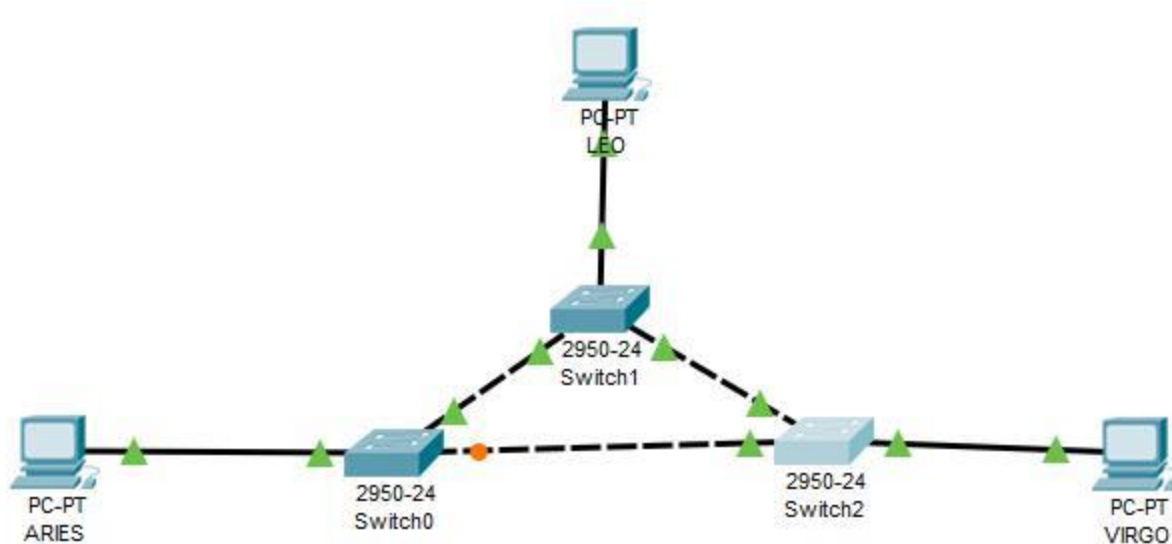


Nama : Dandung Rahmatdhan
NIM : L200170098
Kelas : C
Modul : 6

KEGIATAN 1

1.A Berikut adalah struktur topologi

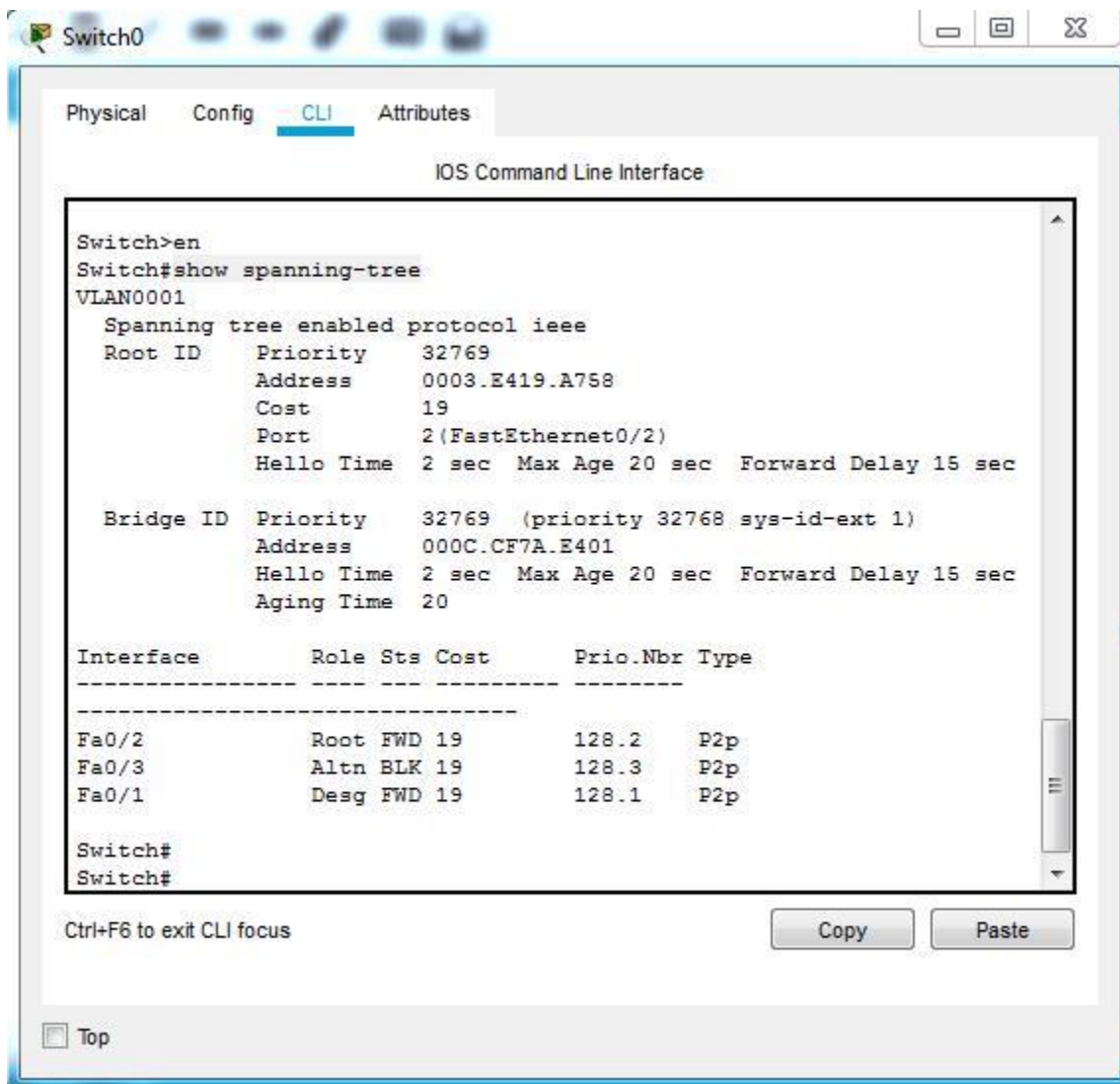


2.A Dari struktur jaringan diatas terdapat 3 Switch dan 3 *Workstation*, dengan nama *Switch* yaitu SW1, SW2, dan SW3. Sedangkan *Workstation* ialah Leo, Aries, dan Virgo.

2. Setelah itu konfigurasi setiap *Workstation* dengan IP Address:

- 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) pada switch.



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 using the IEEE protocol. The root bridge has ID 32769, priority 32769, address 0003.E419.A758, and is connected to FastEthernet0/2. The bridge has a cost of 19, 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 in the forwarding state with a cost of 19. Fa0/3 is an alternate in the blocking state with a cost of 19. Fa0/1 is the designated in the forwarding state with a cost of 19. The window also includes a "Ctrl+F6 to exit CLI focus" message, "Copy" and "Paste" buttons, 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

