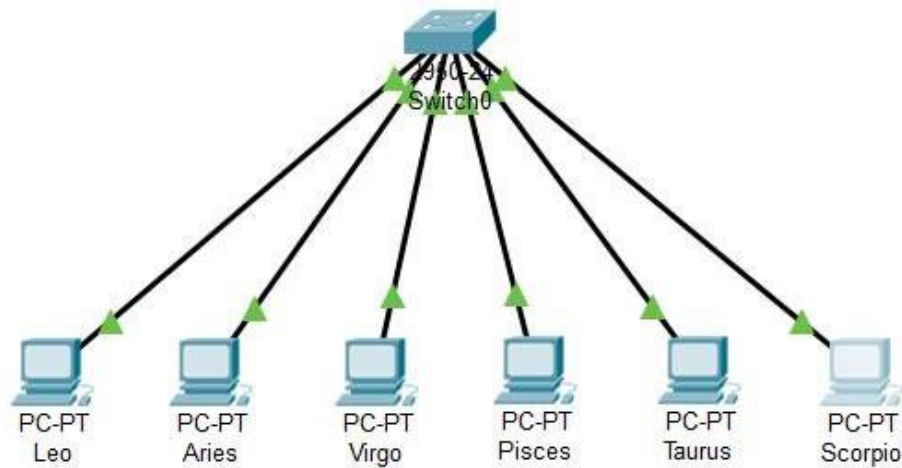


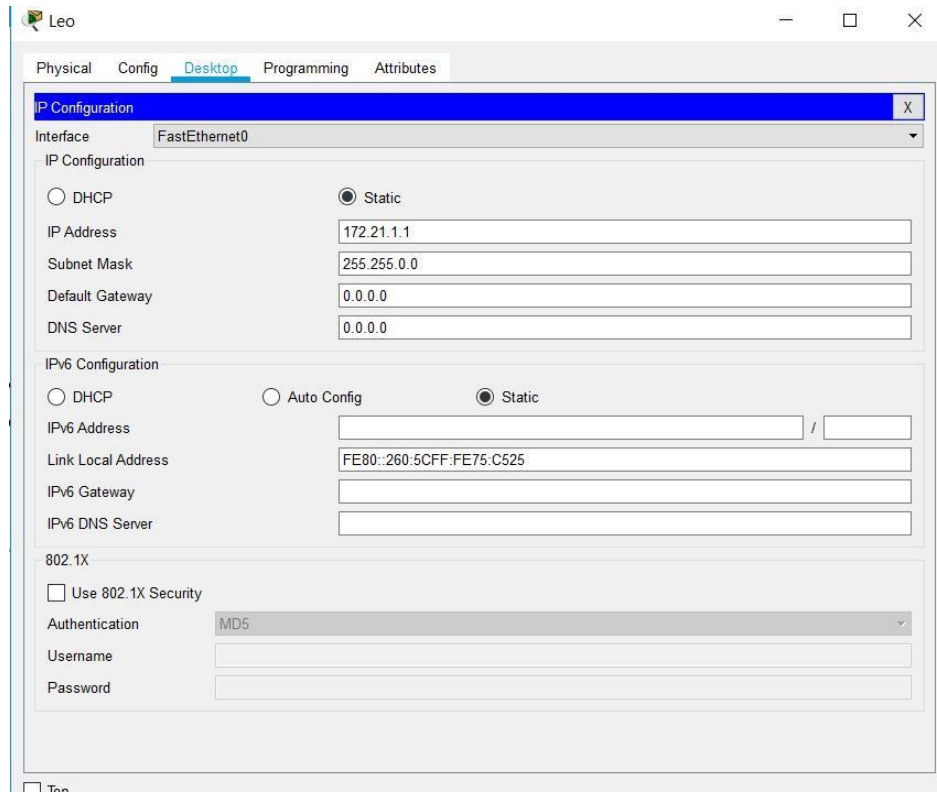
Nama : Robby Novianto
NIM : L200180050
Kelas : B

