

Modul 6

SPANNING TREE PROTOCOL

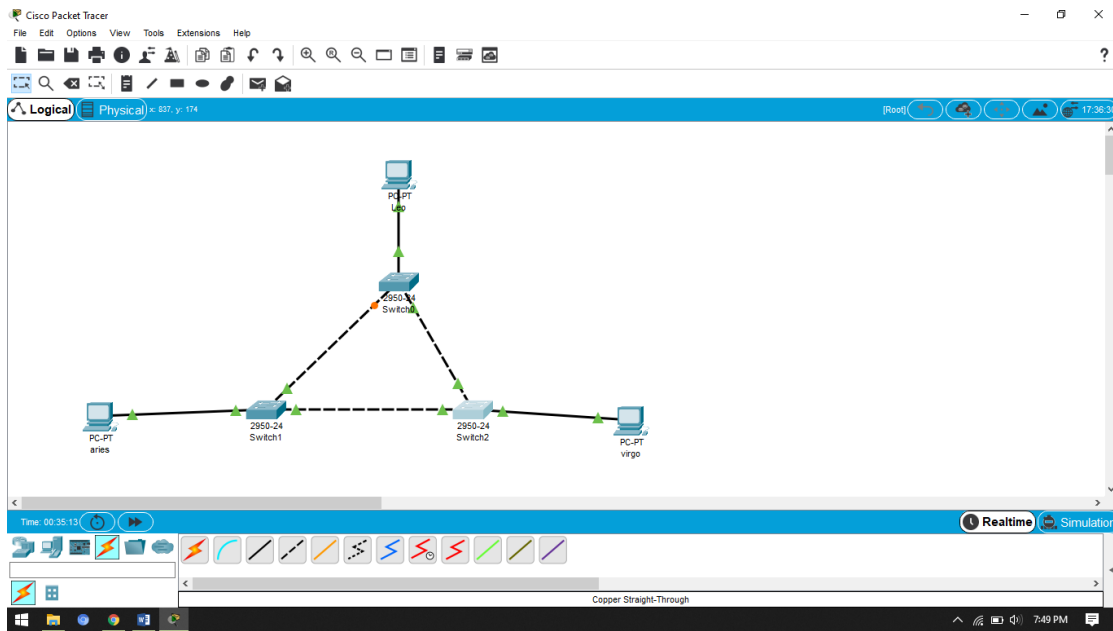
Nama : Damar Fatika Sari

NIM : L200180126

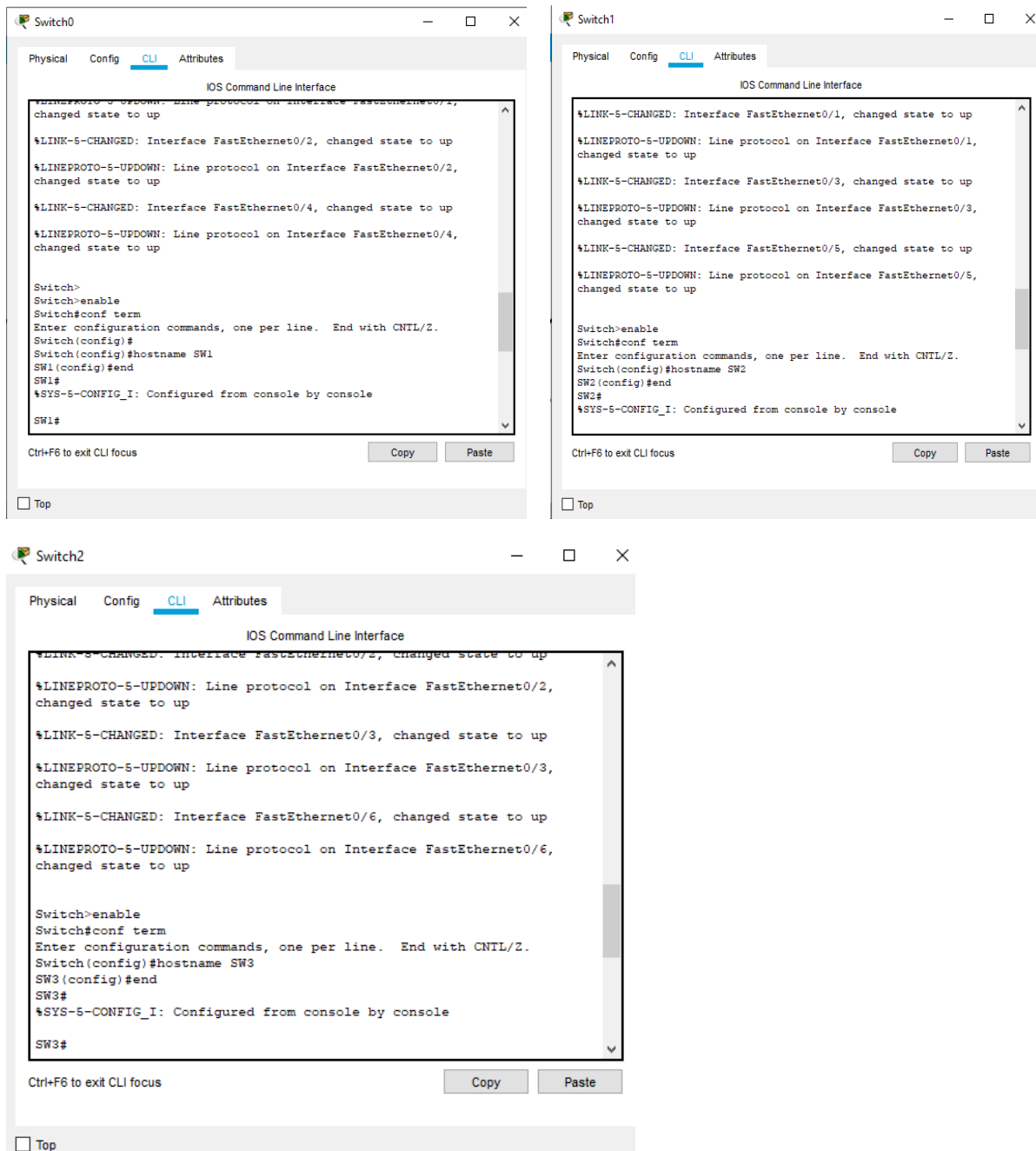
Kelas : C

Kegiatan 1. Topologi 1

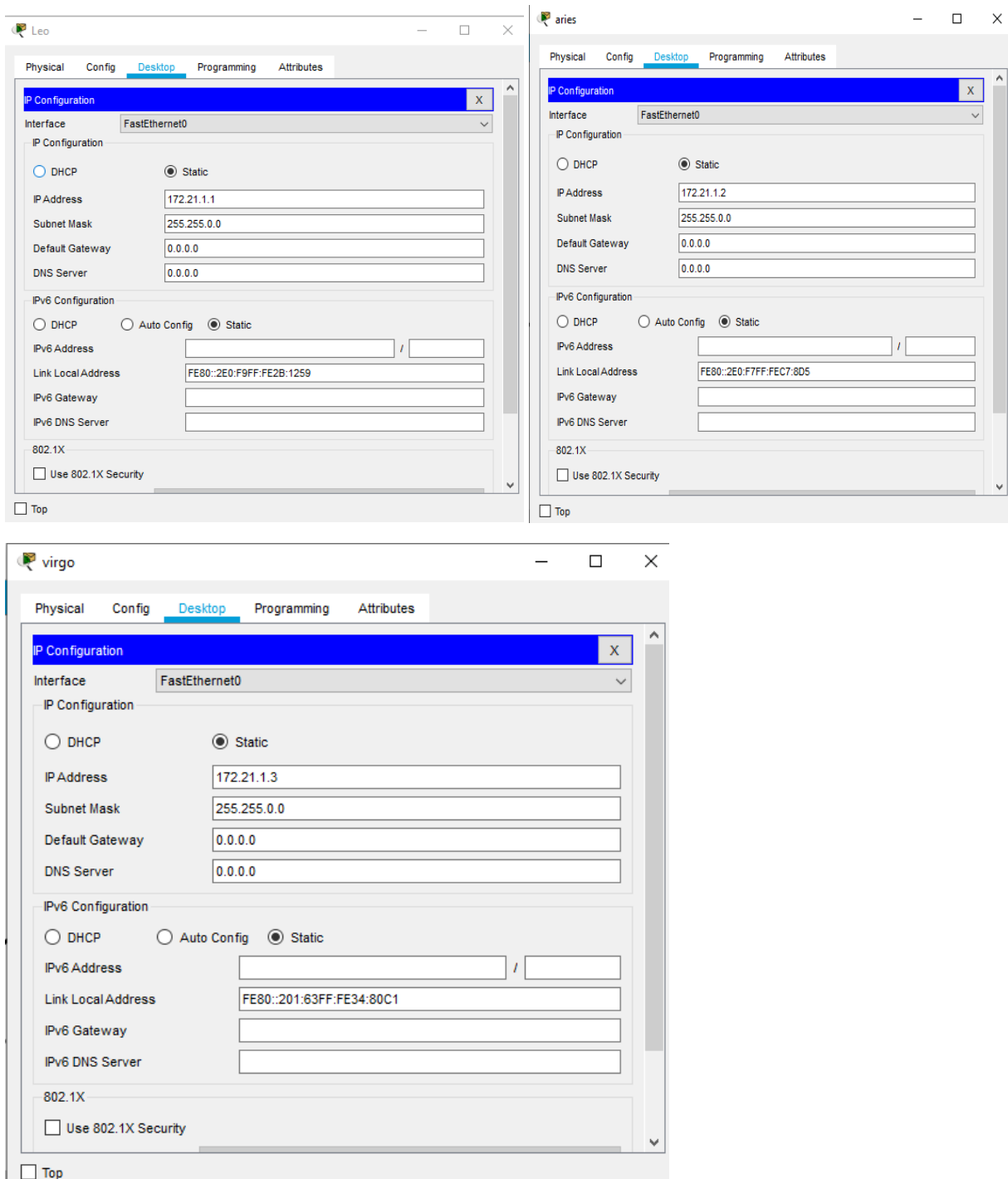
1A.



2A. Mengubah nama switch dengan mode *user* atau *mode privileged* :



C. Konfigurasi masing-masing PC dengan alamat IP:



D.

SW1

Physical Config **CLI** Attributes

IOS Command Line Interface

```

SW1>show spanning-tree
VLAN0001
Spanning tree enabled protocol ieee
Root ID    Priority    32769
           Address    0010.1199.56D5
           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    00E0.F9C0.8799
           Hello Time 2 sec  Max Age 20 sec  Forward Delay 15 sec
           Aging Time 20