Switch1

PhysicalConfigCLIAttributes

IOS Command Line Interface

changed state to up

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

Interface Role Sts Cost Prio.Nbr Type

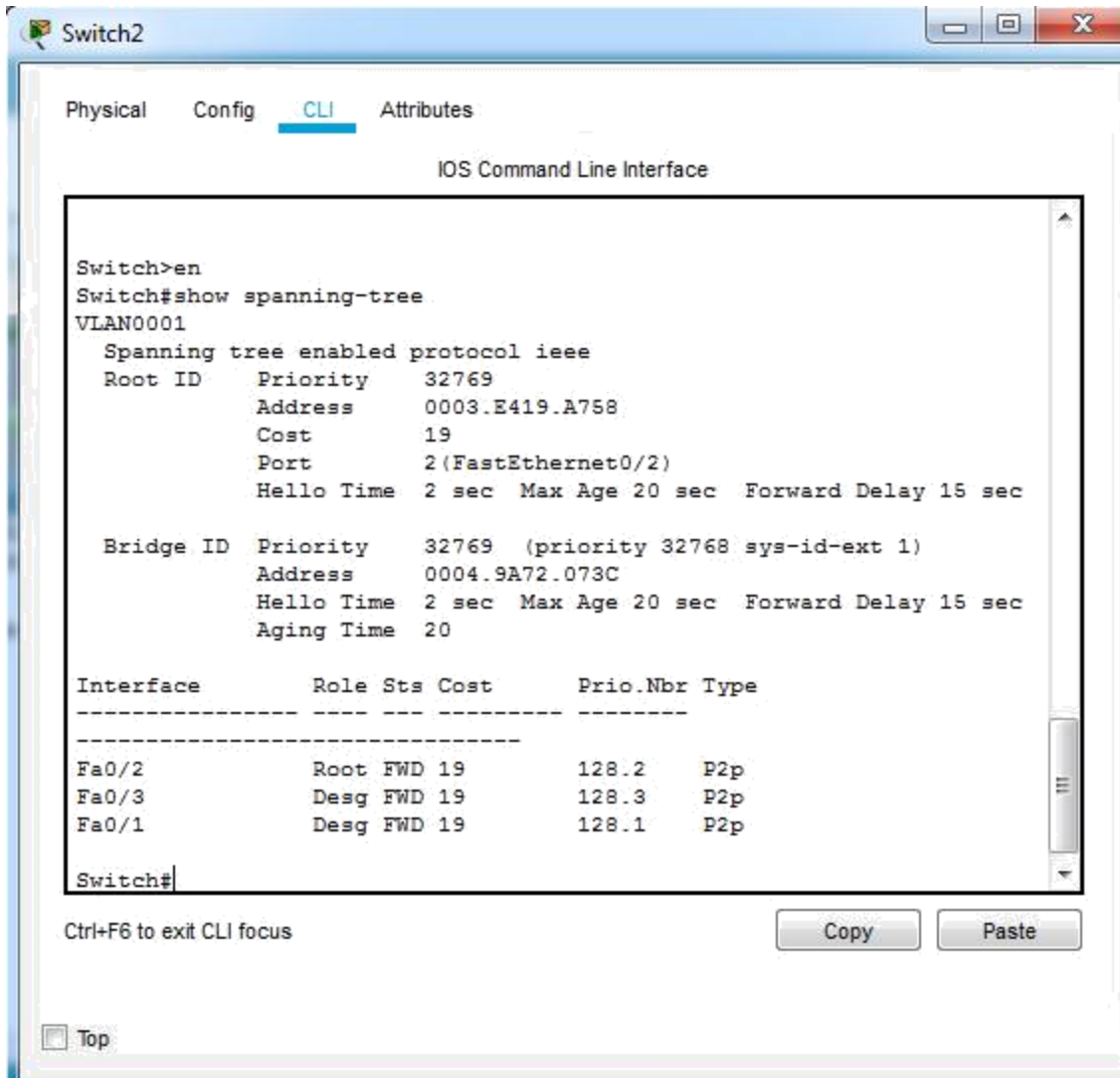
Fa0/3 Desg FWD 19 128.3 P2p
Fa0/1 Desg FWD 19 128.1 P2p
Fa0/2 Desg FWD 19 128.2 P2p

Switch#

Ctrl+F6 to exit CLI focus

CopyPaste

☐ Top



B

SW 0

No	Variable	Nilai
	Root ID	
1	Priority	32769
2	MAC Adress	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

C

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

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

D

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)**.