Modul 04

Kegiatan 1. Topologi 1



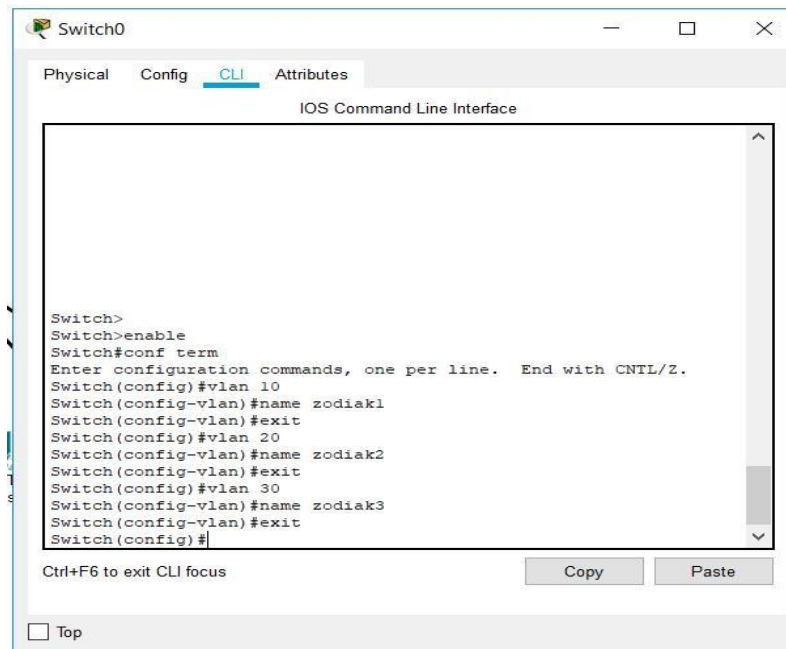
1. Menggunakan packet tracer buat topologi seperti pada gambar dengan menggunakan switch
2. Beri nama masing-masing perangkat dengan SW1(switch), Leo(PC0), Aries(PC1), Virgo(PC2), Pisces(PC3), Taurus(PC4), dan Scorpio(PC5)
3. Konfigurasi masing-masing PC dengan nama dan alamat IP berikut ini :
 - o Leo = 172.21.1.1/24
 - o Aries = 172.21.1.2/24
 - o Virgo = 172.21.1.3/24
 - o Pisces = 172.21.1.4/24
 - o Taurus = 172.21.1.5/24
 - o Scorpio = 172.21.1.6/24



4. Konfigurasi pada switch dengan mode user atau mode privileged, buat 3 VLAN dengan nam zodiak1, zodiak2, zodiak3. Dengan cara klik pada switch 2 kali.

Langkah pengoperasian :

```
Switch>enable
Switch#conf term
Switch(config)#vlan 10
Switch(config-vlan)#name zodiak1
Switch(config-vlan)#exit
Switch(config)#vlan 20
Switch(config-vlan)#name zodiak2
Switch(config-vlan)#exit
Switch(config)#vlan 30
Switch(config-vlan)#name zodiak3
Switch(config-vlan)#exit
```

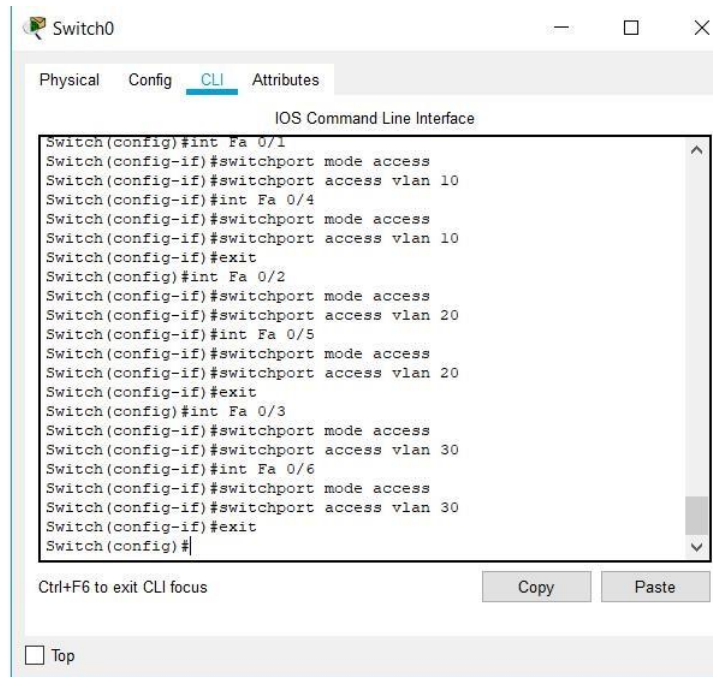


5. Pada mode configuration, konfigurasi port-port switch ke dalam VLAN zodiak1, zodiak2, zodiak3 dengan anggota sebagai berikut :

