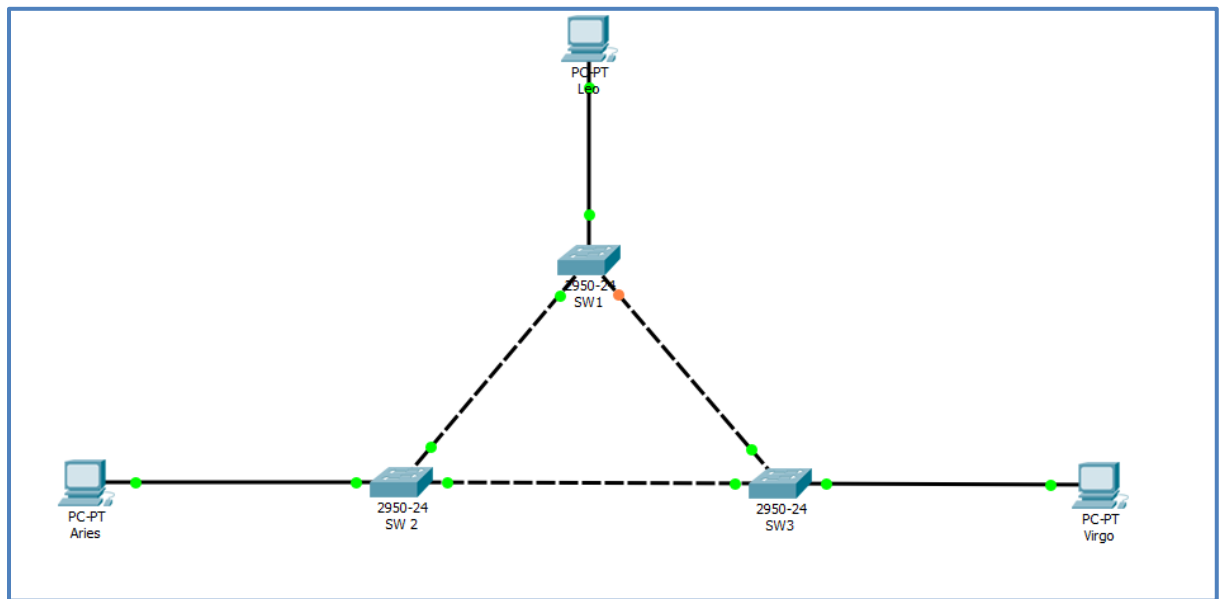


LAPORAN PRAKTIKUM JARKOM MODUL VI SPANNING TREE PROTOCOL

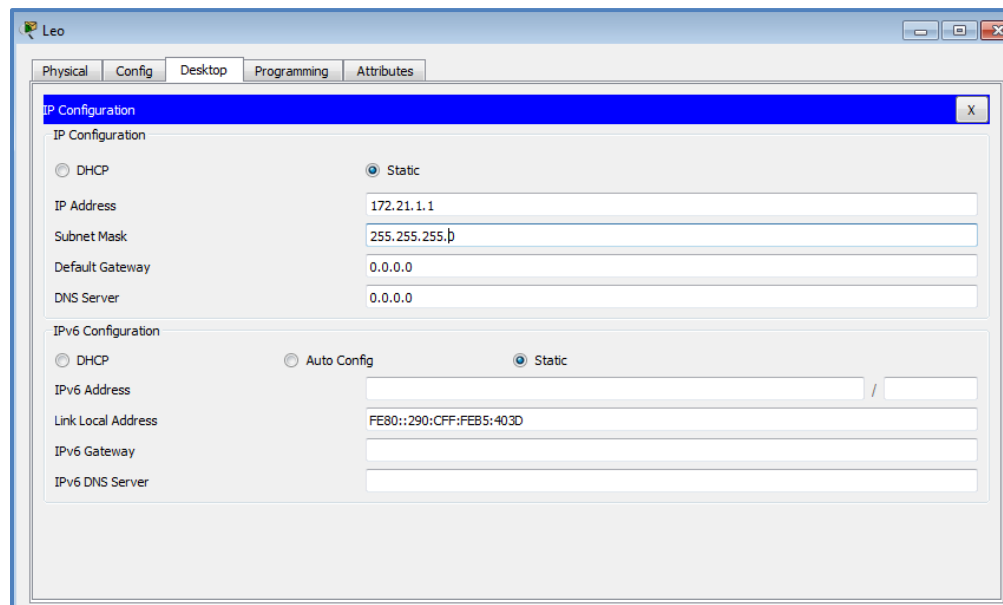
Kegiatan1.Topologi 1

1. Membuat topologi dengan packet tracer,dan beri nama masing-masing switch dengan SW 1, SW 2, SW 3 seperti gambar dibawah ini.

