Nama : Nadya Ayu Widya

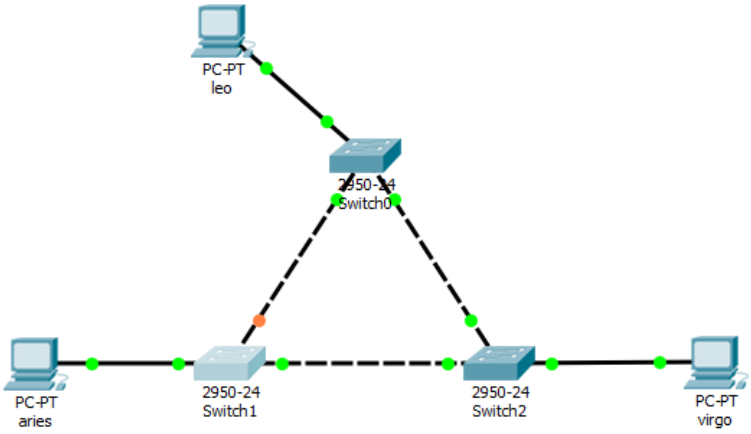
Kelas : C

NIM : L200180099

Modul 6

1. Kegiatan 1. Topologi 1

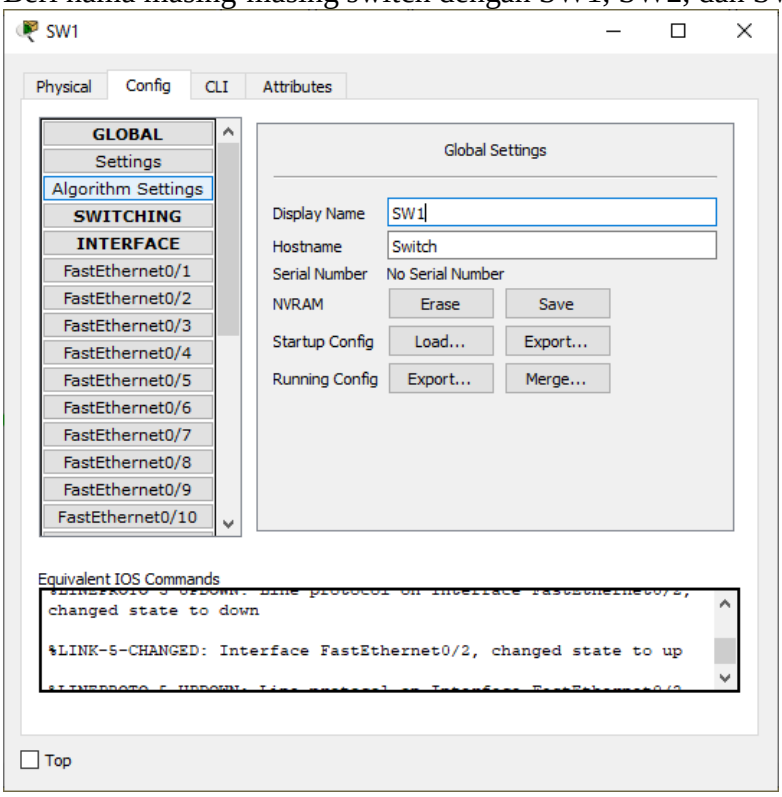
1. Menggunakan PACKET TRACER buat topologi berikut ini dengan menggunakan switch Catalyst 2950.

