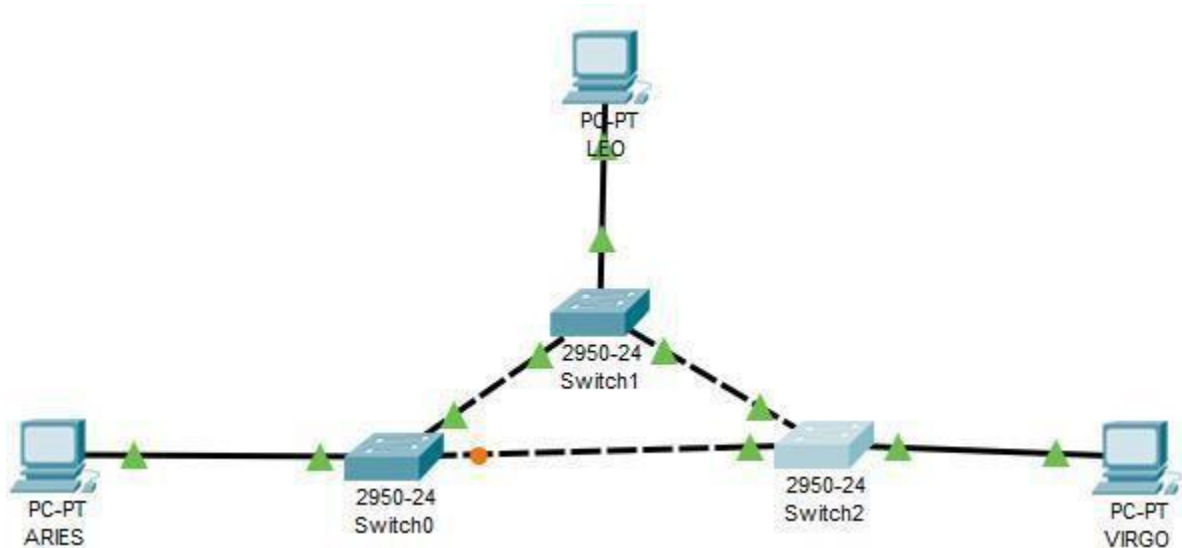


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KEGIATAN 1

1.A Berikut adalah strukturtopologi



2.A Dari struktur jaringan diatas terdapat 3 Switch dan 3 *Workstation*, dengan nama *Switch* yaitu SW1, SW2, dan SW3. Sedangkan *Workstation* ialah Leo, Aries, danVirgo.