5. Ping dari Pc Leo ke Virgo

```
C:\>ping 172.21.1.3

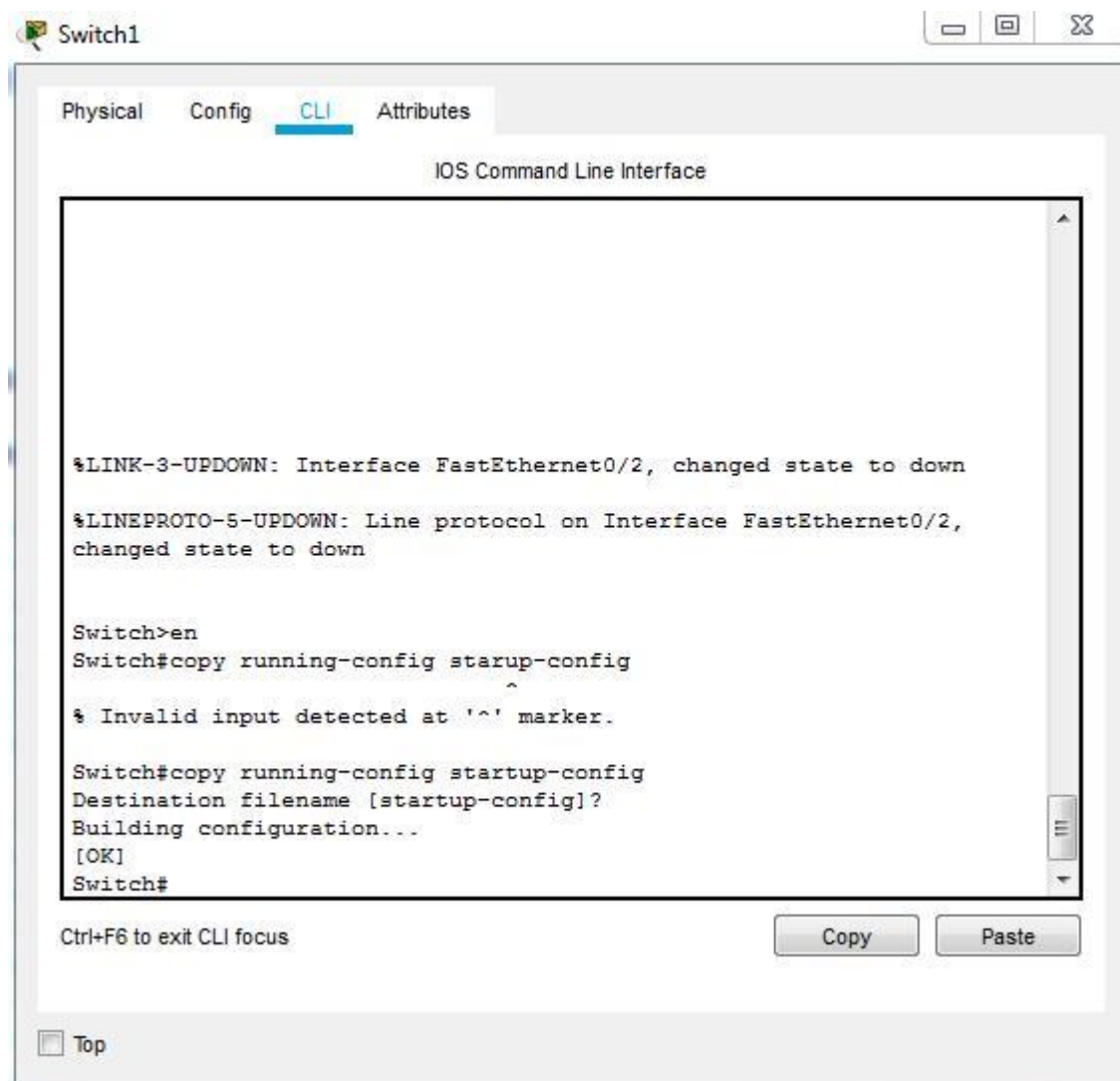
Pinging 172.21.1.3 with 32 bytes of data:

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

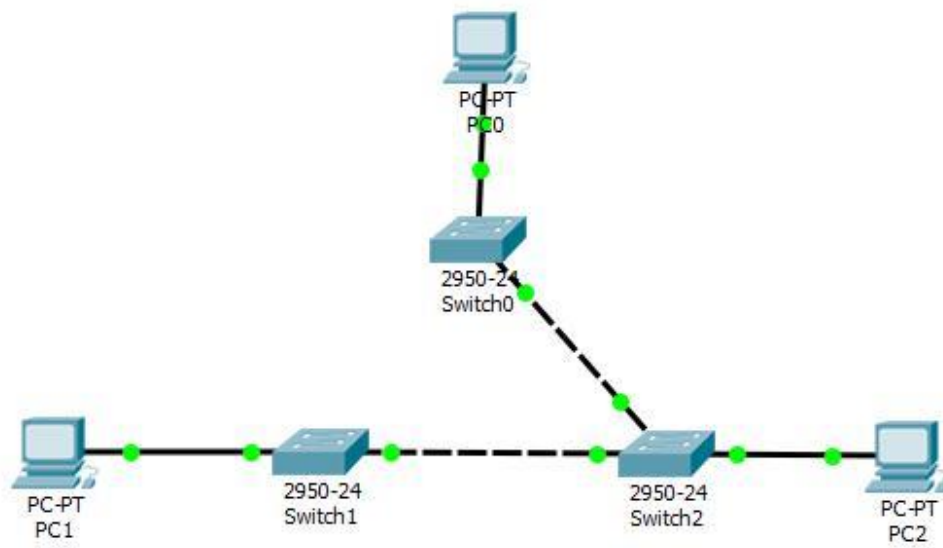
C:\>
```