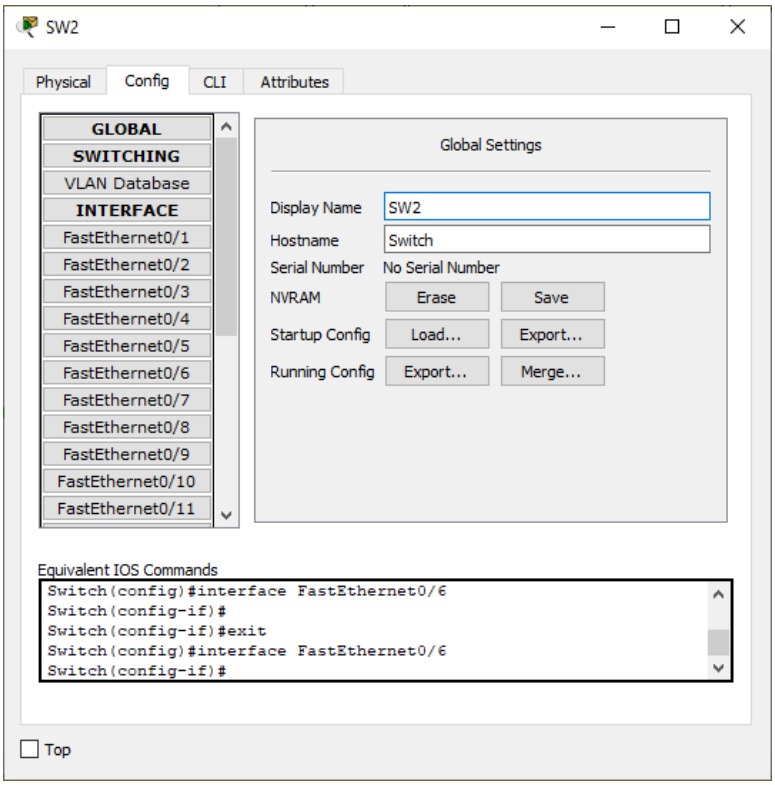


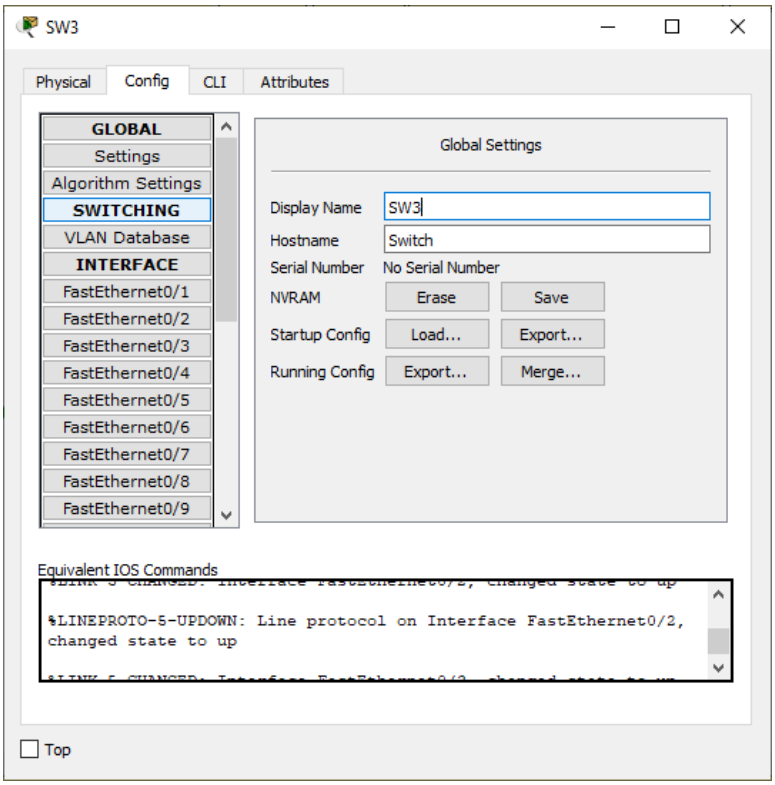
Tugas 1A: Tulis langkah pembuatan topologi

1) Masuk ke aplikasi Cisco Packet Tracer
2) Pilih pada tab “End Devices” dan klik “PC”
3) Drag ke tempat pengerjaan dan lakukan sebanyak 3 kali
4) Pilih pada tab “Switches” dan klik switch 2950-24
5) Drag ke tempat pengerjaan dan lakukan sebanyak 3 kali
6) Hubungkan dengan kabel otomatis

2. Beri nama masing-masing switch dengan SW1, SW2, dan SW3

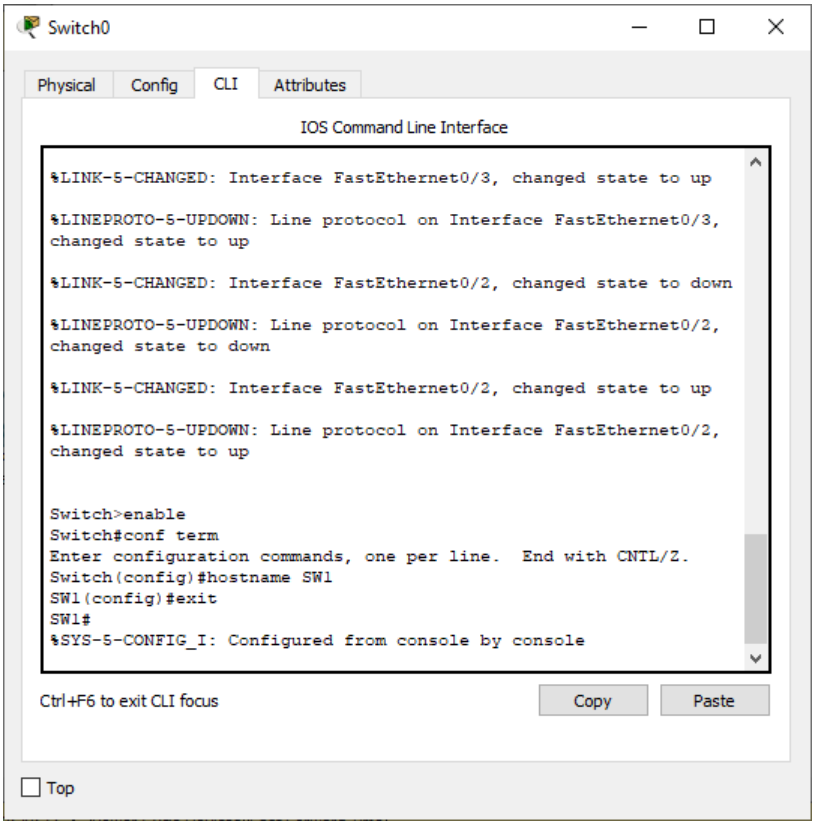



SW2
Physical
Config
CLI
Attributes
GLOBAL
SWITCHING
VLAN Database
INTERFACE
FastEthernet0/1
FastEthernet0/2
FastEthernet0/3
FastEthernet0/4
FastEthernet0/5
FastEthernet0/6
FastEthernet0/7
FastEthernet0/8
FastEthernet0/9
FastEthernet0/10
FastEthernet0/11
Global Settings
Display Name
SW2
Hostname
Switch
Serial Number
No Serial Number
NVRAM
Erase
Save
Startup Config
Load...
Export...
Running Config
Export...
Merge...
Equivalent IOS Commands
Switch(config)#interface FastEthernet0/6
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/6
Switch(config-if)#
Top