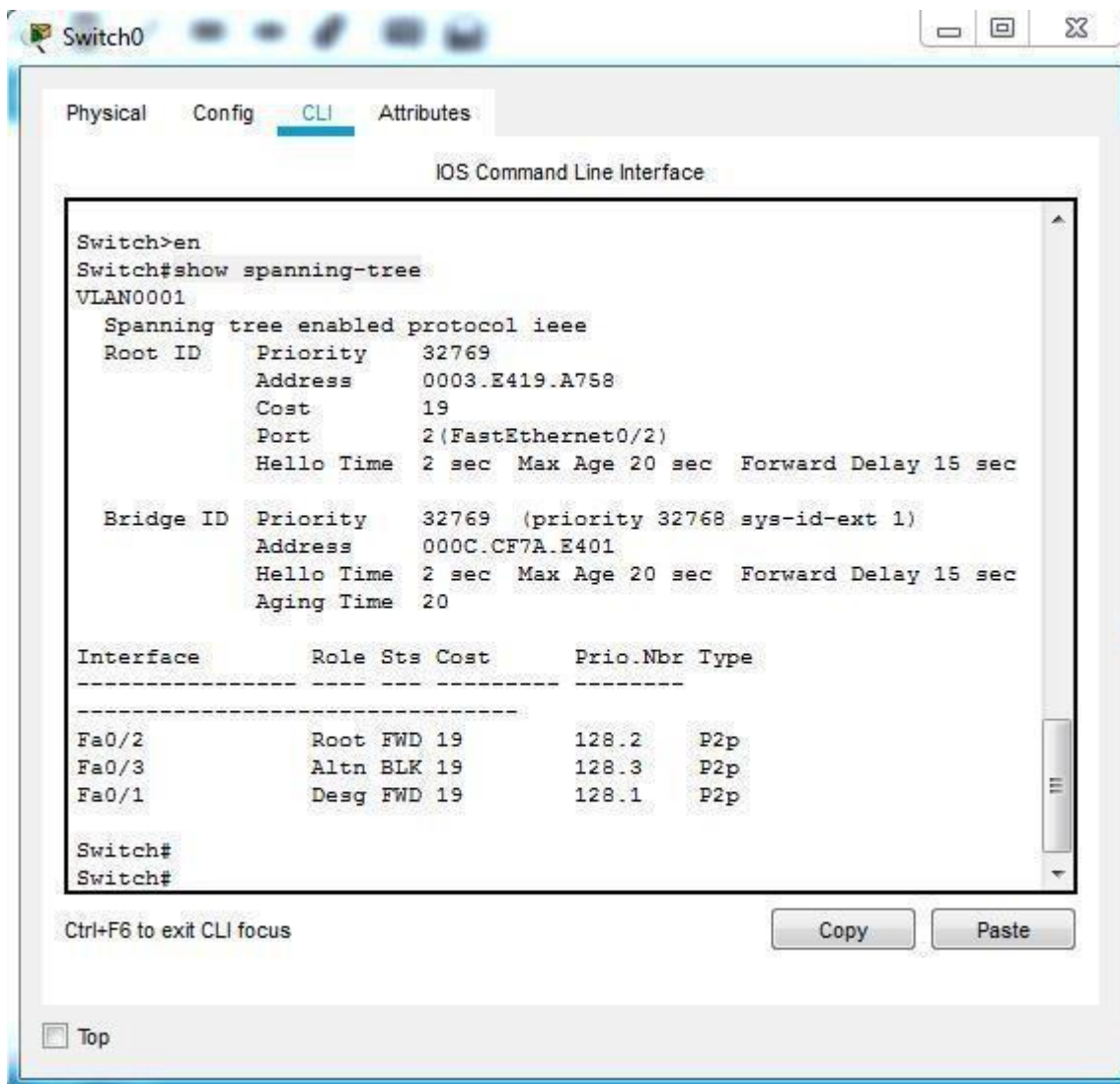
Setelah itu konfigurasi setiap *Workstation* dengan IPAddress:

Leo = 172.21.1.1/24

Aries =172.21.1.2/24

Virgo =172.21.1.3/24

4.A Tampilan masing-masing status STP(Spanning Tree Protocol) padaswitch.



