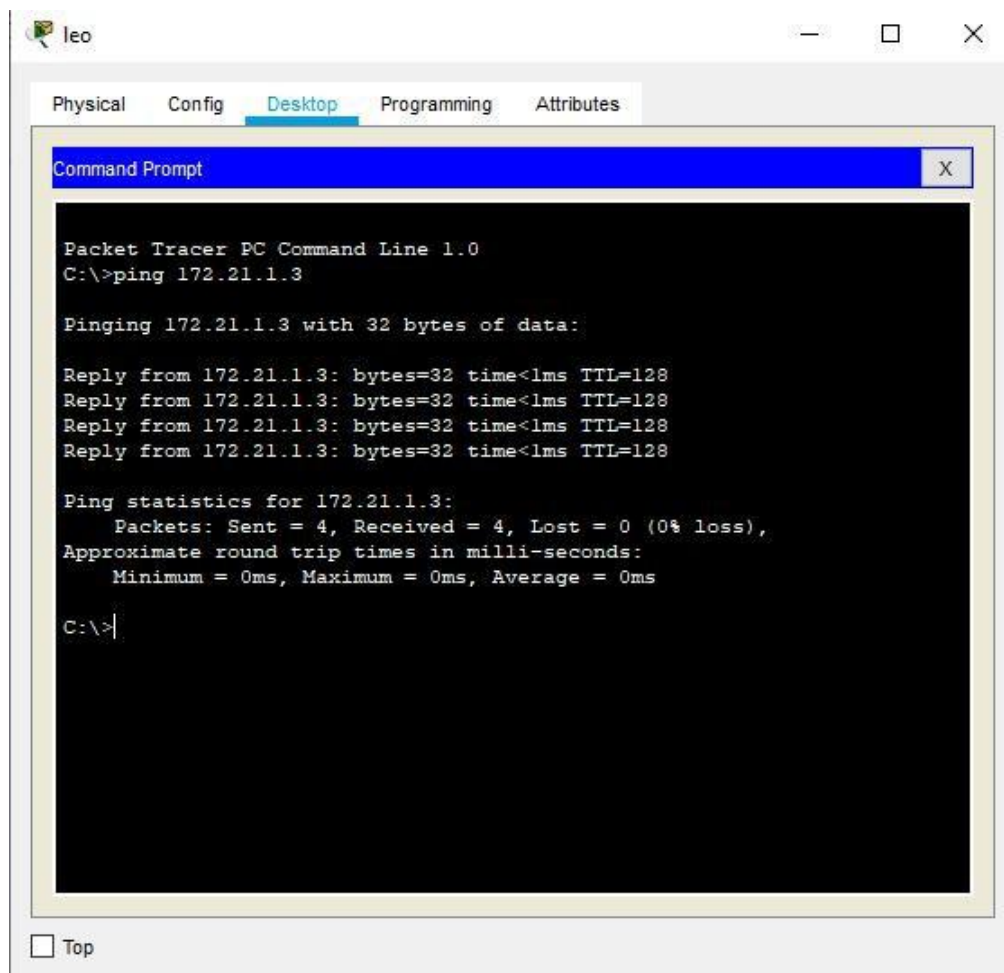
No	Variable	Nilai
1	Root ID	
2	Priority	32769
3	MAC Address	0002.1609.C816
4	Bridge ID	
5	Cost (0/1;0/2;0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

Tugas 4C:

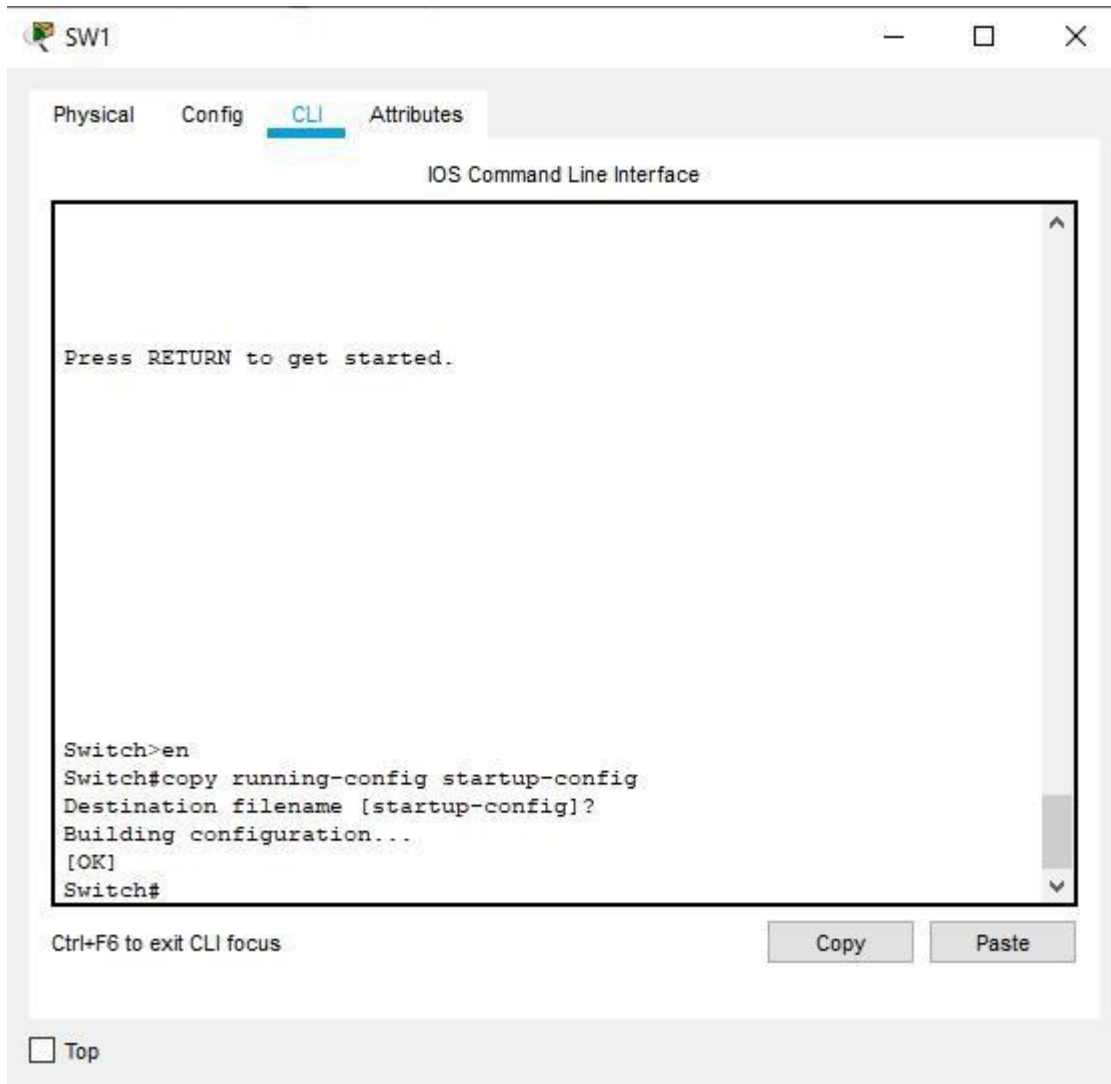
- *Root Bridge* = SW3
- *Designated Bridge* = SW1
- *Root Port* = Fa0/3 pada SW1 dan Fa0/3 pada SW2
- *Designated Port* = Fa0/1 dan Fa0/2

Tugas 4D:

- Berada pada keadaan *forwarding* pada SW1(Fa0/1, Fa0/2, dan Fa0/3), SW2(Fa0/1 dan Fa0/3), dan SW3(Fa0/1, Fa0/2, dan Fa0/3).
- Berada pada keadaan *blocking* pada SW2(Fa0/2).