Interface   Role Sts Cost      Prio.Nbr Type
-----
Fa0/1       Altn BLK 19       128.1    P2p
Fa0/4       Desg FWD 19       128.4    P2p
Fa0/2       Root FWD 19       128.2    P2p

```

SW1>

Ctrl+F6 to exit CLI focus

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SW2

Physical Config **CLI** Attributes

IOS Command Line Interface

```

SW2>show spanning-tree
VLAN0001
Spanning tree enabled protocol ieee
Root ID    Priority    32769
           Address    0010.1199.56D5
           Cost       19
           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    00E0.B093.4D2D
           Hello Time 2 sec  Max Age 20 sec  Forward Delay 15 sec
           Aging Time 20

Interface   Role Sts Cost      Prio.Nbr Type
-----
Fa0/5       Desg FWD 19       128.5    P2p
Fa0/3       Root FWD 19       128.3    P2p
Fa0/1       Desg FWD 19       128.1    P2p

```

SW2>

Ctrl+F6 to exit CLI focus

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SW3

Physical Config **CLI** Attributes

IOS Command Line Interface

```

SW3>show spanning-tree
VLAN0001
Spanning tree enabled protocol ieee
Root ID    Priority    32769
           Address    0010.1199.56D5
           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    0010.1199.56D5
           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
Fa0/3       Desg FWD 19       128.3    P2p
Fa0/6       Desg FWD 19       128.6    P2p

```

SW3>

Ctrl+F6 to exit CLI focus

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4B.