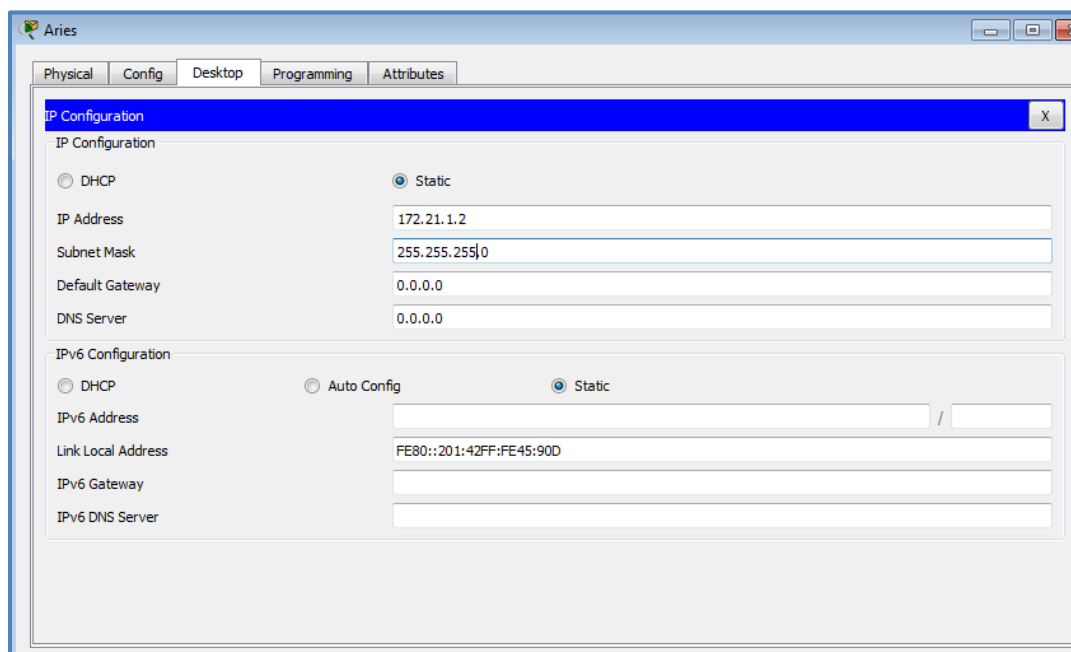


2. Konfigurasi masing-masing PC dengan alamat IP :
 - a. Leo = 172.21.1.1/24

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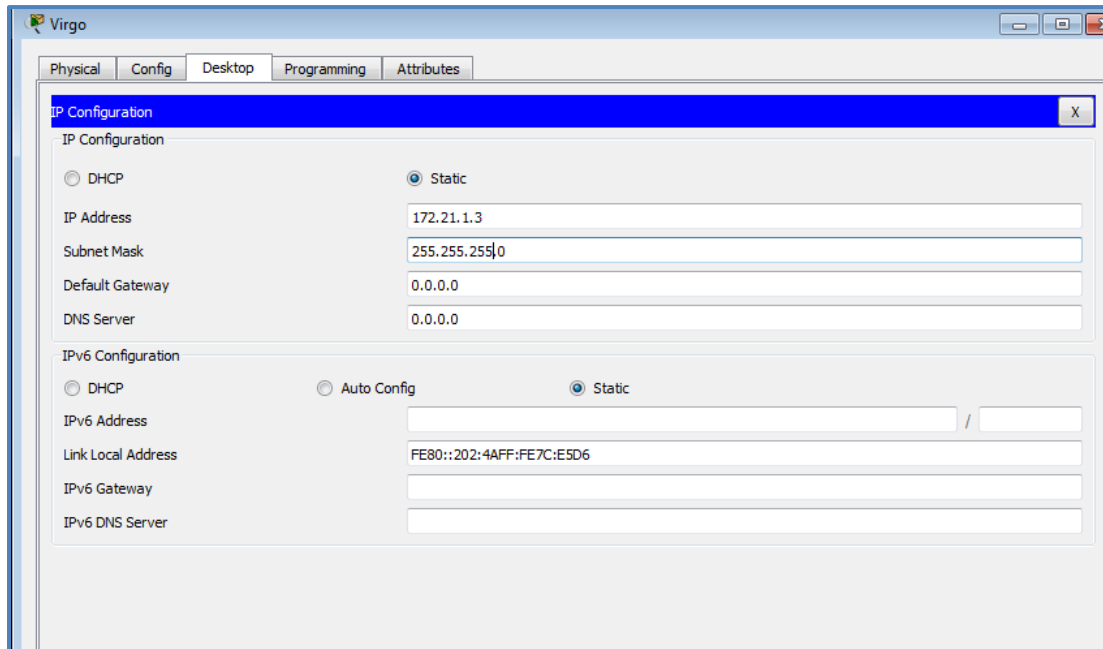


b. Aries = 172.21.1.2/24



c. Virgo = 172.21.1.3/24

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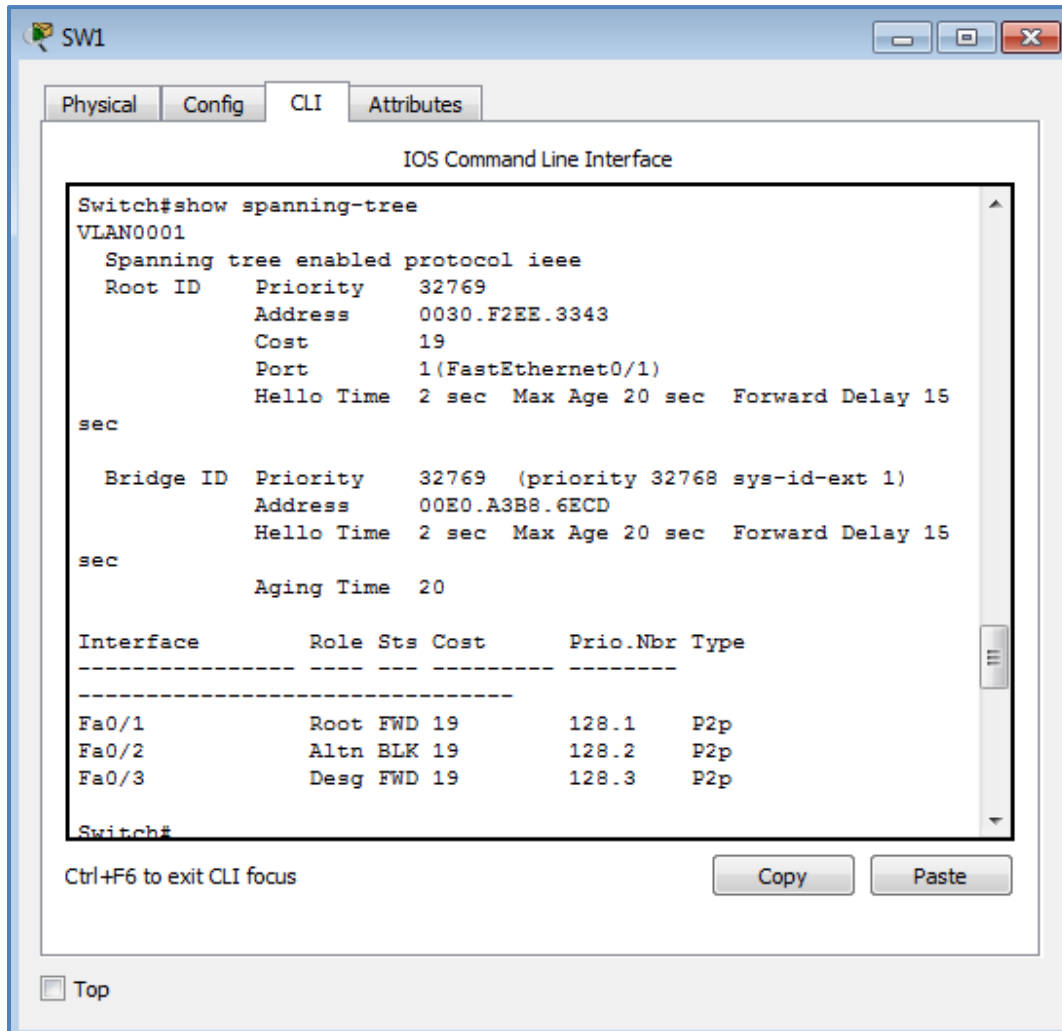
3. Melihat status STP pada masing-masing switch.