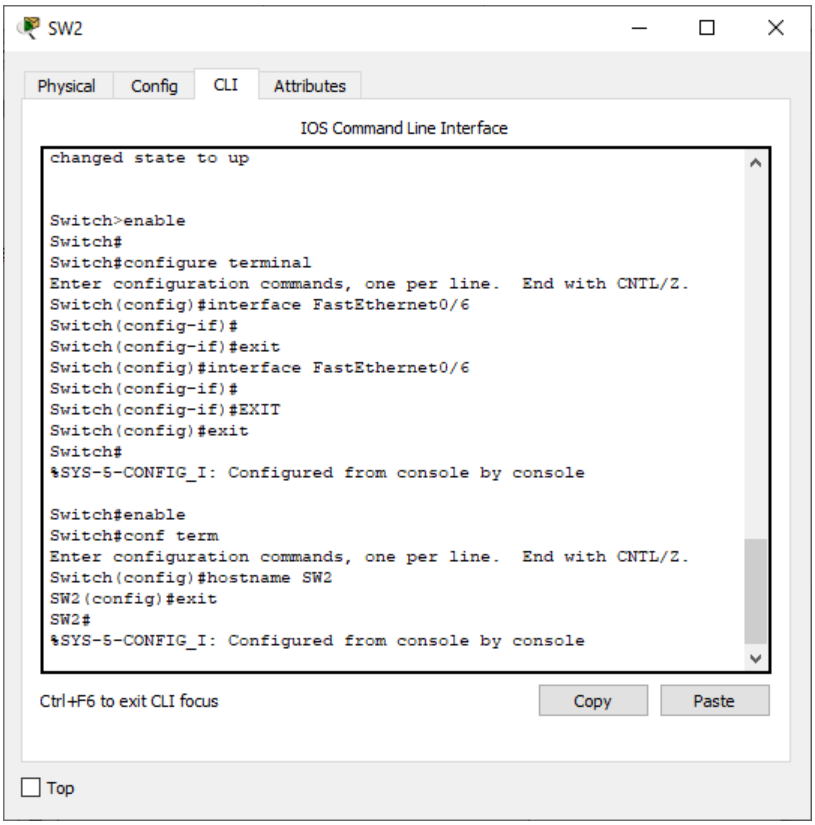

SW3
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
SWITCHING
VLAN Database
INTERFACE
FastEthernet0/1
FastEthernet0/2
FastEthernet0/3
FastEthernet0/4
FastEthernet0/5
FastEthernet0/6
FastEthernet0/7
FastEthernet0/8
FastEthernet0/9
Global Settings
Display Name
SW3
Hostname
Switch
Serial Number
No Serial Number
NVRAM
Erase
Save
Startup Config
Load...
Export...
Running Config
Export...
Merge...
Equivalent IOS Commands
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2,
changed state to up
Top