NO.	Variable (SW1)	Nilai
1	Root ID	32769.0010.1199.56D5
2	Priority	32769
3	MAC Address	0010.1199.56D5
4	Bridge ID	32769.0010.1199.56D5
5	Cost (0/1;0/1;0/3)	19;19;19
6	Hello Time	2 sec
7	MaxAge	20 sec

8	Forward Delay	15 sec
---	---------------	--------

NO.	Variable (SW2)	Nilai
1	Root ID	32769.0010.11C3.1658
2	Priority	32769
3	MAC Address	0060.70CC.E281
4	Bridge ID	32769.0060.70CC.EC81
5	Cost (0/1;0/1;0/3)	19;19;19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

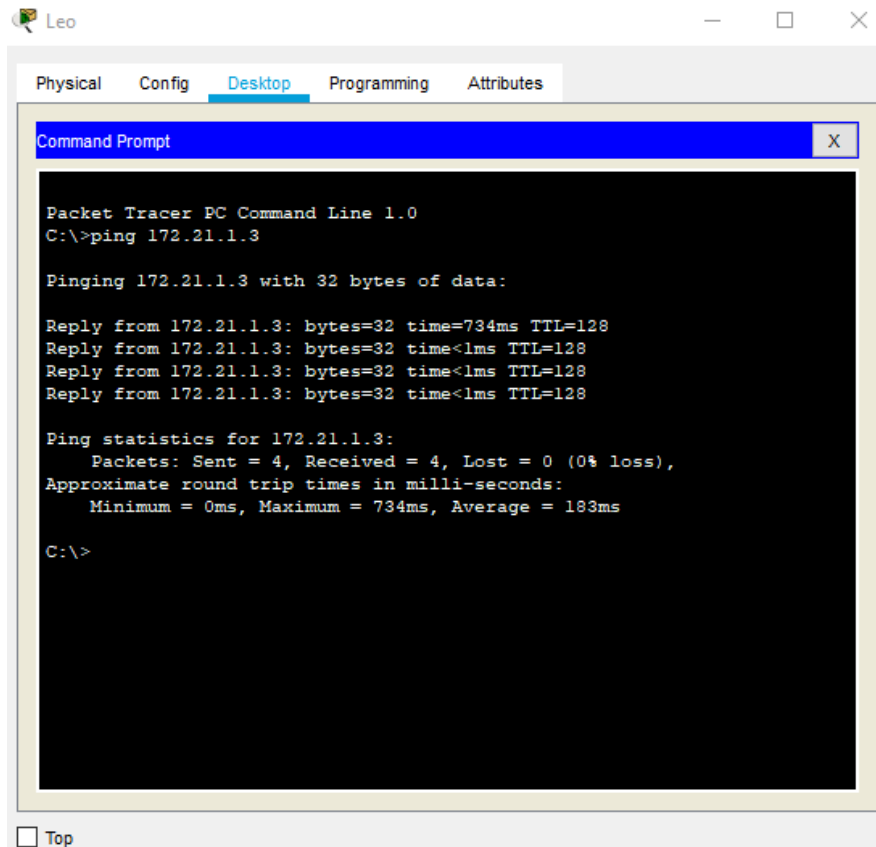
NO.	Variable (SW3)	Nilai
1	Root ID	32769.0010.11C3.1658
2	Priority	32769
3	MAC Address	0060.475B.AB15
4	Bridge ID	32769.0060. 475B.AB15
5	Cost (0/1;0/1;0/3)	19;19;19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

- ✓ Menjadi root bridge : SW1
- ✓ Menjadi designated bridge : SW1 dan SW2
- ✓ Menjadi root port : SW2 : (Fa 0/1) dan SW3: (Fa0/1)
- ✓ Menjadi designated port : SW1: (Fa 0/1,Fa 0/2,Fa 0/3); SW2:(Fa 0/3);SW3 : (Fa 0/2,Fa 0/3)