The screenshot shows a network switch window titled "Switch0" with tabs for Physical, Config, CLI, and Attributes. The CLI tab is active, displaying the "IOS Command Line Interface". The user has entered the command "show spanning-tree" in VLAN0001. The output shows that STP is enabled with the IEEE protocol. The root bridge has ID 32769, priority 32769, address 0003.E419.A758, cost 19, and is connected to port 2 (FastEthernet0/2). The bridge has a hello time of 2 seconds, max age of 20 seconds, and forward delay of 15 seconds. The bridge ID is 32769 (priority 32768 sys-id-ext 1), address 000C.CF7A.E401, hello time 2 seconds, max age 20 seconds, forward delay 15 seconds, and aging time 20. A table shows the status of interfaces Fa0/2, Fa0/3, and Fa0/1. Fa0/2 is the root (Root) in the forwarding state (FWD) with a cost of 19 and priority 128.2. Fa0/3 is an alternate (Altn) in the blocking state (BLK) with a cost of 19 and priority 128.3. Fa0/1 is the designated (Desg) in the forwarding state (FWD) with a cost of 19 and priority 128.1. The window also has a "Copy" button, a "Paste" button, and a "Top" button.

```
Switch>en
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
            Address      0003.E419.A758
            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      000C.CF7A.E401
            Hello Time   2 sec  Max Age 20 sec  Forward Delay 15 sec
            Aging Time   20

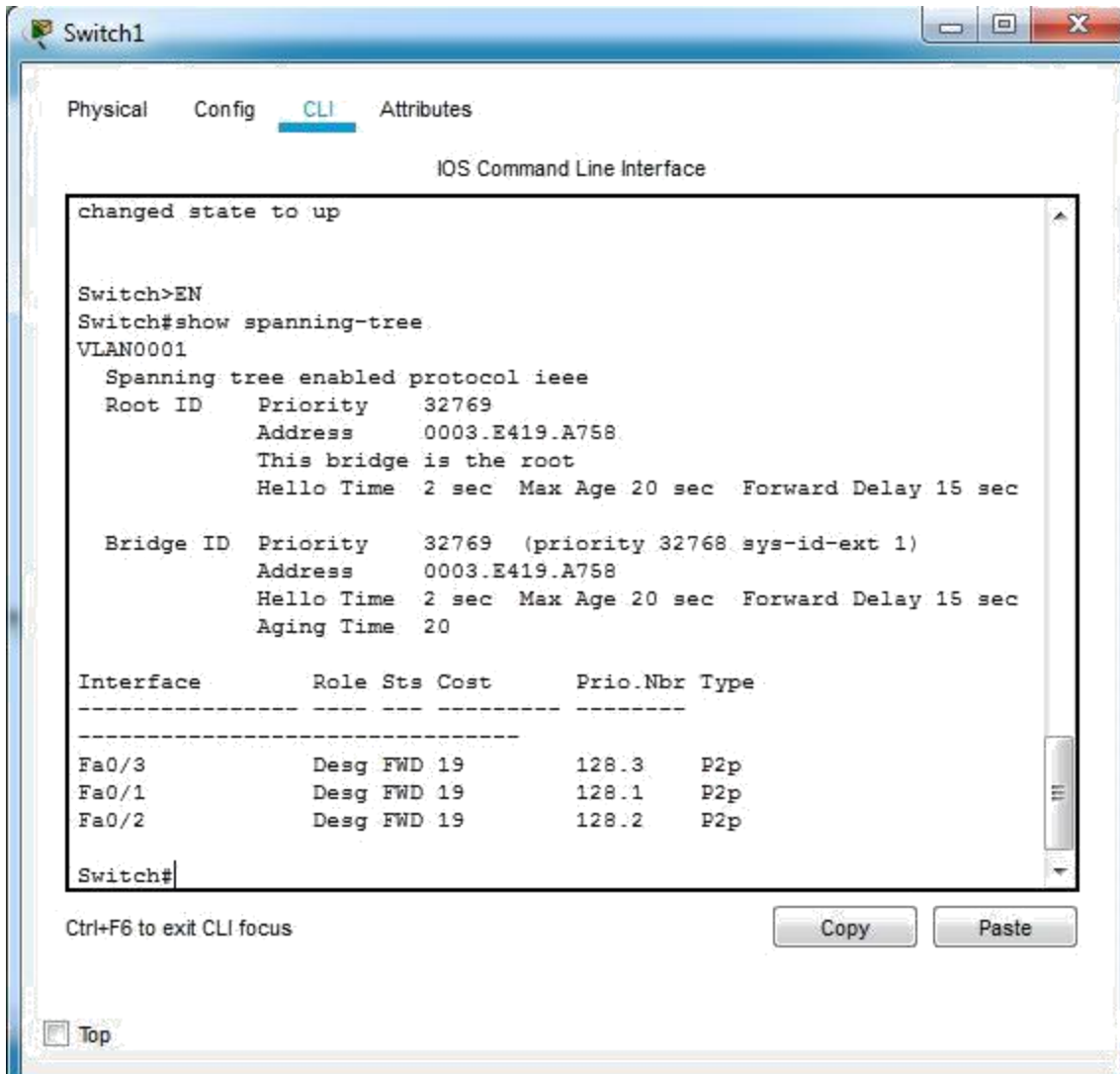
Interface    Role  Sts  Cost      Prio.Nbr  Type
-----
Fa0/2        Root  FWD  19         128.2     P2p
Fa0/3        Altn  BLK  19         128.3     P2p
Fa0/1        Desg  FWD  19         128.1     P2p

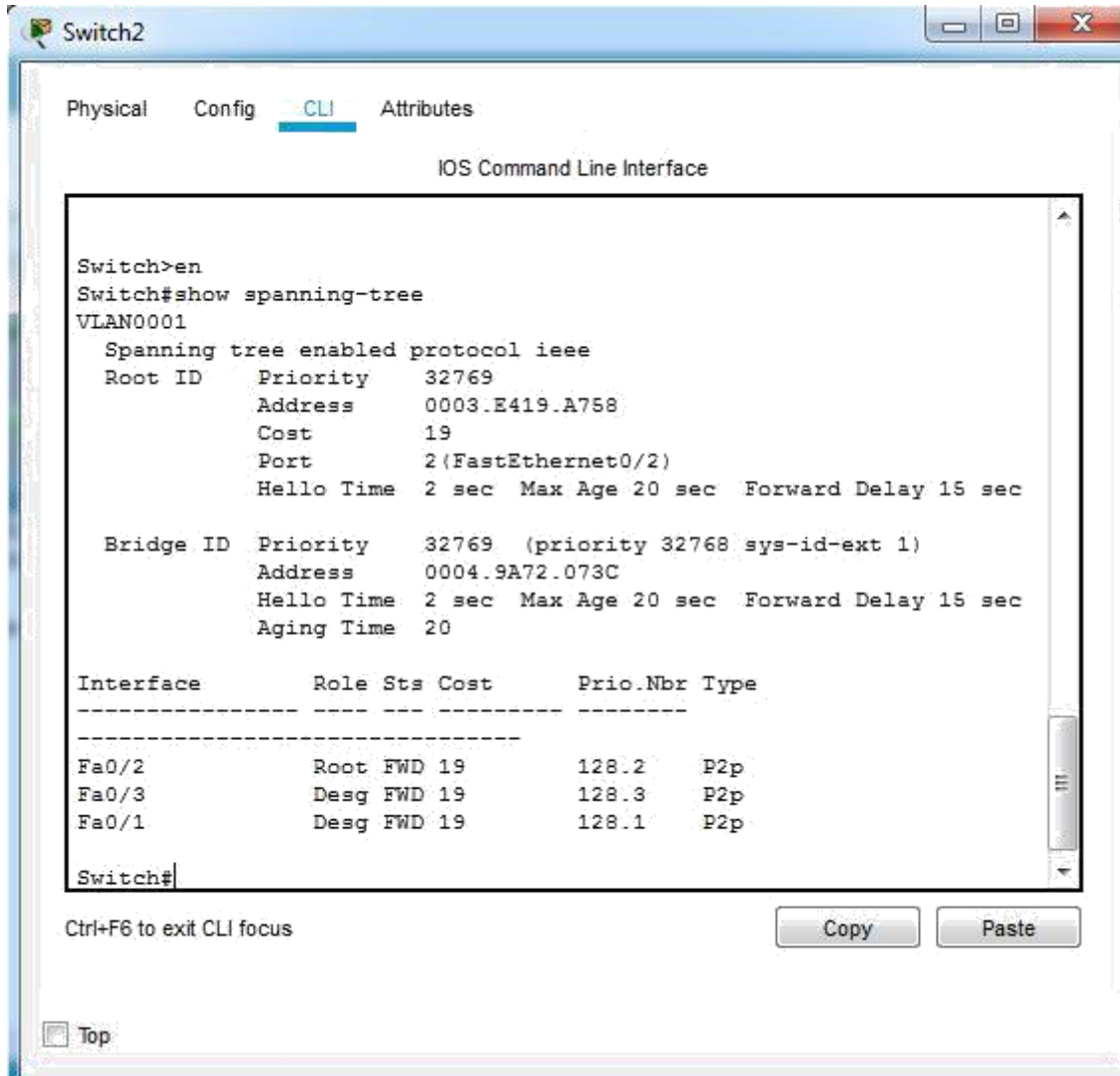
Switch#
Switch#
```