a. SW 1

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The screenshot shows a network switch window titled "SW1" with tabs for Physical, Config, CLI, and Attributes. The CLI tab is active, displaying the "IOS Command Line Interface". The command "Switch#show spanning-tree" has been entered, showing the configuration for VLAN0001. The output indicates that spanning tree is enabled with the IEEE protocol. The root bridge has ID 32769, priority 32769, address 0030.F2EE.3343, cost 19, and is connected to port 1 (FastEthernet0/1). The hello time is 2 seconds, max age is 20 seconds, and forward delay is 15 seconds. The bridge ID is 32769 (priority 32768 sys-id-ext 1), address 00E0.A3B8.6ECD, and aging time is 20 seconds. A table shows the status of interfaces Fa0/1, Fa0/2, and Fa0/3.

```
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0030.F2EE.3343
             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     00E0.A3B8.6ECD
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15
sec

             Aging Time  20

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

Switch#
```

Ctrl+F6 to exit CLI focus

Copy Paste

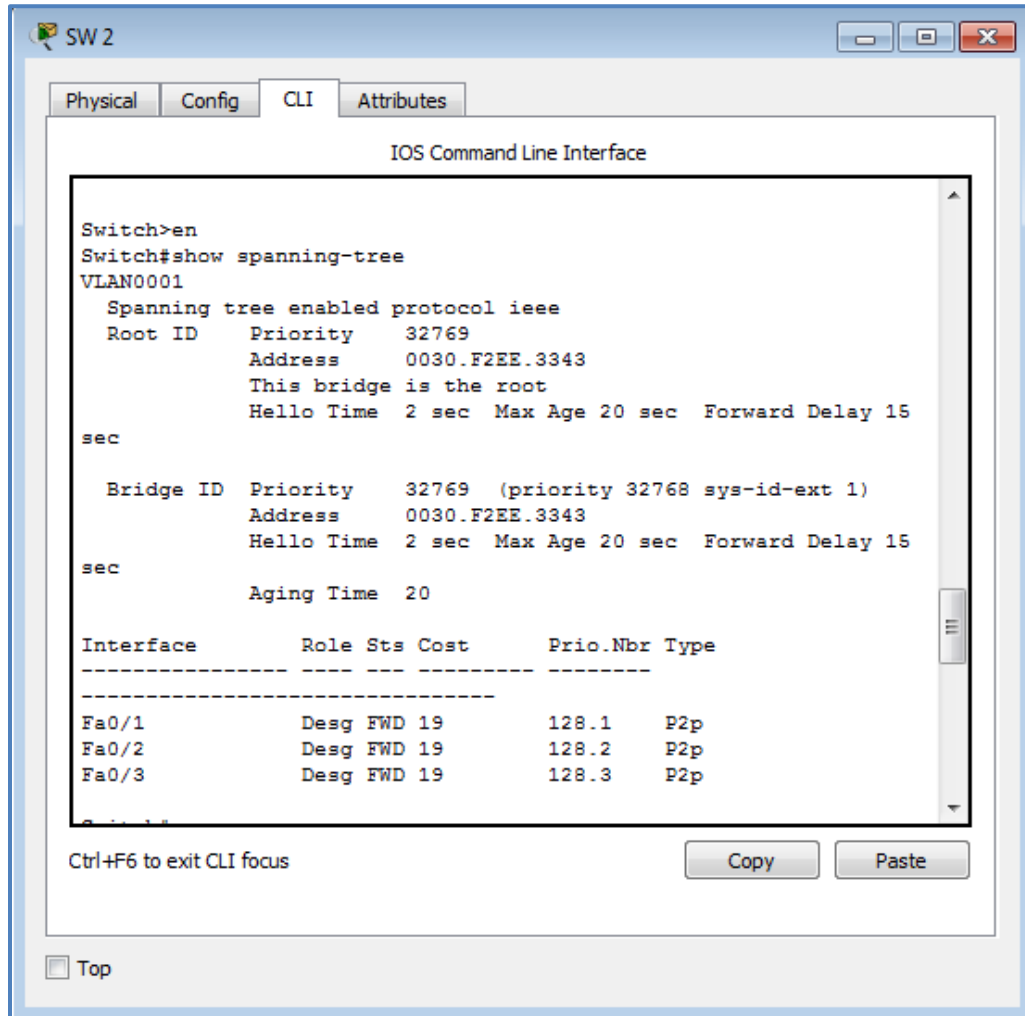