- zodiak1 = Leo dan Pisces
- zodiak2 = Aries dan Taurus
- zodiak3 = Virgo dan Scorpio

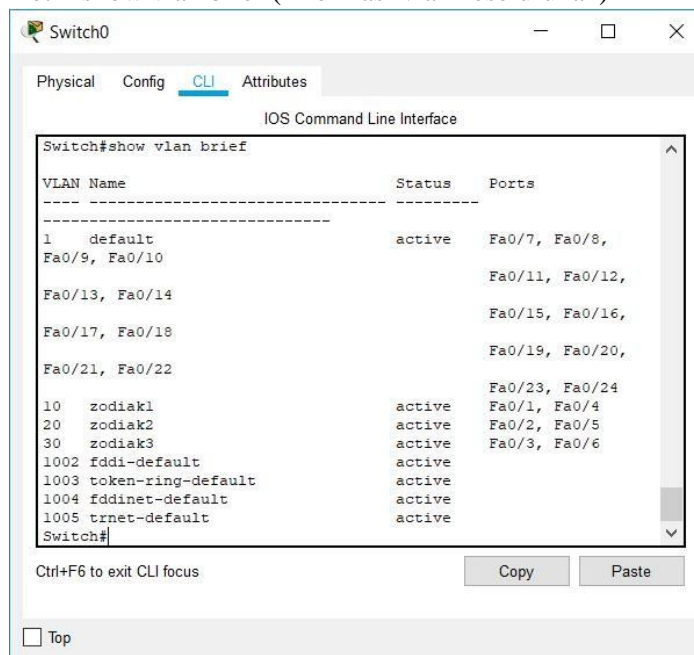
langkah pengoperasian :

- Masuk mode configuration
- Ketik interface Fastethernet 0/1
- Ketik switchport mode access
- Ketik switchport access vlan 10
- Ketik interface Fastethernet 0/4
- Ketik switchport mode access
- Ketik switchport access vlan 10
- Ketik exit
- Lakukan langkah-langkah diatas untuk port VLAN zodiak2 (Aries dan Taurus) dan port VLAN zodiak3 (Virgo dan Scorpio)