Ctrl+F6 to exit CLI focus

Copy Paste

Top





4B

SW0

No	Variable	Nilai
	Root ID	
1	Priority	32769
2	MAC Address	0003.E419.A768
	Bridge ID	
3	Cost(0/1;0/2;0/3)	19
4	Hello Time	2 Sec
5	Max Age	20 Sec
6	Forward Delay	15 Sec

SW1

No	Variable	Nilai
	Root ID	
1	Priority	32769
2	MAC Address	0003.E419.A768
	Bridge ID	
3	Cost(0/1;0/2;0/3)	19
4	Hello Time	2 Sec
5	Max Age	20 Sec
6	Forward Delay	15 Sec

SW2

No	Variable	Nilai
	Root ID	
1	Priority	32769
2	MAC Address	0003.E419.A758
	Bridge ID	
3	Cost(0/1;0/2;0/3)	19
4	Hello Time	2 Sec
5	Max Age	20 Sec
6	Forward Delay	15 Sec

4C

Pada kondisi default *Switch* dan *Port* yang menjadi :

- *Root Bridge* ialah **SwitchSW3**
- *Designated Bridge* ialah **SwitchSW1**
- *Root Port* ialah **Fa0/3** pada **SW1** dan **Fa0/3** pada **SW2**
- *Designated Port* ialah **Fa0/1** dan **Fa0/2**

4D

Pada kondisi default port yang :

- 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)**.