☐ Top

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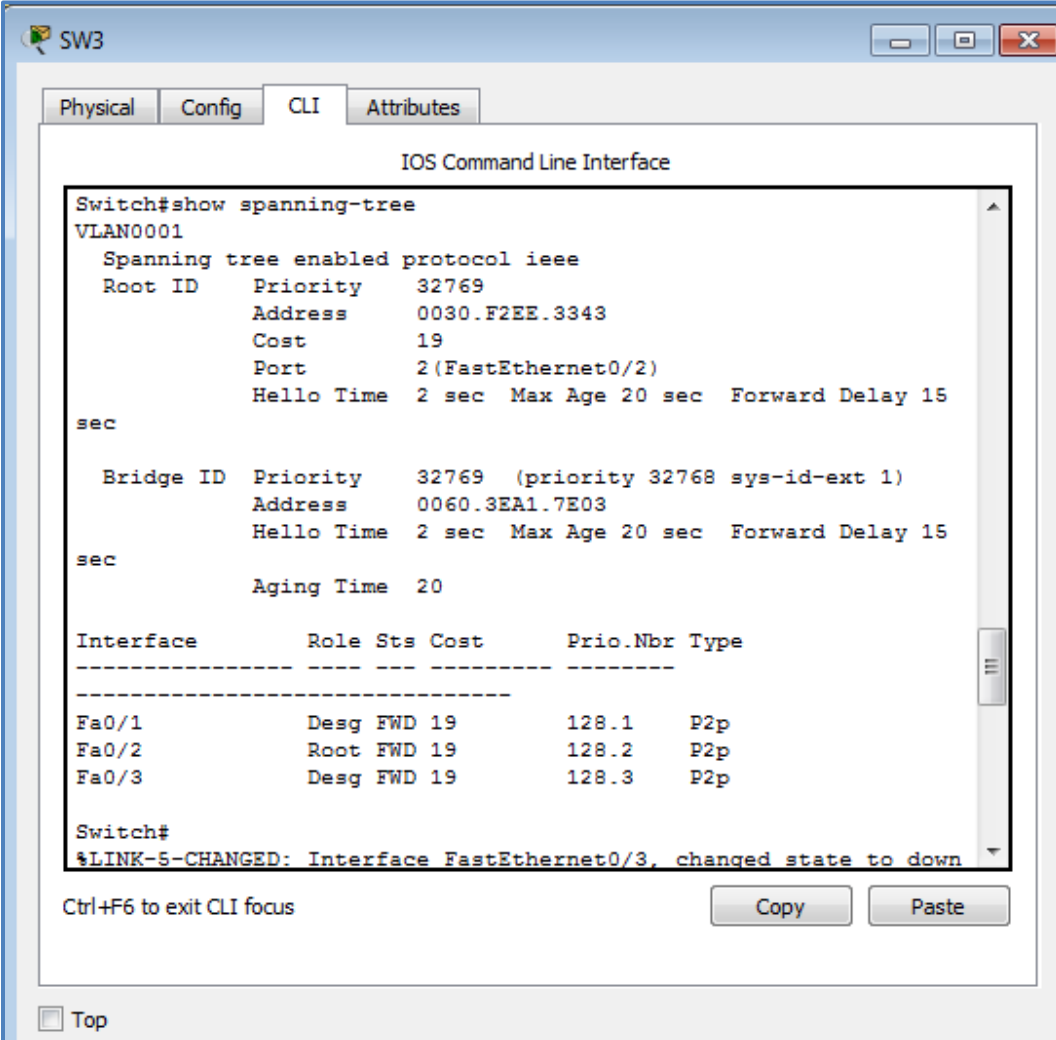
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b. SW 2



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c. SW 3



The screenshot shows a network switch configuration window titled "SW3". It has tabs for "Physical", "Config", "CLI", and "Attributes". The "CLI" tab is active, displaying the "IOS Command Line Interface". The command entered is "Switch#show spanning-tree", and the output shows the configuration for "VLAN0001".

```
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
    Root ID    Priority    32769
              Address     0030.F2EE.3343
              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     0060.3EA1.7E03
              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
Fa0/2          Root FWD 19        128.2   P2p
Fa0/3          Desg FWD 19        128.3   P2p

Switch#
%LINK-S-CHANGED: Interface FastEthernet0/3, changed state to down
```

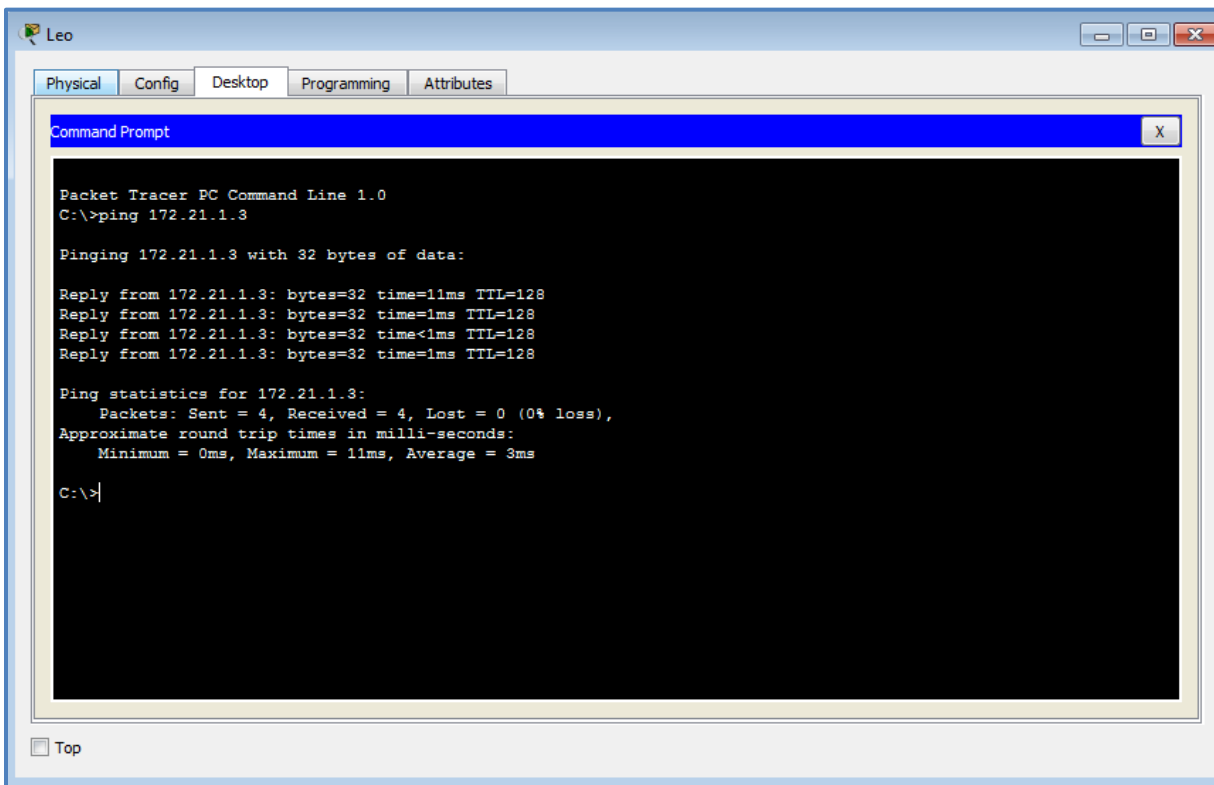
Below the CLI window, there is a "Ctrl+F6 to exit CLI focus" message and "Copy" and "Paste" buttons. At the bottom left, there is a "Top" button.