Tugas 2A: Tulis langkah pemberian nama switch mulai dari *mode user*

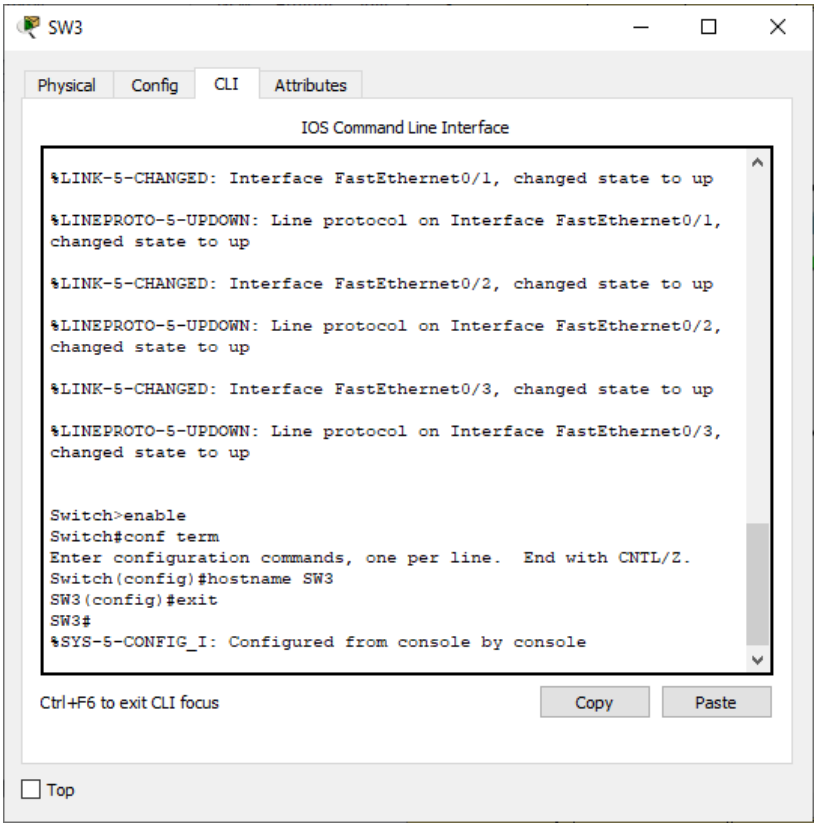
SW1



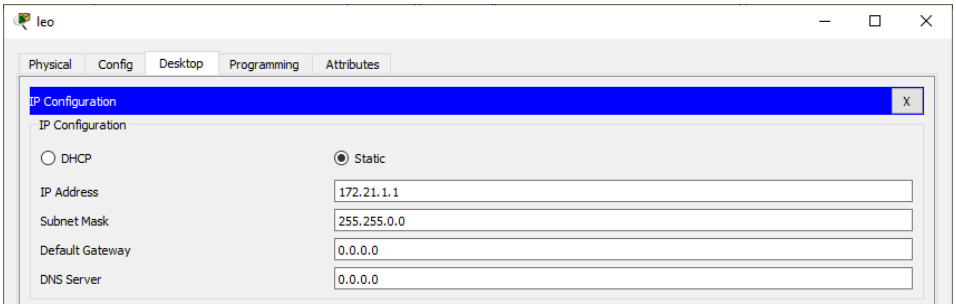
SW2



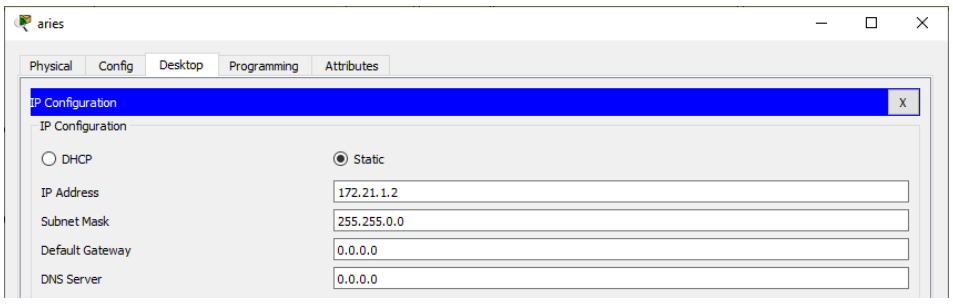
SW3



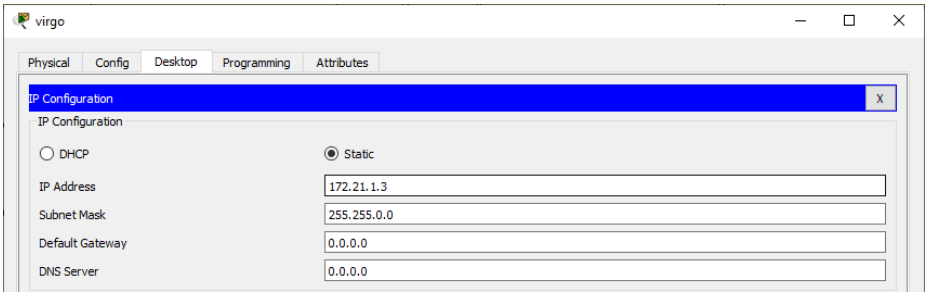
3. Konfigurasi masing-masing PC dengan alamat IP:
    - Leo = 172.21.1.1/24