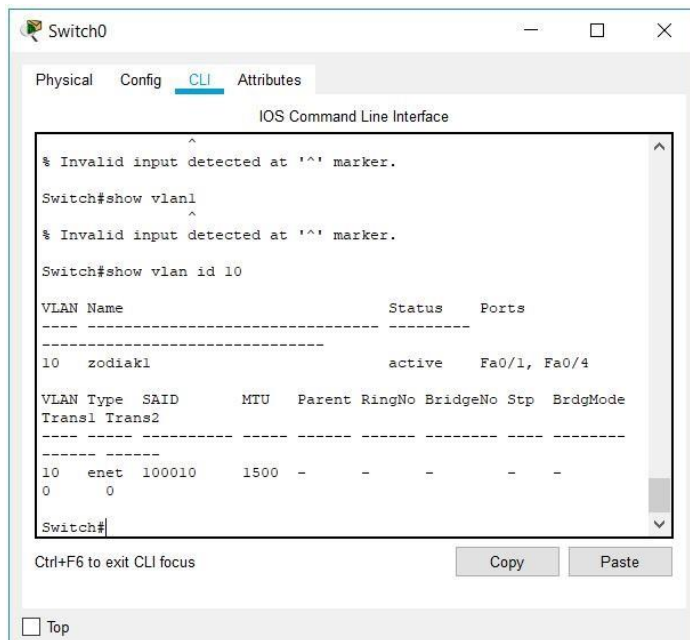


6. Pada mode user atau mode privileged, lihat konfigurasi VLAN yang telah dibuat. Langkah untuk melihat konfigurasi :

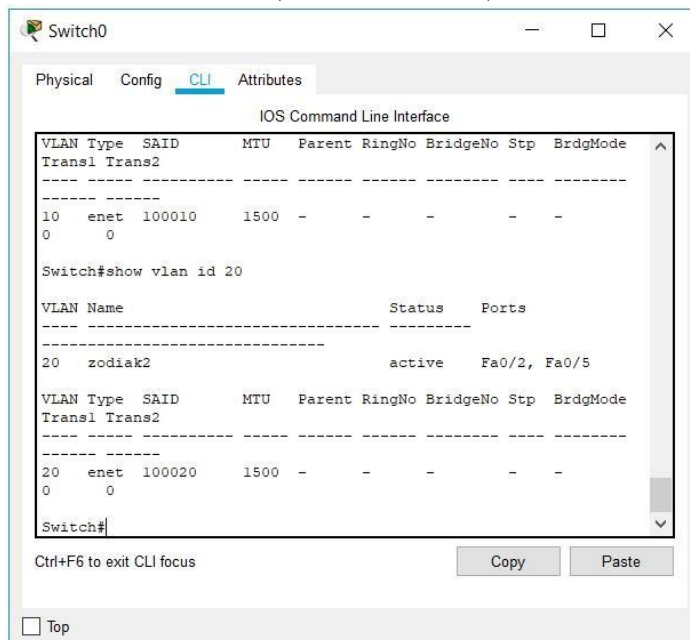
- Tekan enter
- Masuk mode privileged
- Ketik show vlan brief (informasi vlan keseluruhan)



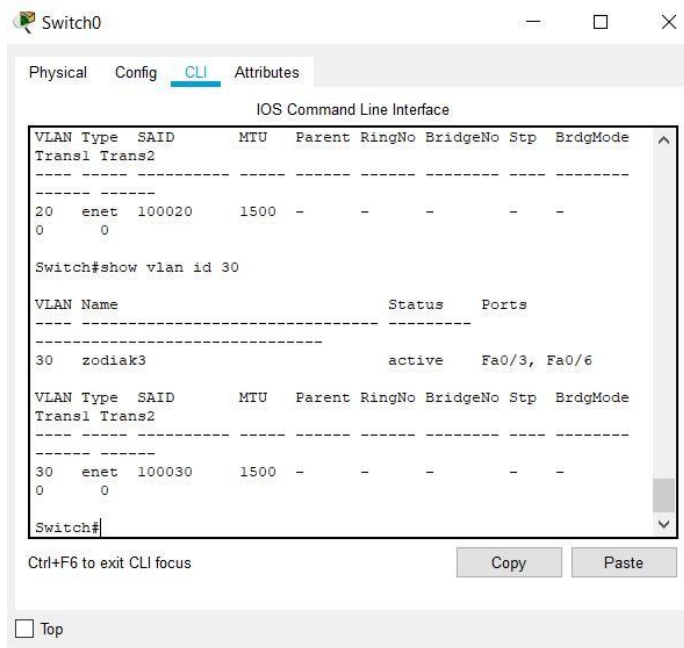
- Ketik show vlan id 10 (informasi vlan 10)



- Ketik show vlan id 20 (informasi vlan 20)



- Ketik show vlan id 30 (informasi vlan 30)

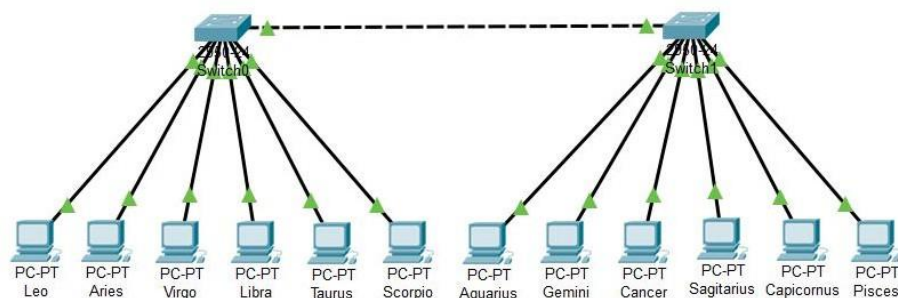


• Tugas 6A :

No	Variabel	Nilai		
		vlan id 10	vlan id 20	vlan id 30
1	Nomor VLAN	10	20	30
2	Nama VLAN	zodiak1	zodiak2	zodiak3
3	Port	Fa0/1, Fa0/4	Fa0/2, Fa0/5	Fa0/3, Fa0/6
4	Status	active	active	Active