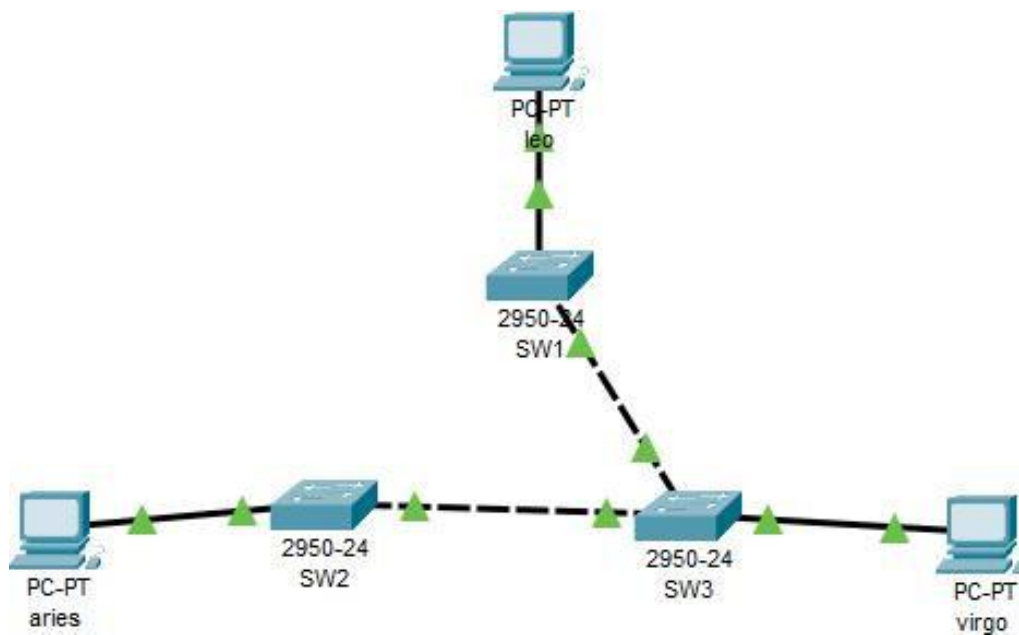
Tugas 5A:

Tugas 6A:



2. Kegiatan 2. Topologi 2

a. Menggunakan Packet Tracer ubah topologi menjadi seperti topologi berikut ini

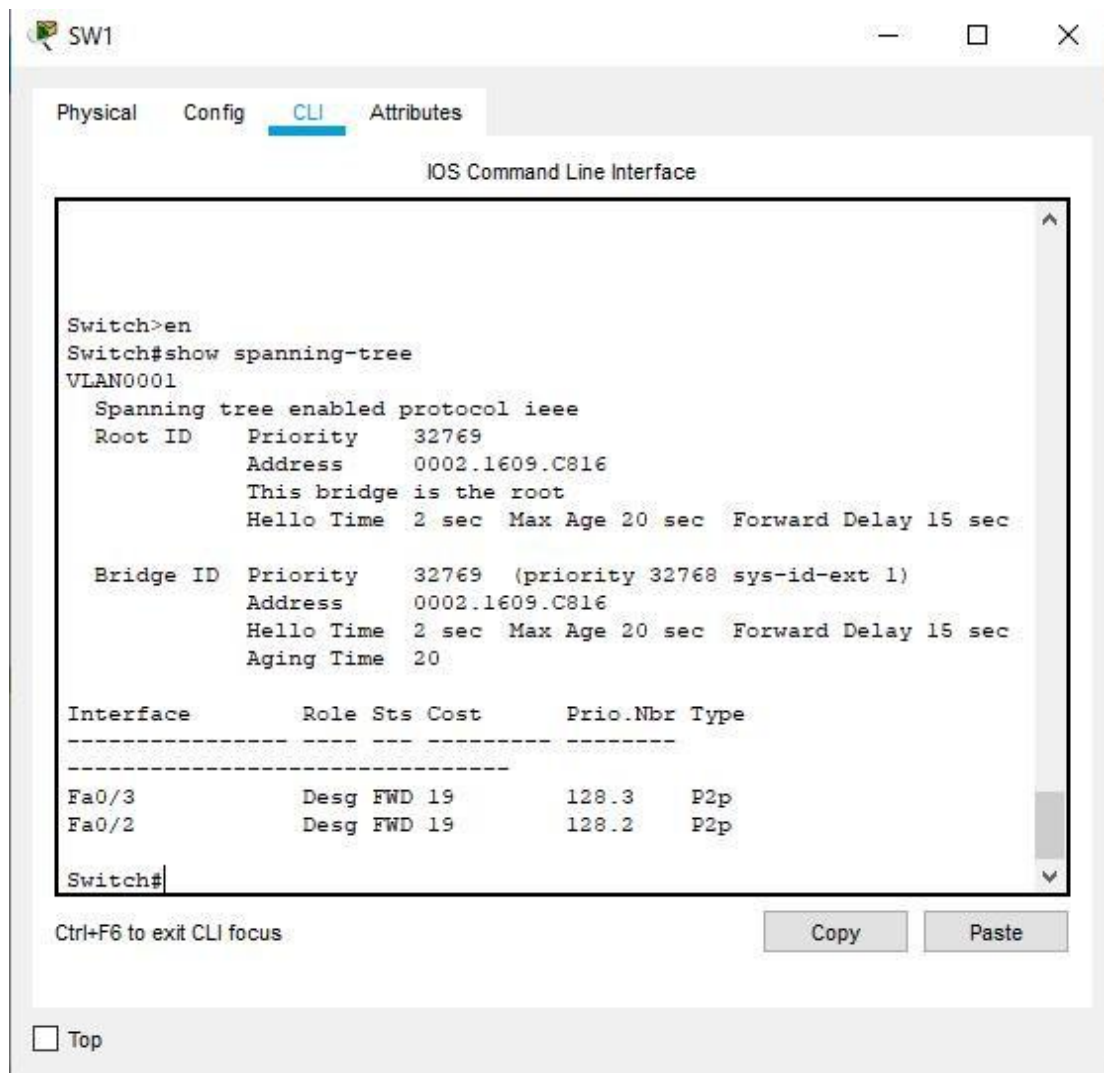


Tugas 9A:

Setelah mengubah struktur topologi jaringan selanjutnya lakukan seperti pada lab.4 dan lab.5 menentukan kondisi *default* tersebut, *switch* dan *port* dengan mengetik *show spanning-tree* pada masing-masing Switch.

- Menjadi *root bridge* adalah SW3
- Menjadi *designated bridge* adalah tidak ada yang memiliki jalur terblok.
- Menjadi *root port* adalah SW1(Fa0/3) dan SW2(Fa0/3).
- Menjadi *designated port* adalah tidak ada *designated port* karena pada *designated bridge* tidak ada jalur yang terblok.

Pada semua *switch* semua *port* pada keadaan *Forwarding*, tidak ada *port* yang ter *Blocking*.



The screenshot shows a network switch (SW1) CLI window with the following content:

```
Switch>en
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0002.1609.C816
             This bridge is the root
             Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec

  Bridge ID  Priority    32769 (priority 32768 sys-id-ext 1)
             Address     0002.1609.C816
             Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
             Aging Time  20

Interface      Role Sts Cost      Prio.Nbr Type
-----
Fa0/3          Desg FWD 19       128.3    P2p
Fa0/2          Desg FWD 19       128.2    P2p

Switch#
```

Below the CLI window, there is a status bar with the text "Ctrl+F6 to exit CLI focus" and two buttons: "Copy" and "Paste". At the bottom left, there is a checkbox labeled "Top".

IOS Command Line Interface

changed state to down

Switch>en

Switch#show spanning-tree

VLAN0001

Spanning tree enabled protocol ieee

Root ID Priority 32769
 Address 0002.1609.C816
 Cost 38
 Port 3(FastEthernet0/3)
 Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec

Bridge ID Priority 32769 (priority 32768 sys-id-ext 1)
 Address 00D0.9759.5278
 Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
 Aging Time 20

Interface	Role	Sts	Cost	Prio.Nbr	Type
Fa0/3	Root	FWD	19	128.3	P2p
Fa0/1	Desg	FWD	19	128.1	P2p

Switch#

Ctrl+F6 to exit CLI focus

Copy

Paste

☐ Top

IOS Command Line Interface

Switch>en

Switch#show spanning-tree

VLAN0001

Spanning tree enabled protocol ieee

Root ID Priority 32769
 Address 0002.1609.C816
 Cost 19
 Port 1(FastEthernet0/1)
 Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec

Bridge ID Priority 32769 (priority 32768 sys-id-ext 1)
 Address 0060.5CD9.2774
 Hello Time 2 sec Max Age 20 sec Forward Delay 15 sec
 Aging Time 20

Interface	Role	Sts	Cost	Prio.Nbr	Type
Fa0/2	Desg	FWD	19	128.2	P2p
Fa0/1	Root	FWD	19	128.1	P2p
Fa0/3	Desg	FWD	19	128.3	P2p

Switch#

Ctrl+F6 to exit CLI focus

Copy

Paste

☐ Top