- Aries = 172.21.1.2/24



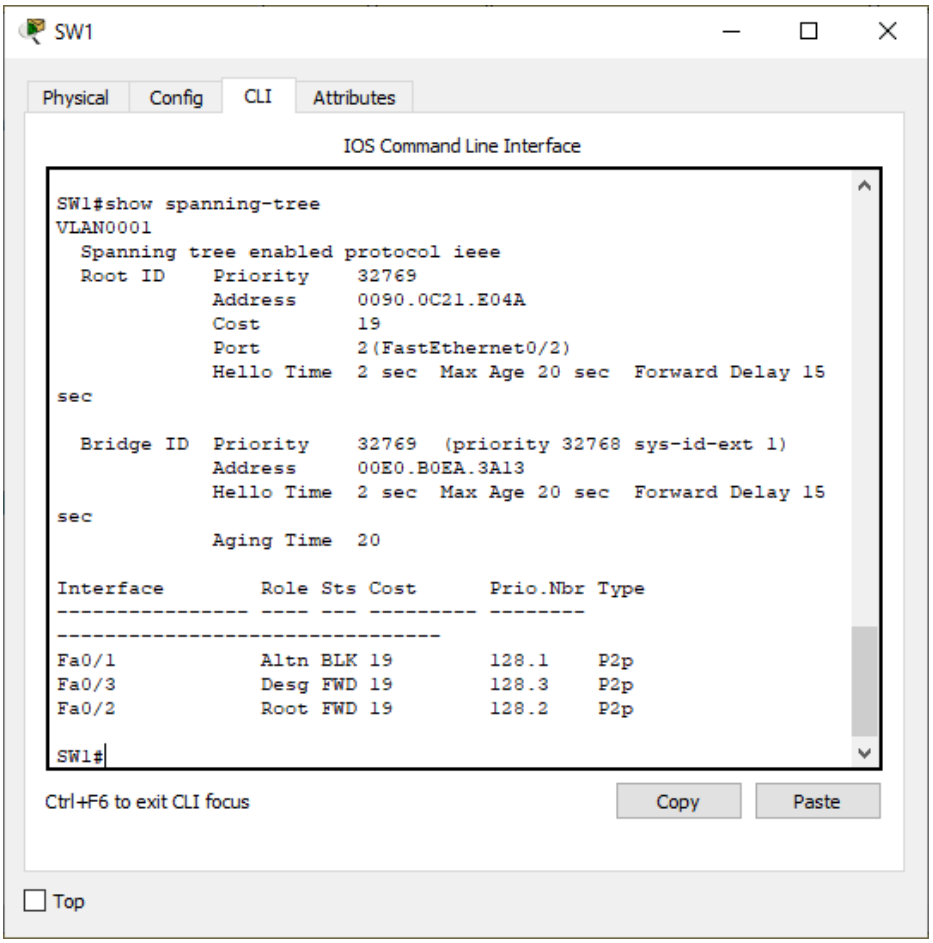
- Virgo = 172.21.1.3/24



4. Pada mode user atau mode privileged, lihat status STP pada masing-masing switch. Langkah pengoperasian
    - Tekan enter
    - Masuuk mode privileged(optional)
    - Ketik **show spanning-tree**

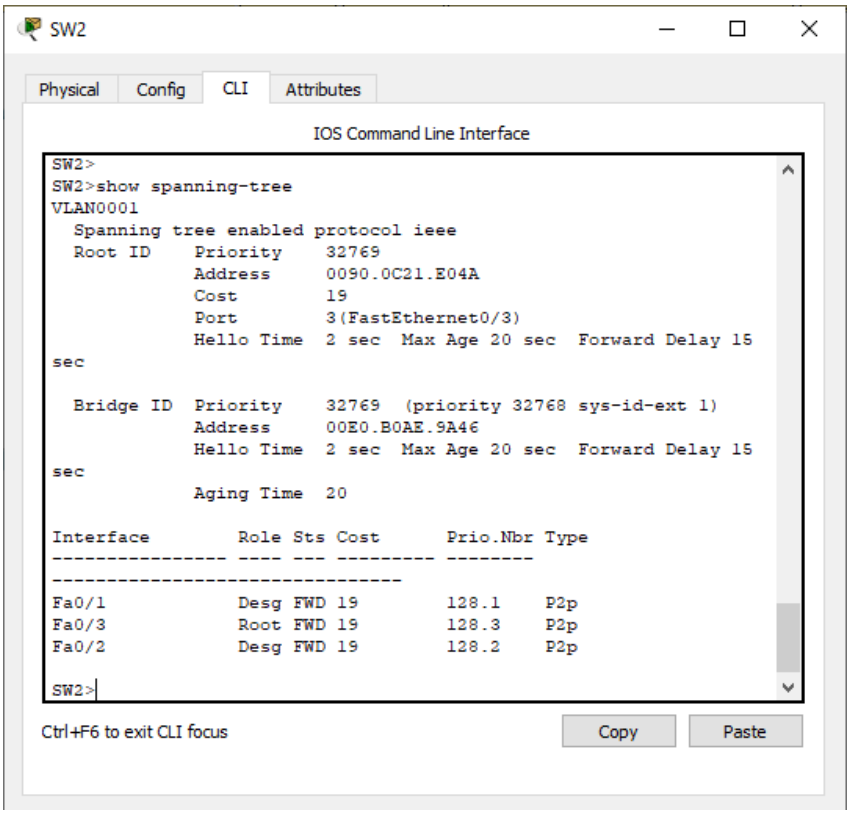
Tugas 4A: Pada kondis default, capture masing-masing tampilan status STP swicth

SW1



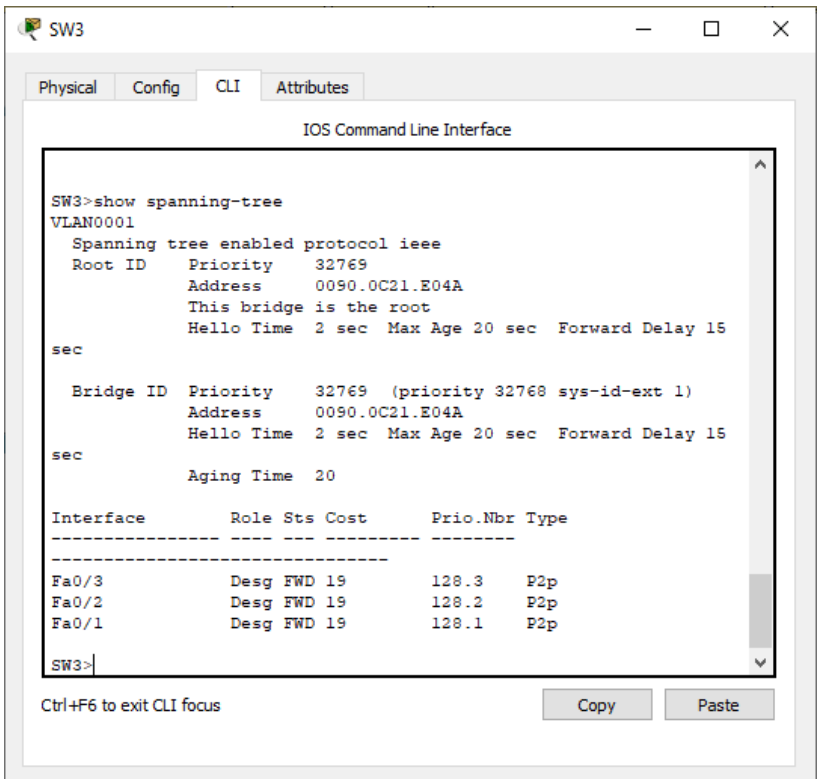
No	Variabel	Nilai
1	Root ID	32769.0090.0C21.E04A
2	Priority	32769
3	MAC Address	00E0.B0EA.3A13
4	Bridge ID	32769.00E0.B0EA.3A13
5	Cost(0/1;0;2;0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