Kegiatan 2. Topologi 2

1. Menggunakan cisco packet tracer buat topologi berikut :



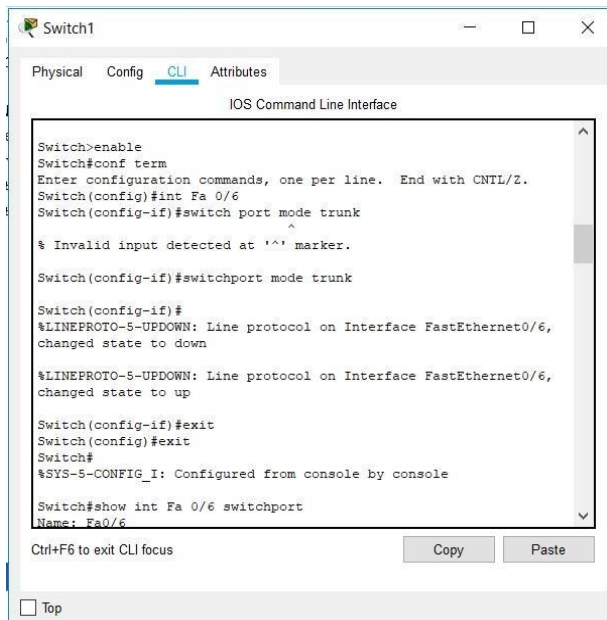
2. Beri nama masing-masing perangkat dengan SW1(switch 1), Leo(PC0), Aries(PC1), Virgo(PC2), Libra(PC3), Taurus(PC4), dan Scorpio(PC5) untuk segmen switch 1.
3. Beri nama masing-masing perangkat dengan SW2(switch 2), Aquarius(PC6), Gemini(PC7), Cancer(PC8), Sagittarius(PC9), Capricornus(PC10), dan Pisces(PC11) untuk segmen switch 2.
4. Konfigurasi masing-masing PC dengan nama dan alamat IP berikut ini :

- Leo = 172.21.1.1/24
- Aries = 172.21.1.2/24
- Virgo = 172.21.2.1/24
- Libra = 172.21.2.2/24
- Taurus = 172.21.3.1/24
- Scorpio = 172.21.3.2/24
- Aquarius = 172.21.1.3/24
- Gemini = 172.21.1.4/24
- Cancer = 172.21.2.3/24
- Sagitarius = 172.21.2.4/24
- Capriconus = 172.21.3.3/24
- Pisces = 172.21.3.4/24

5. Konfigurasi VLAN trunking pada switch 1.

Langkah pengoperasian :

- Switch(config)#interface Fa 0/6
- Switch(config-if)#switchport mode trunk
- Switch(config-if)#exit



The screenshot shows a network switch configuration window titled 'Switch1'. The 'CLI' tab is selected, displaying the 'IOS Command Line Interface'. The command sequence is as follows:

```
Switch>enable
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#int Fa 0/6
Switch(config-if)#switch port mode trunk
% Invalid input detected at '^' marker.
Switch(config-if)#switchport mode trunk

Switch(config-if)#
%LINEPROTO-S-UPDOWN: Line protocol on Interface FastEthernet0/6,
changed state to down

%LINEPROTO-S-UPDOWN: Line protocol on Interface FastEthernet0/6,
changed state to up

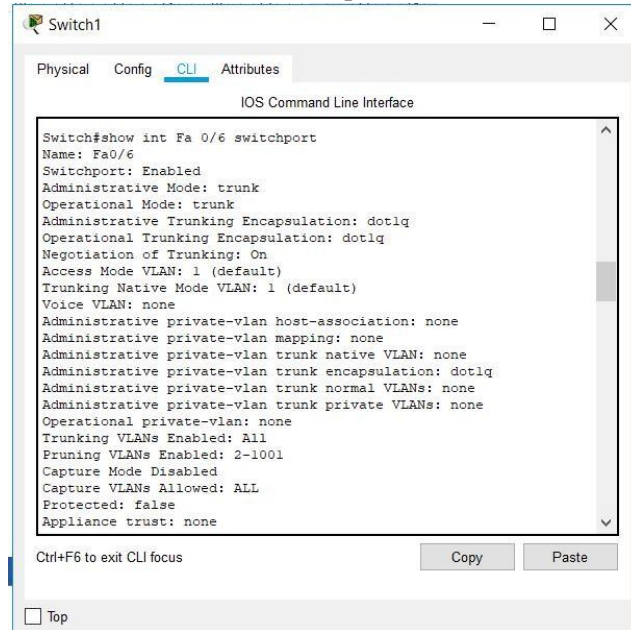
Switch(config-if)#exit
Switch(config)#exit
Switch#
%SYS-S-CONFIG_I: Configured from console by console

Switch#show int Fa 0/6 switchport
Name: Fa0/6
```