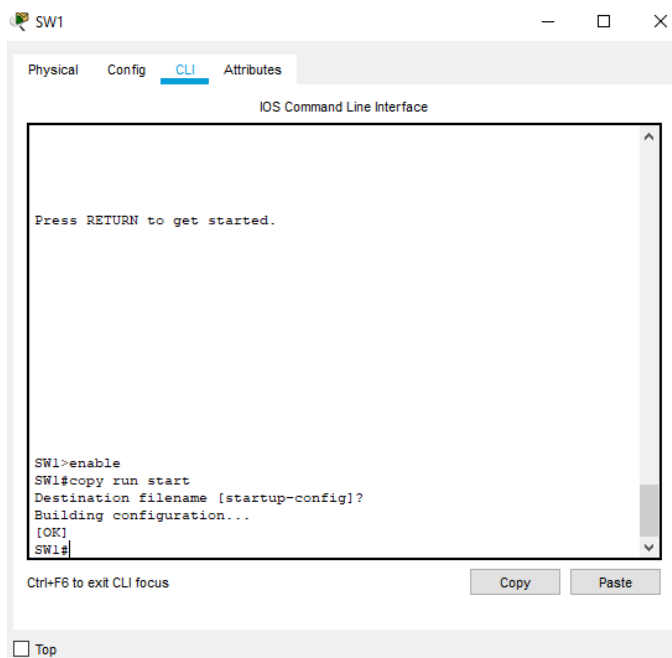
4D.

- ✓ Berada pada keadaan forwarding : SW1: (Fa 0/1,Fa 0/2,Fa 0/3); SW2:(Fa 0/3);SW3 : (Fa 0/2,Fa 0/3)
- ✓ Berada pada keadaan blocking : SW2(Fa 0/2)

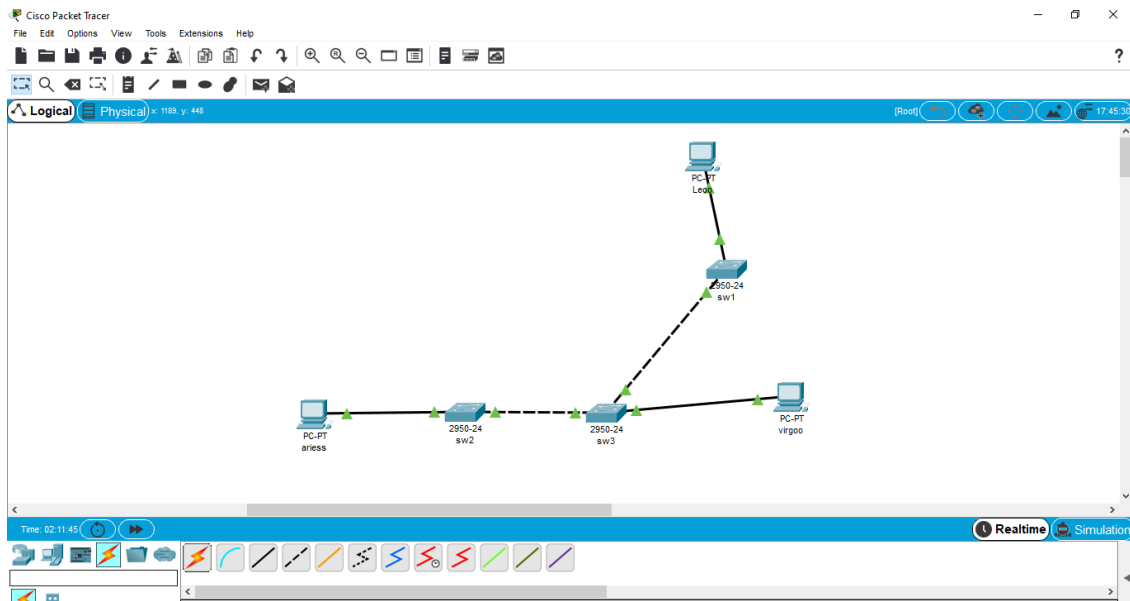
5A. Langkah pingin PC Leo ke PC Virgo



6A.