SW2



No	Variabel	Nilai
1	Root ID	32769.0090.0C21.E04A
2	Priority	32769
3	MAC Address	00E0.B0AE.9A46
4	Bridge ID	32769.00E0.B0AE.9A46
5	Cost(0/1;0;2;0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

SW3



No	Variabel	Nilai
1	Root ID	32769.0090.0C21.E04A
2	Priority	32769
3	MAC Address	0090.0C21.E04A
4	Bridge ID	32769.0090.0C21.E04A
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: Pada kondisi default tersevut, swicth dan port mana saja yang:

- Menjadi *root bridge* : SW3
- Menjadi *designated bridge* : SW2
- Menjadi *root port* : SW1 Fa0/2, SW2 Fa0/3
- Menjadi *designated port* : SW1 Fa0/3, SW2 Fa0/1 Fa0/2, SW3 Fa0/1 Fa0/2 Fa0/3

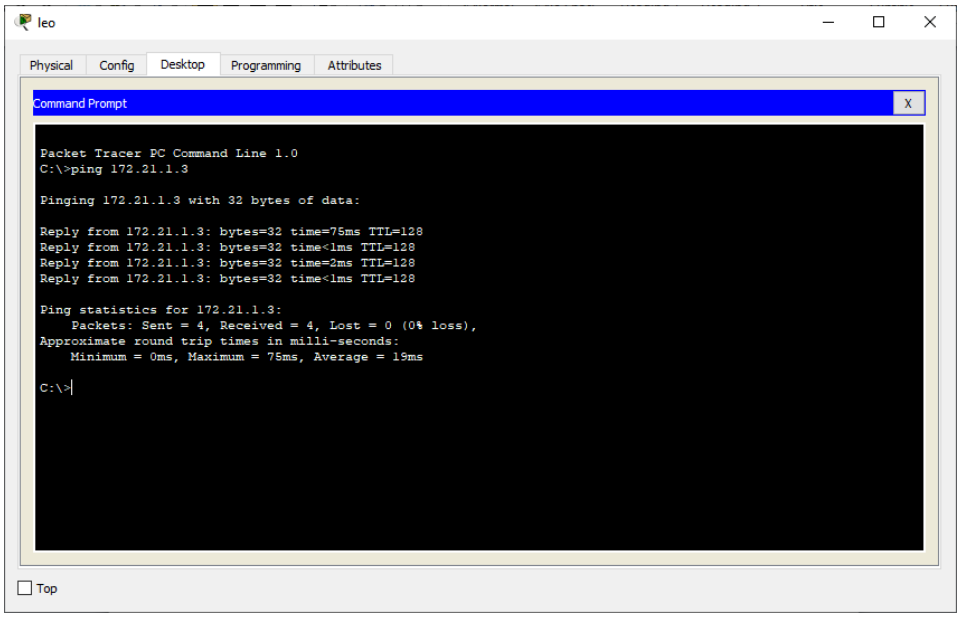
Tugas 4D: Pada kondisi default tersebut, dan port mana saja yang:

- Berada pada keadaan forwarding : SW1 Fa0/2 Fa0/3, SW2 Fa0/1 Fa0/2 Fa0/3, SW3 Fa0/1 Fa0/2 Fa0/3
- Berada pada keadaan blocking : SW1 Fa0/1

5. Dari PC Leo lakukan ping ke PC Virgo

Tugas 5A: Tulis langkah untuk melakakukan perintah ping.

- Klik pada PC Leo lalu pilih tab desktop
- Kemudian pilih terminal
- Tuliskan ping 172.21.1.3