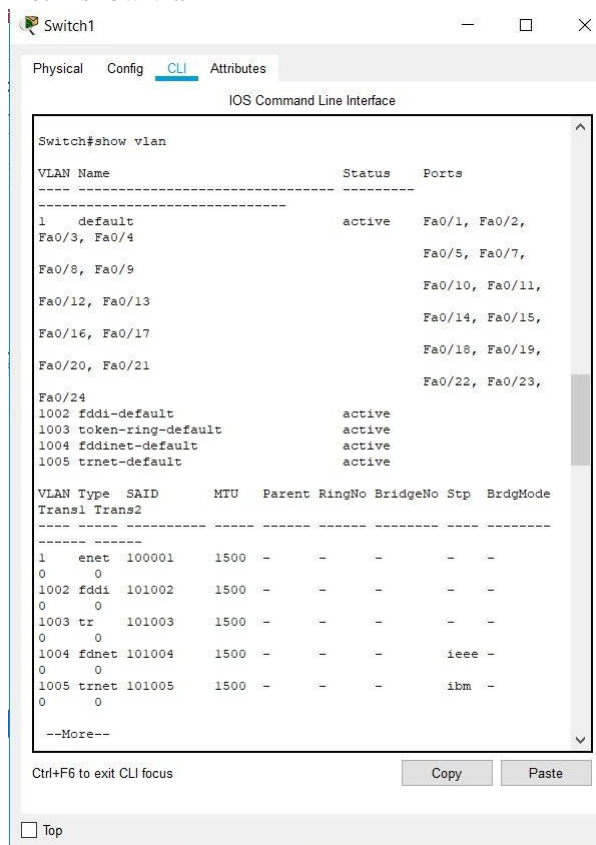
At the bottom of the window, there is a 'Top' checkbox, a 'Ctrl+F6 to exit CLI focus' label, and 'Copy' and 'Paste' buttons.