e. Ping dari Pc Leo ke Virgo

```
C:\>ping 172.21.1.3

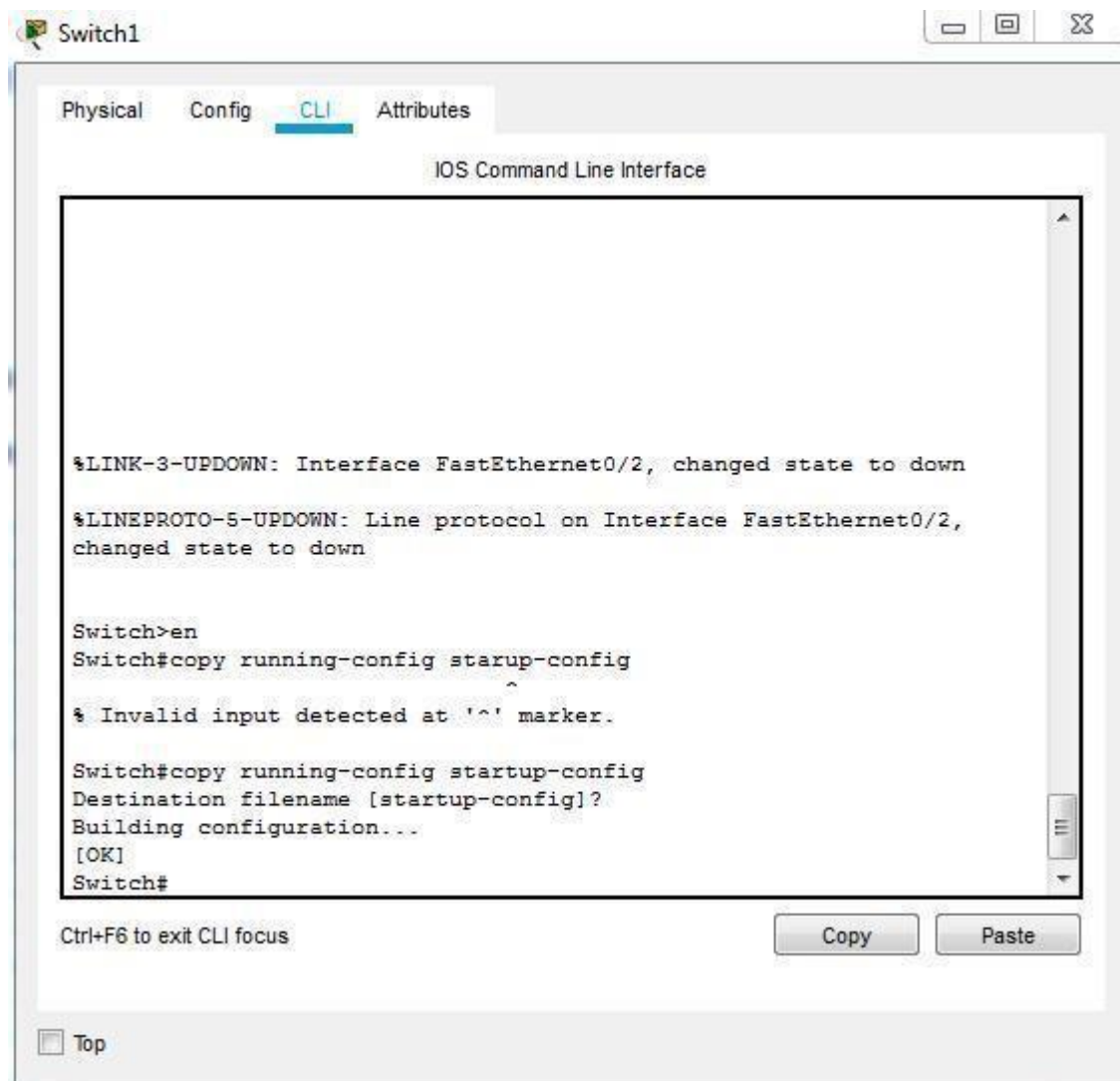
Pinging 172.21.1.3 with 32 bytes of data:

Reply from 172.21.1.3: bytes=32 time=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
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 = 1ms, Average = 0ms

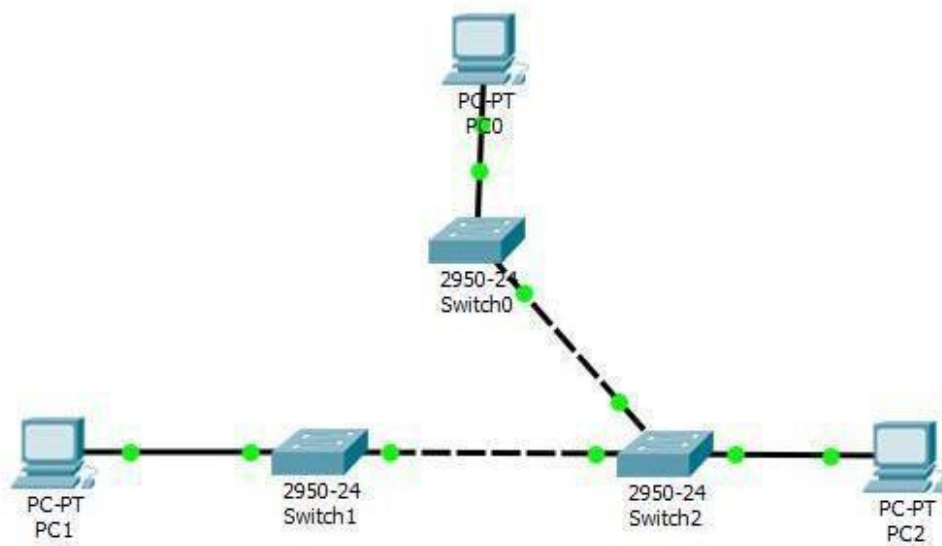
C:\>
```