6. Simpan konfigurasi jaringan dengan nama lab2.nwc

Tugas 6A: Tulis langkah untuk menyimpan konfigurasi jaringan

a. Ketik “Write” pada masing-masing CLI switches

SW1

```
SW1#write
Building configuration...
[OK]
SW1#
```

SW2

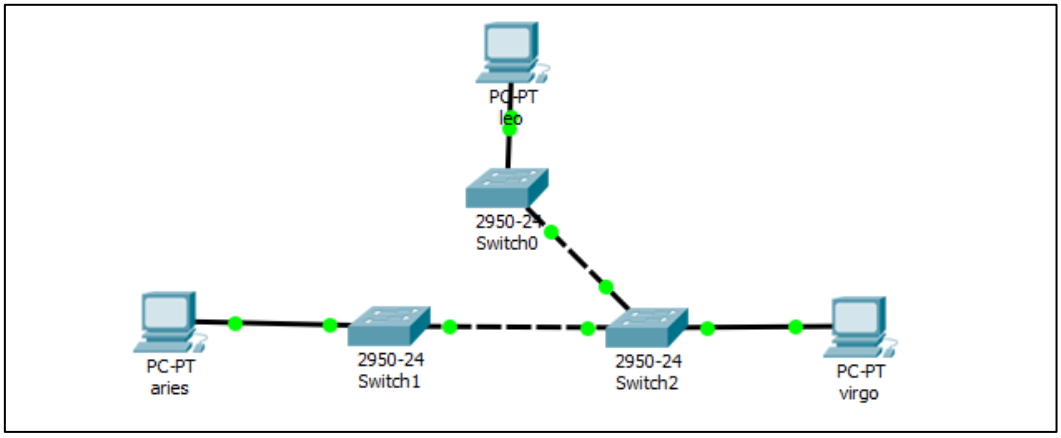
```
SW2#write
Building configuration...
[OK]
SW2#
```

SW3

```
SW3#write
Building configuration...
[OK]
SW3#
```

2. Kegiatan 2. Topologi 2

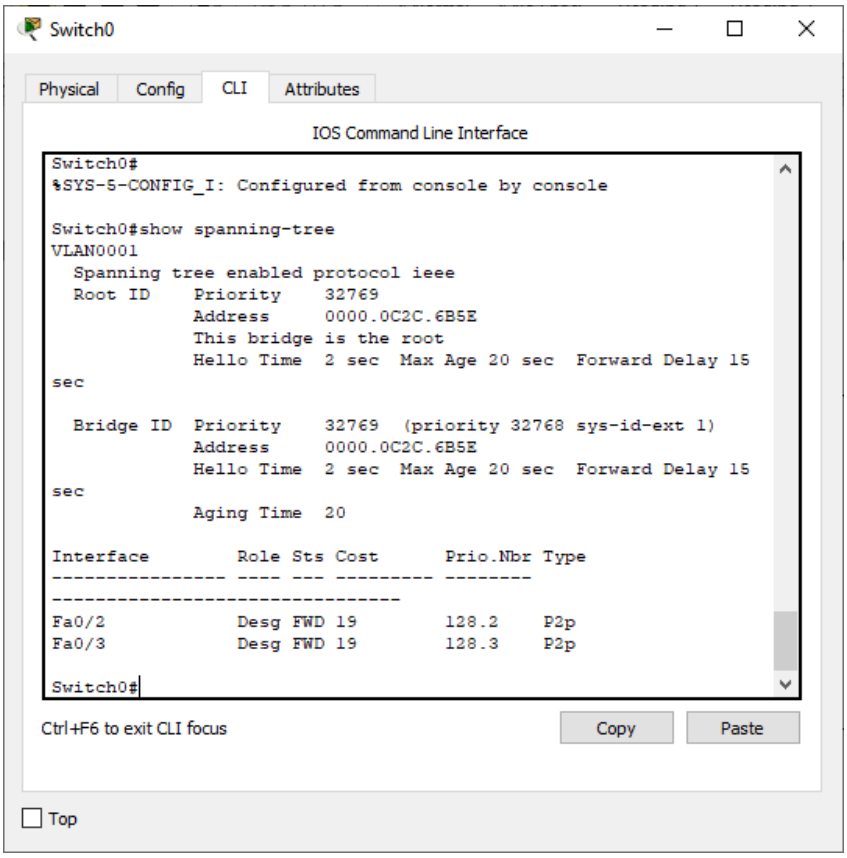
a. Menggunakan Packet Tracer ubah topologi menjadi seperti topologi berikut ini



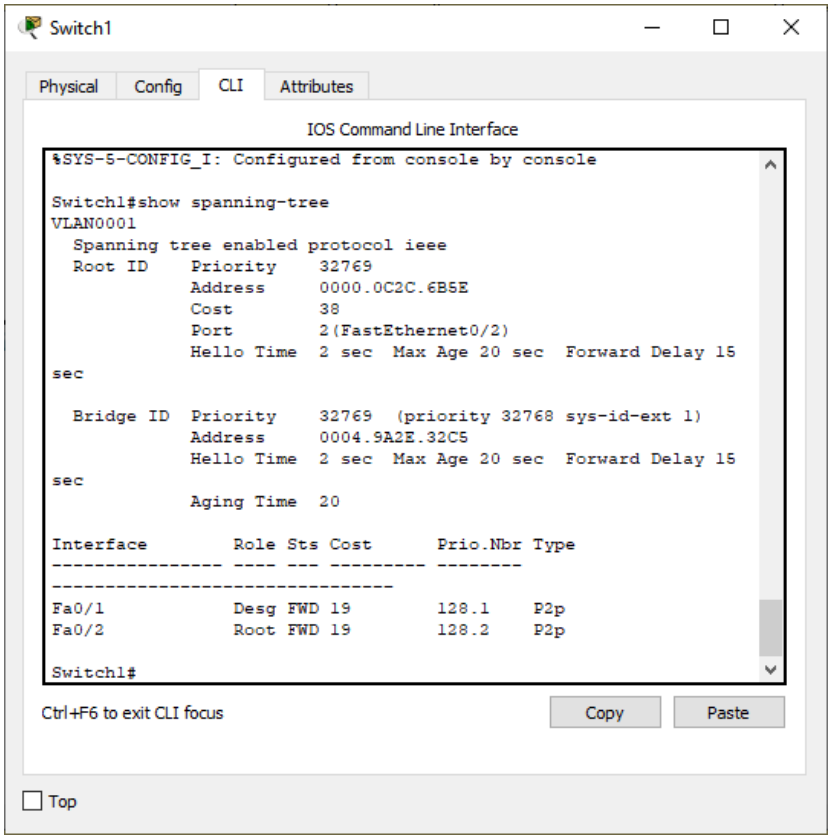
b. Pada mode user atau mode privileged, lihat status STP pada masing-masing swicth. Lakukan pengoperasian