Muhibah Fata Tika

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4. Melakukan ping dari PC Leo ke PC Virgo



```
Packet Tracer PC Command Line 1.0
C:\>ping 172.21.1.3

Pinging 172.21.1.3 with 32 bytes of data:

Reply from 172.21.1.3: bytes=32 time=11ms TTL=128
Reply from 172.21.1.3: bytes=32 time=1ms TTL=128
Reply from 172.21.1.3: bytes=32 time<1ms TTL=128
Reply from 172.21.1.3: bytes=32 time=1ms TTL=128

Ping statistics for 172.21.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 11ms, Average = 3ms

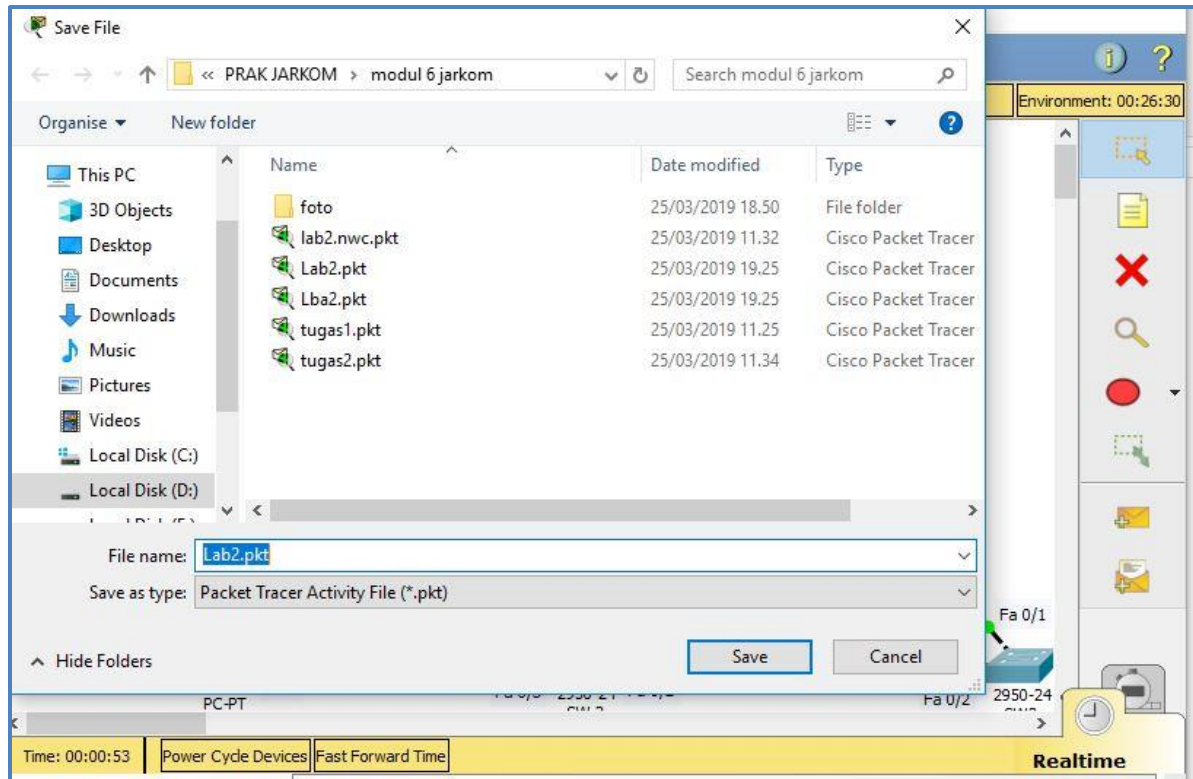
C:\>
```