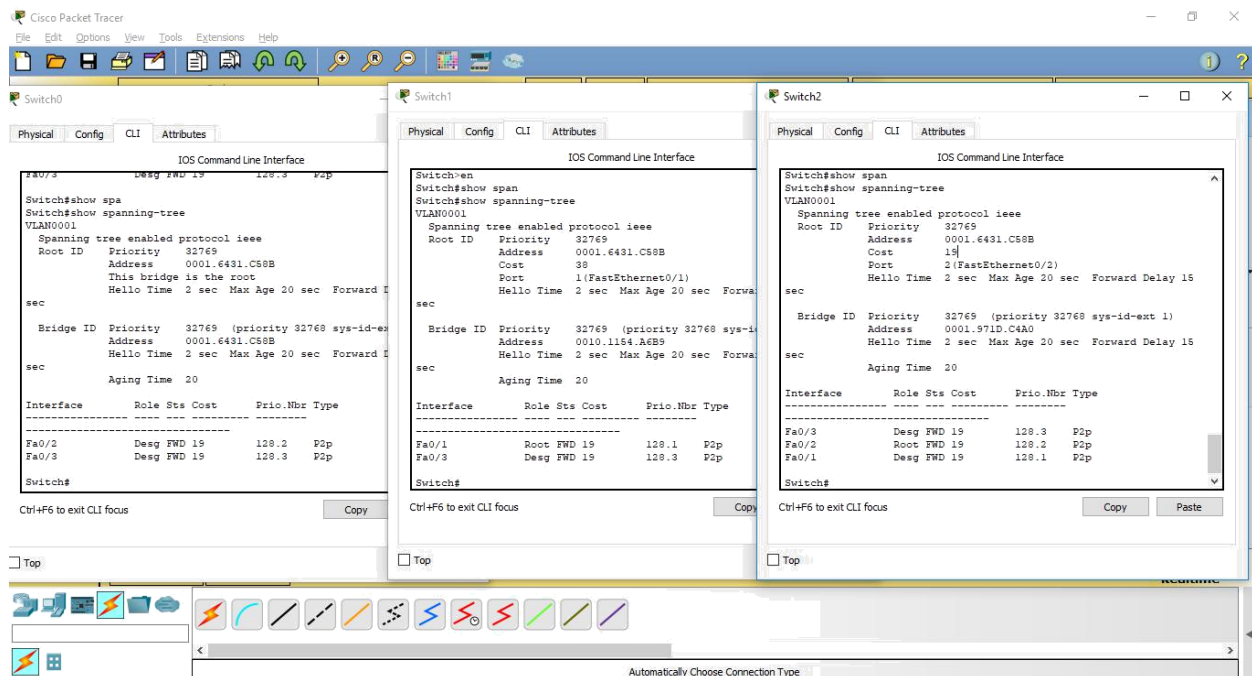
6.A Menyiapkan konfigurasi switch



KEGIATAN 2.

Membuat Design Seperti dibawah ini lalu cek spanning tree





SW 0

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 1

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