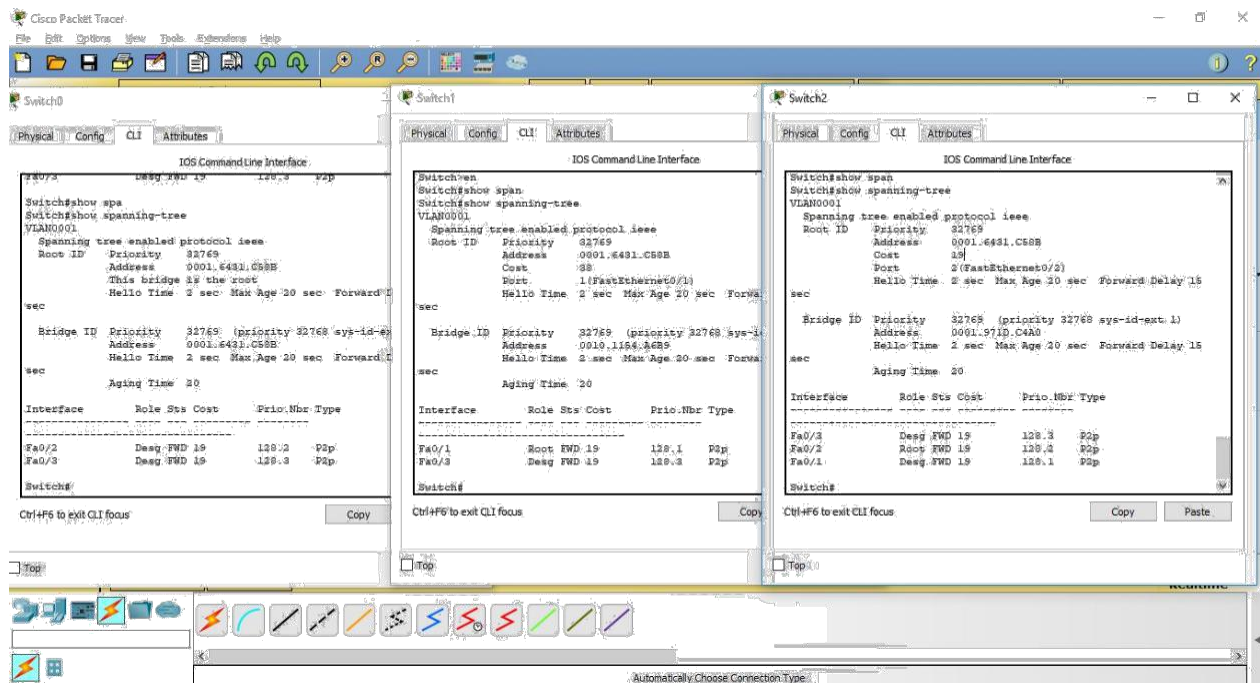
6A. Menyiapkan konfigurasi switch



KEGIATAN 2.

Membuat Design Seperti dibawah ini lalu cek spanning tree





SW0

NO	Variabel	Nilai
1	Root ID	32769
2	Priority	32769
3	MAC Addrres	0001.6431.C58B
4	Bridge ID	32769
5	Cost(0/1,0/2,0/3)	19;19;19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

SW1

NO	Variabel	Nilai
1	Root ID	32769
2	Priority	32769
3	MAC Addrres	0001.6431.C58B
4	Bridge ID	32769
5	Cost(0/1,0/2,0/3)	19;19;19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

SW 2

NO	Variabel	Nilai
1	Root ID	32769
2	Priority	32769
3	MAC Addrres	0001.6431.C58B
4	Bridge ID	32769
5	Cost(0/1,0/2,0/3)	19;19;19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

Root bridge : sw1 /sw2
 Designated bridge : sw0
 Root port : sw1 / sw 2
 Designated port : sw0
 Forwarding : sw0/sw1/sw2
 Blocking : None