5. Simpan konfigurasi jaringan dengan nama lab2.pkt

Muhibah Fata Tika

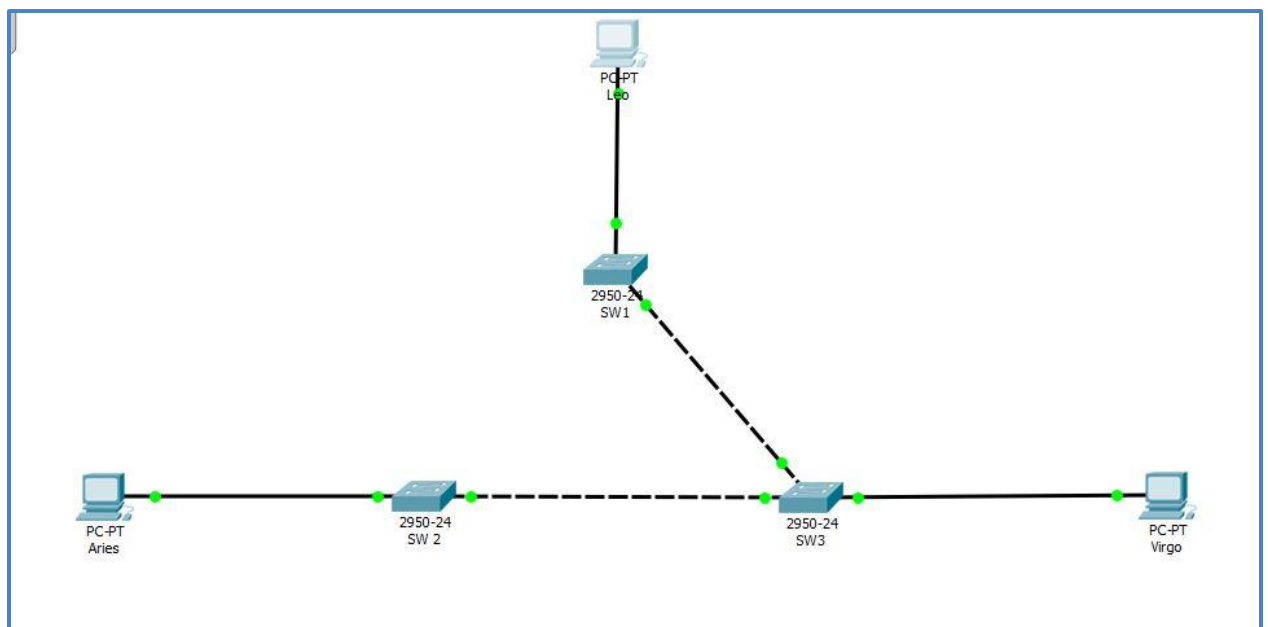
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Kegiatan2. Topologi 2

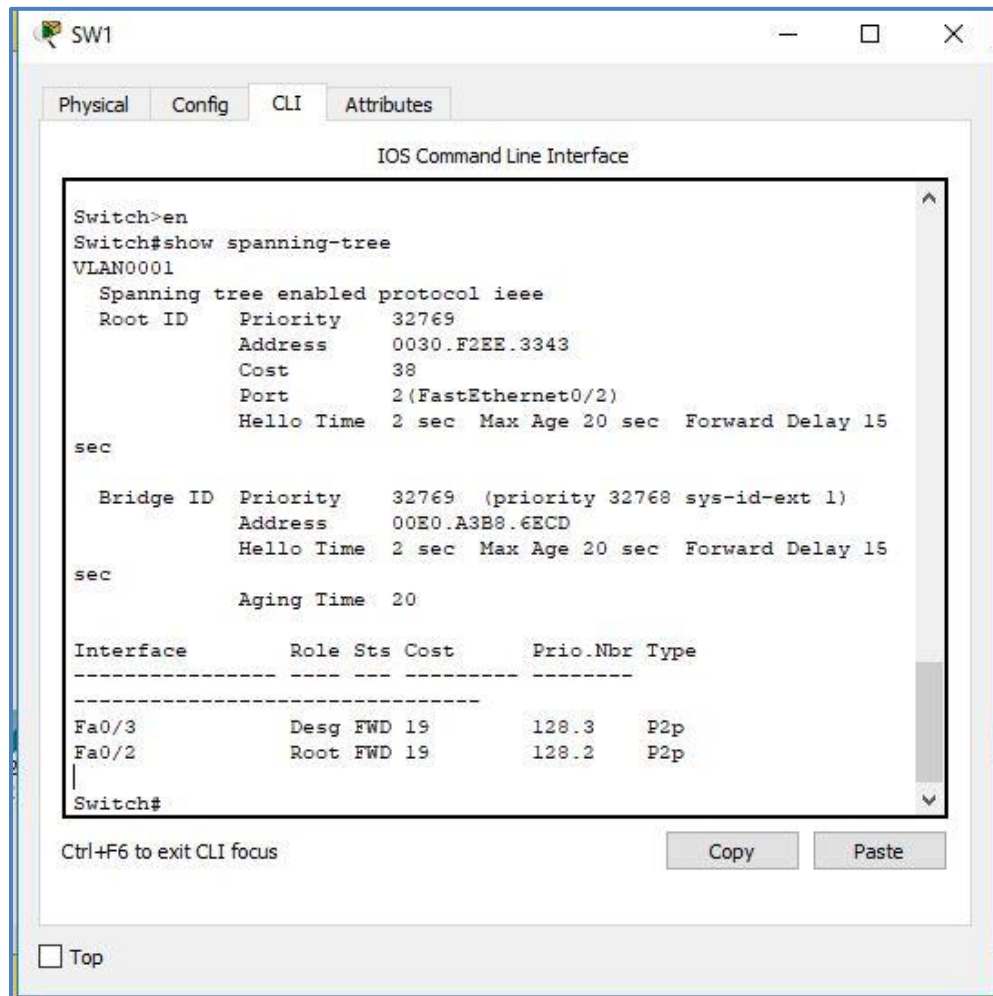
1. Menggunakan packet tracer ubah topologi menjadi seperti topologi berikut ini.