6. Melihat konfigurasi :

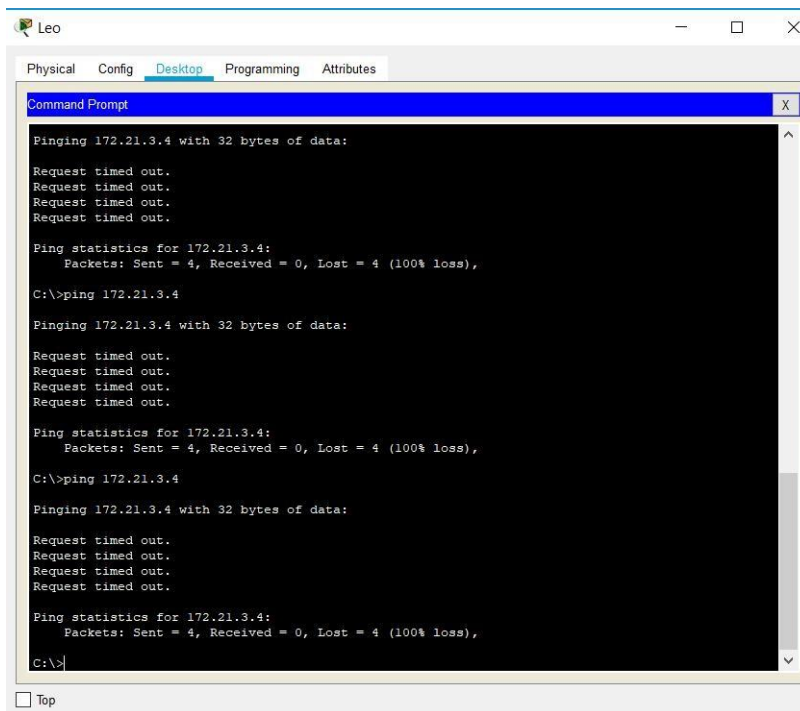
- Ketik show int Fa 0/6 switchport



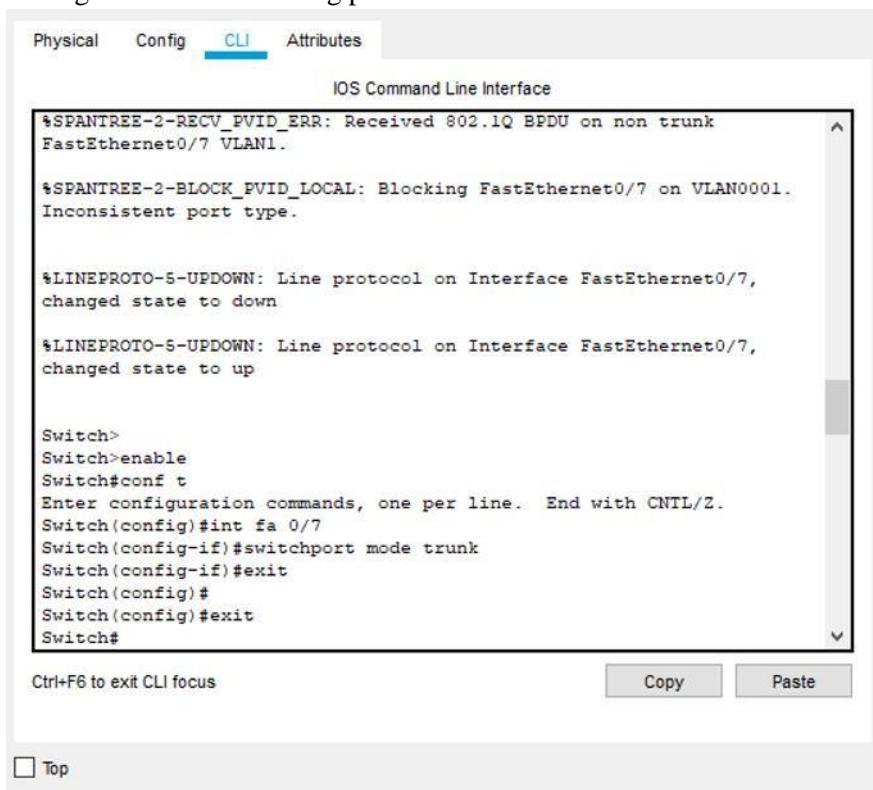
- Ketik show vlan



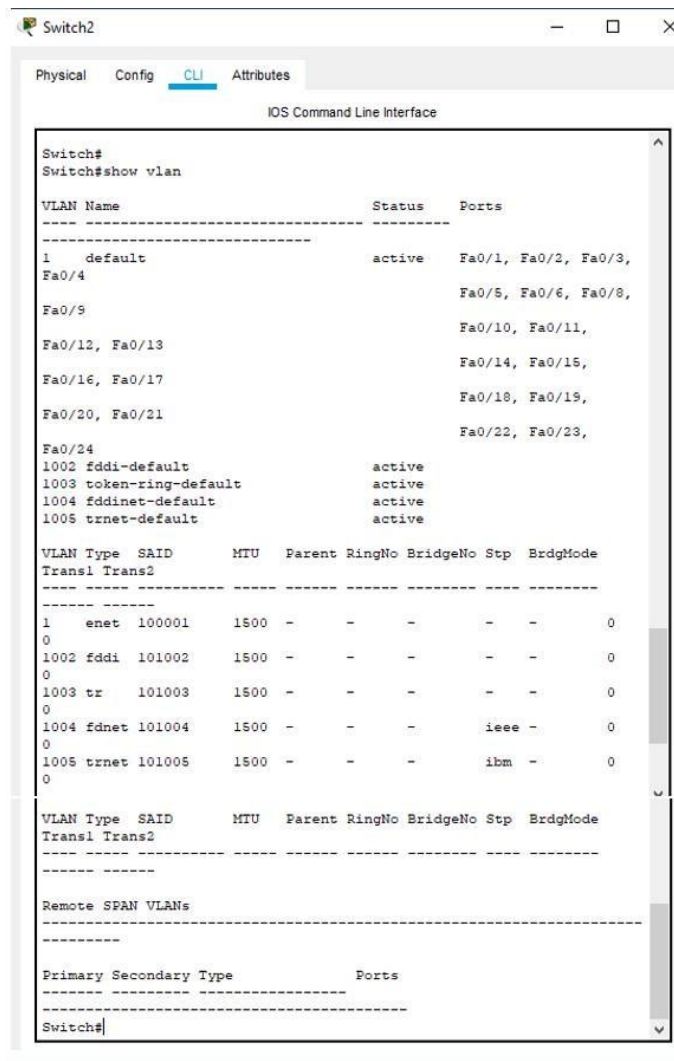
7. Lakukan PC Leoke PC Pisces



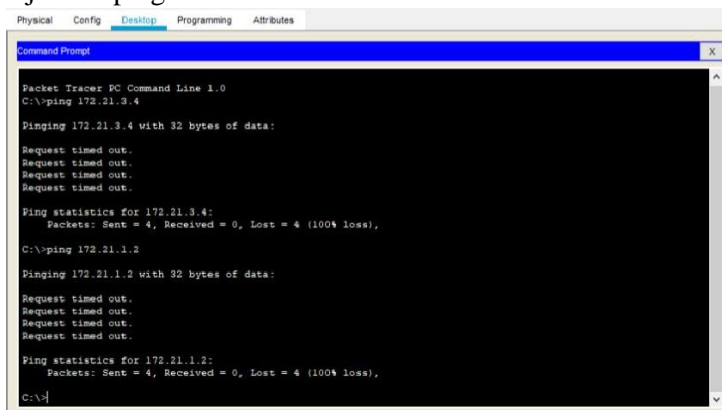
8. Konfigurasi VLAN trunking pada switch 2



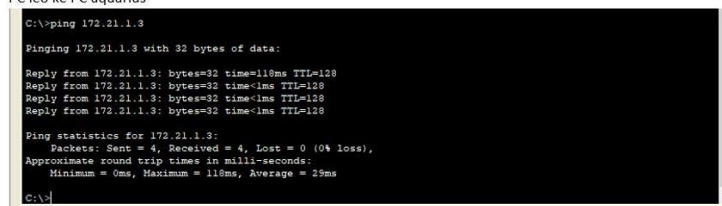
9. Melihat hasil konfigurasi trunking pada switch 2



10. Uji coba ping



PC leo ke PC aquarius



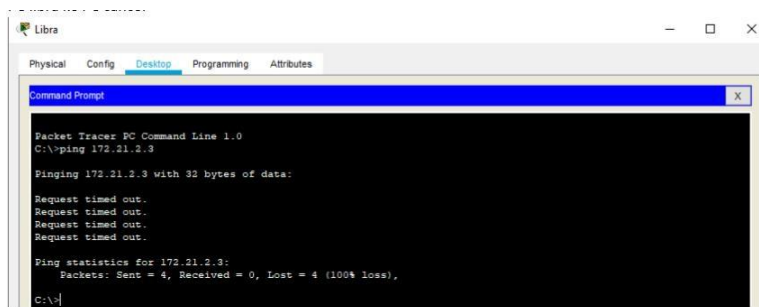
```
C:\>ping 172.21.3.4

Pinging 172.21.3.4 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 172.21.3.4:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```



The screenshot shows a Packet Tracer PC Command Line 1.0 window. The window has tabs for Physical, Config, Desktop, Programming, and Attributes. The Desktop tab is active, showing a Command Prompt window. The Command Prompt displays the command 'C:\>ping 172.21.2.3' and the output: 'Pinging 172.21.2.3 with 32 bytes of data: Request timed out. Request timed out. Request timed out. Request timed out. Ping statistics for 172.21.2.3: Packets: Sent = 4, Received = 0, Lost = 4 (100% loss), C:\>'. This indicates that the PC is not receiving any replies from the target IP address.

```
C:\>ping 172.21.1.1

Pinging 172.21.1.1 with 32 bytes of data:

Reply from 172.21.1.1: bytes=32 time=1ms TTL=128
Reply from 172.21.1.1: bytes=32 time<1ms TTL=128
Reply from 172.21.1.1: bytes=32 time<1ms TTL=128
Reply from 172.21.1.1: bytes=32 time<1ms TTL=128

Ping statistics for 172.21.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
```

Dari hasil percobaan diatas, dapat disimpulkan apabila PC berada pada VLAN yang sama, maka akan menghasilkan status Reply. Akan tetapi jika berada pada VLAN yang berbeda akan menghasilkan status Request Time Out