Tugas 4A: Pada kondisi default, capture masing masing tampila status STP switch(Switch0, Switch1, Switch2)

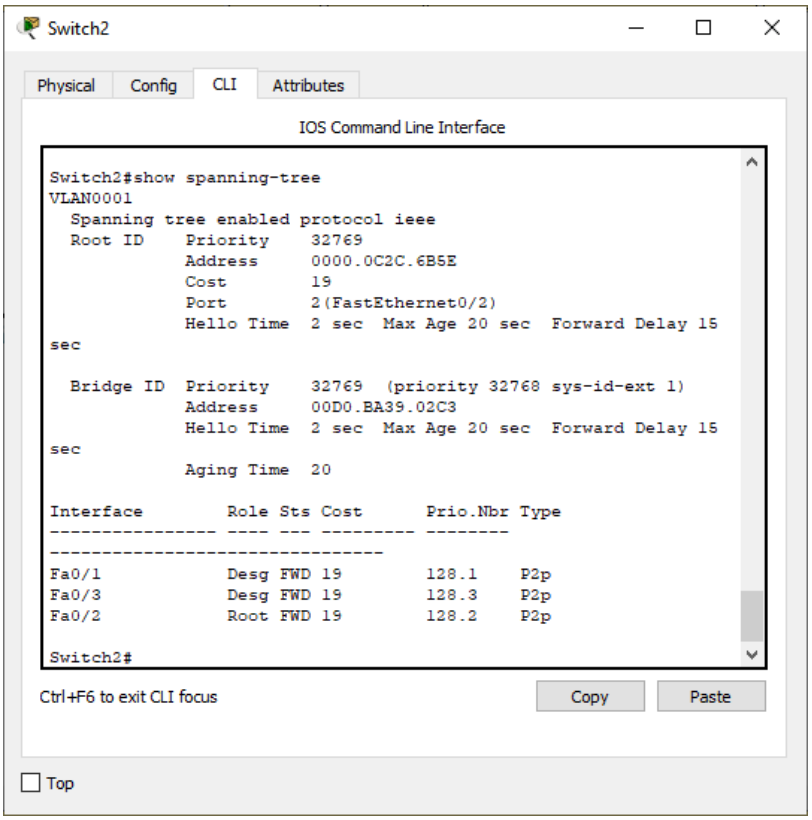
Switch0



Switch1



Switch2



Tugas 4B: untuk tiap-tiap switch isikan tabel berikut

Swicth0

No	Variabel	Nilai
1	Root ID	32769.0090.0C2C.6B5E
2	Priority	32769
3	MAC Address	0090.0C2C.6B5E
4	Bridge ID	32769.0090.0C2C.6B5E
5	Cost(0/1;0;2;0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

Swicth1

No	Variabel	Nilai
1	Root ID	32769.0000.0C2C.6B5E
2	Priority	32769
3	MAC Address	0004.9A2E.32C5
4	Bridge ID	32769.0090.0C21.E04A
5	Cost(0/1;0;2;0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

Switch2

No	Variabel	Nilai
1	Root ID	32769.0000.0C2C.6B5E
2	Priority	32769
3	MAC Address	00D0.BA39.02C3
4	Bridge ID	32769.00D0.BA39.02C3
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: Pada kondisi default tersevut, swicth dan port mana saja yang:

- Menjadi *root bridge* : Switch1
- Menjadi *designated bridge* : Swicth2
- Menjadi *root port* : Swicth1 Fa0/2, Switch2 Fa0/2
- Menjadi *designated port* : Swicth0 Fa0/2 Fa0/3, Swicth1 Fa0/1, Swicth2 Fa0/1 Fa0/3

Tugas 4D: Pada kondisi default tersebut, dan port mana saja yang:

- Berada pada keadaan forwarding : Swicth0 Fa0/2 Fa0/3, Switch1 Fa0/1 Fa0/2 , Switch2 Fa0/1 Fa0/2 Fa0/3
- Berada pada keadaan blocking : Tidak ada

Dari PC Leo lakukan ping ke PC Virgo

Tugas 5A: Tulis langkah untuk melakakukan perintah ping.

- Klik pada PC Leo lalu pilih tab desktop
- Kemudian pilih terminal
- Tuliskan ping 172.21.1.3