Kegiatan 2. Topologi 2



Menentukan IP Address

The image shows three overlapping screenshots of the Cisco Packet Tracer CLI for switches sw1, sw2, and sw3. Each window displays the 'IOS Command Line Interface' with the following configuration commands and status messages:

```
Switch>enable
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname sw1
sw1(config)#end
sw1#
%SYS-5-CONFIG_I: Configured from console by console
```

For sw2:

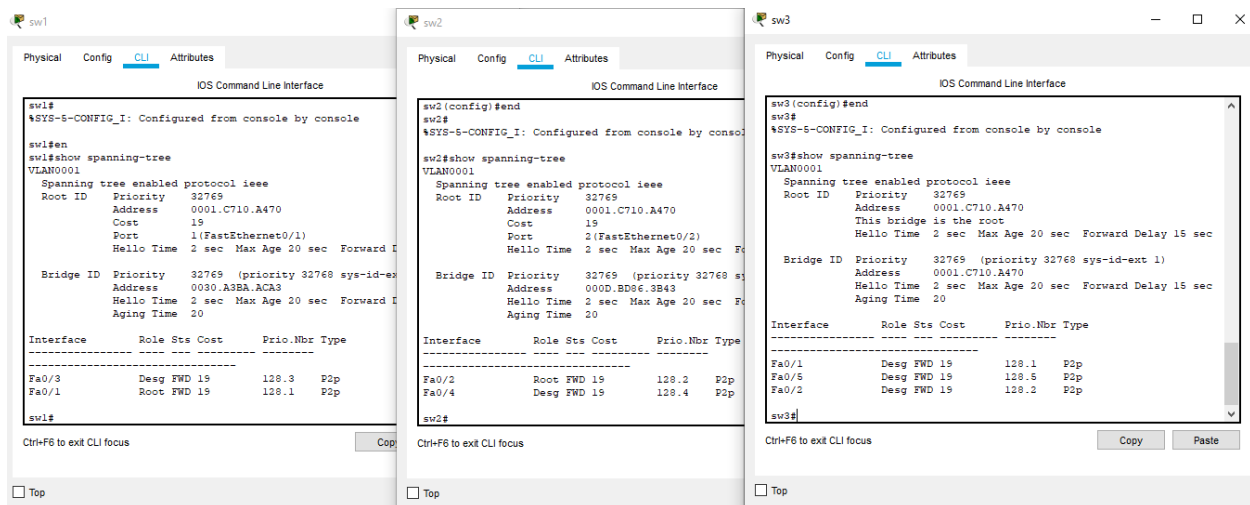
```
Switch>enable
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname sw2
sw2(config)#end
sw2#
%SYS-5-CONFIG_I: Configured from console by console
```

For sw3:

```
Switch>enable
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname sw3
sw3(config)#end
sw3#
%SYS-5-CONFIG_I: Configured from console by console
```

Each window also shows status messages for interfaces FastEthernet0/1, FastEthernet0/2, FastEthernet0/3, FastEthernet0/4, and FastEthernet0/5, indicating that the line protocol is up and the link state is changed.

Melihat status STP



TABLE

NO.	Variable (SW1)	Nilai
1	Root ID	32769.0010.C710.A470
2	Priority	32769
3	MAC Address	0030.A3BA.ACA3
4	Bridge ID	32769.0030.A3BA.ACA3
5	Cost (0/1;0/1;0/3)	19;19;19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	16 sec

NO.	Variable (SW2)	Nilai
1	Root ID	32769.0010.C710.A470
2	Priority	32769
3	MAC Address	0000.BD86.3B43
4	Bridge ID	32769.0000. BD86.3B43
5	Cost (0/1;0/1;0/3)	19;19;19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

NO.	Variable (SW3)	Nilai
1	Root ID	32769.0010.C710.A470
2	Priority	32769
3	MAC Address	0001.C710.A470
4	Bridge ID	32769.0001. C710.A470
5	Cost (0/1;0/1;0/3)	19;19;19

6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

- ✓ Root bridge : sw3
- ✓ Designated Bridge : sw2
- ✓ Root Port : sw1(Fa 0/1);sw2 (Fa 0/2)
- ✓ Designated port : sw1(Fa 0/2);sw2(Fa 0/1,Fa 0/3);sw3(Fa0/1,Fa 0/2)
- ✓ Forwarding : sw1(Fa 0/1,Fa 0/2); sw2(Fa 0/1,Fa 0/2,Fa 0/3);sw3 (Fa 0/1,Fa 0/2)
- ✓ Blocking : tidak ada

Menyimpan konfig