2. Melihat status STP pada masing-masing switch.

Muhibah Fata Tika
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- SW 1



The screenshot shows a network switch CLI window titled "SW1". The window has tabs for "Physical", "Config", "CLI", and "Attributes". The "CLI" tab is active, displaying the "IOS Command Line Interface". The command "Switch>en" has been entered, followed by "Switch#show spanning-tree". The output shows the spanning tree configuration for VLAN0001, including the root ID, priority, address, cost, port, and hello time. It also shows the bridge ID, priority, address, and hello time. At the bottom, there is a table showing the spanning tree status for interfaces Fa0/3 and Fa0/2.

```
Switch>en
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0030.F2EE.3343
             Cost        38
             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     00E0.A3B8.6ECD
             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          Root FWD 19        128.2    P2p
Switch#
```

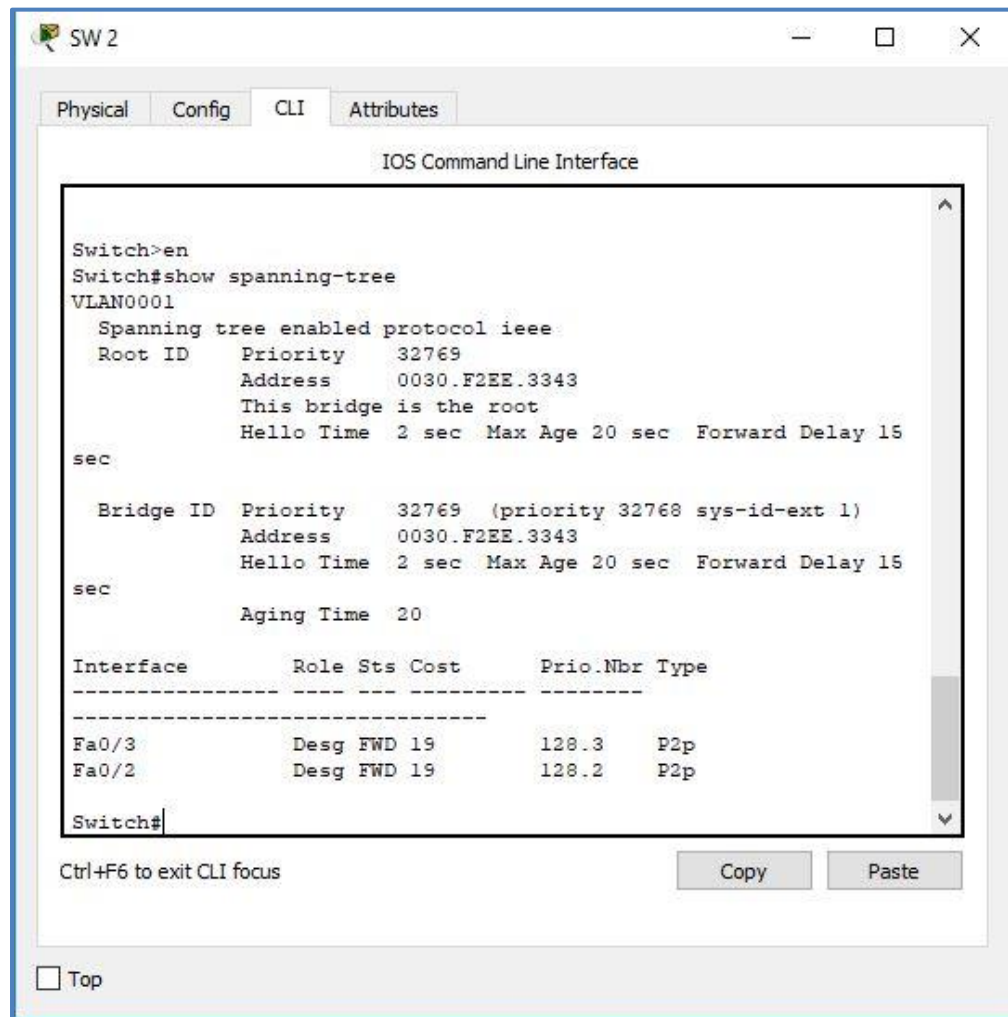
Ctrl+F6 to exit CLI focus

Copy Paste

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- SW 2



The screenshot shows a network switch CLI window titled "SW 2". The window has tabs for "Physical", "Config", "CLI", and "Attributes", with "CLI" selected. The main area displays the output of the command "show spanning-tree" for VLAN0001. The output indicates that the spanning tree is enabled with the IEEE protocol, and the switch is the root of the tree. It shows the root ID, priority, address, and various timers. Below this, it shows the bridge ID, priority, address, and timers. At the bottom, there is a table of interfaces and their roles.

```
Switch>en
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0030.F2EE.3343
             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     0030.F2EE.3343
             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#
```

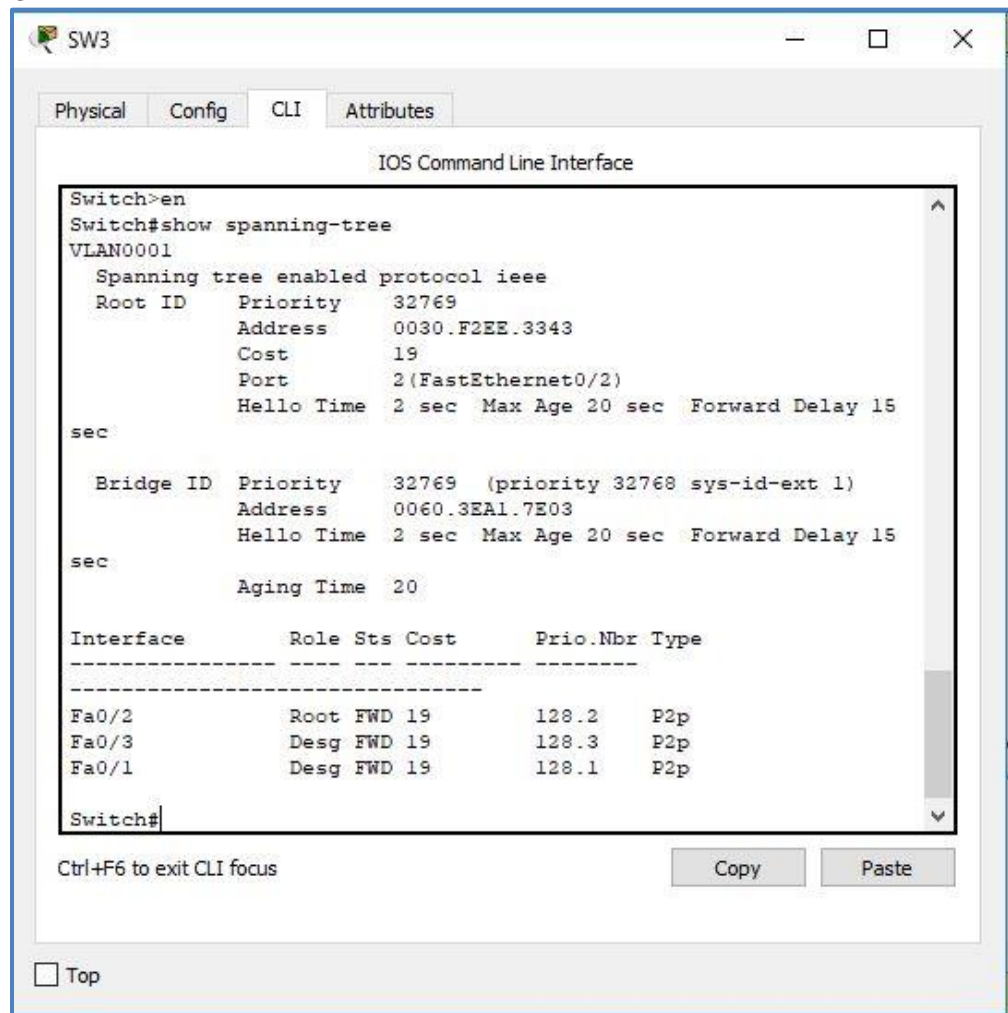
Ctrl+F6 to exit CLI focus

Copy Paste

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Muhibah Fata Tika
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- SW 3



The screenshot shows a network switch configuration window titled 'SW3'. The 'CLI' tab is selected, displaying the 'IOS Command Line Interface'. The command 'Switch#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    0030.F2EE.3343
            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    0060.3E81.7E03
            Hello Time  2 sec  Max Age 20 sec  Forward Delay 15
sec

            Aging Time  20
```

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

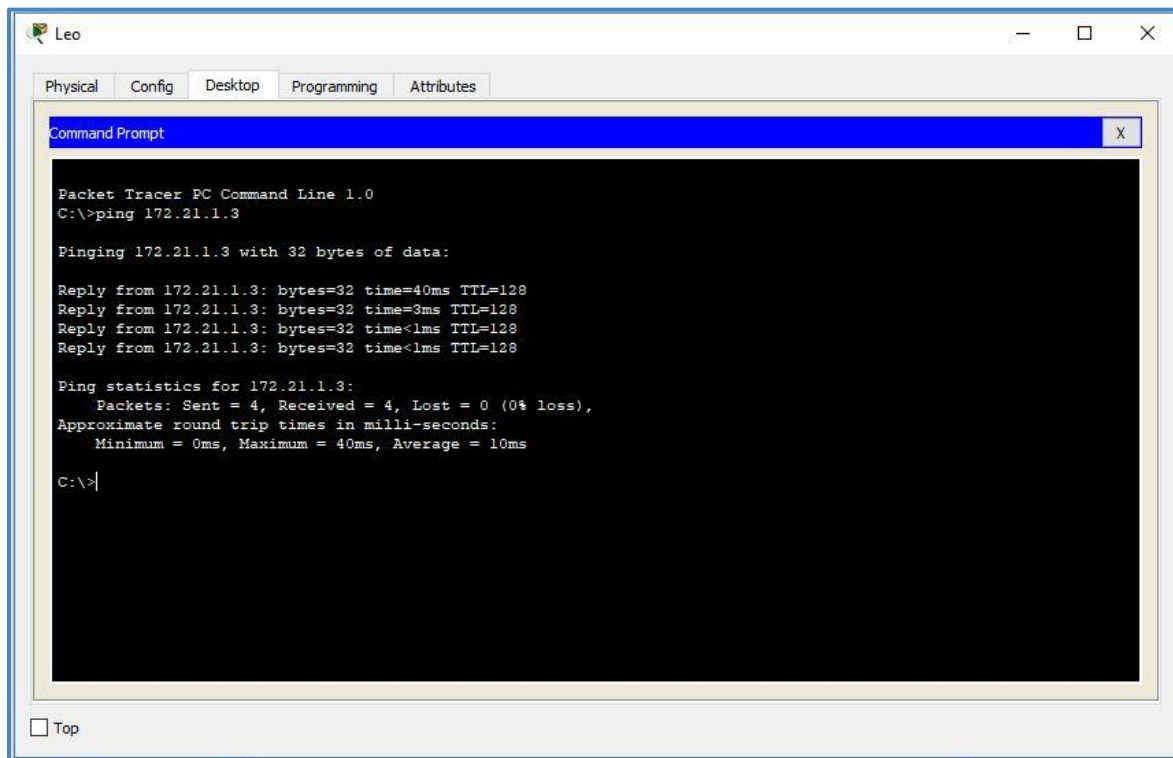
Below the table, the prompt 'Switch#' is visible. At the bottom of the CLI window, there is a 'Ctrl+F6 to exit CLI focus' message and 'Copy' and 'Paste' buttons. A 'Top' button is also present at the bottom left of the window.

Muhibah Fata Tika

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3. Melakukan ping antara PC Leo dengan PC Virgo



```
Packet Tracer PC Command Line 1.0
C:\>ping 172.21.1.3

Pinging 172.21.1.3 with 32 bytes of data:

Reply from 172.21.1.3: bytes=32 time=40ms TTL=128
Reply from 172.21.1.3: bytes=32 time=3ms TTL=128
Reply from 172.21.1.3: bytes=32 time<1ms TTL=128
Reply from 172.21.1.3: bytes=32 time<1ms TTL=128

Ping statistics for 172.21.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 40ms, Average = 10ms

C:\>
```