

Nama : Pawitro Purbangkoro

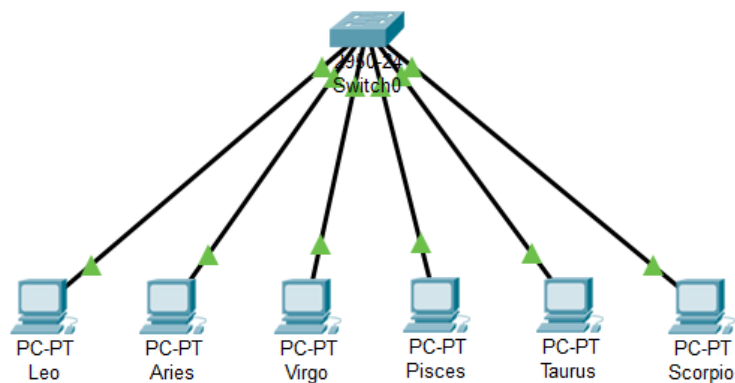
NIM : L200170045

Kelas : B

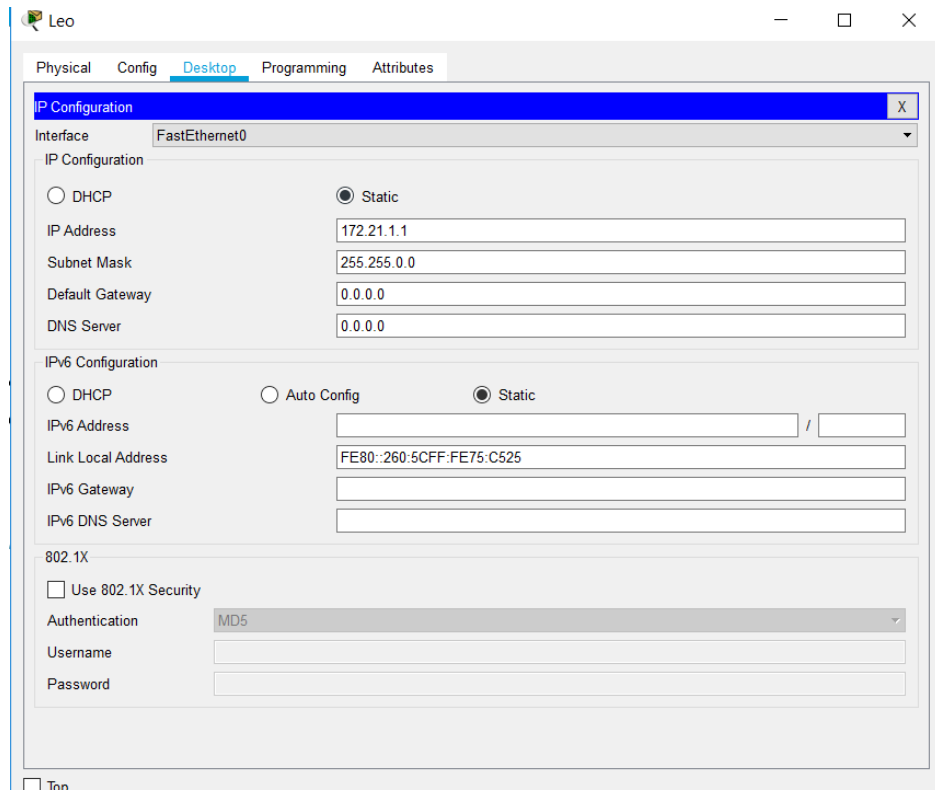
Modul 04

Kegiatan1.

1. Menggunakan packet tracer buat topologi seperti pada gambar :



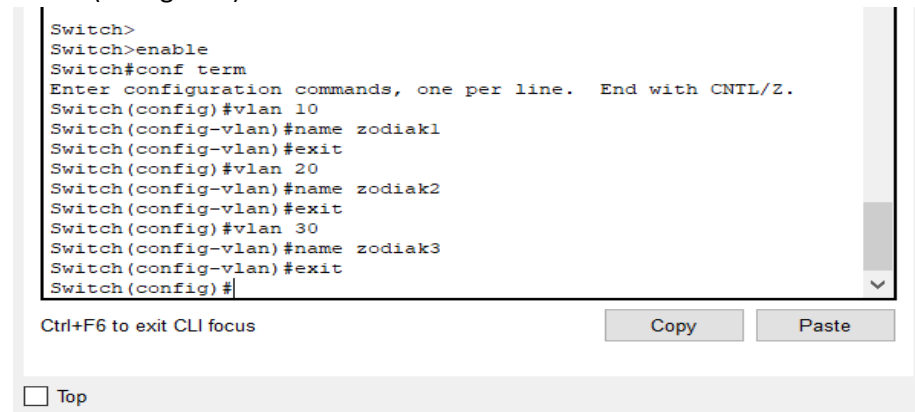
2. Beri nama masing-masing perangkat dengan SW1(switch), Leo(PC0), Aries(PC1), Virgo(PC2), Pisces(PC3), Taurus(PC4), dan Scorpio(PC5)
3. Konfigurasi masing-masing PC dengan nama dan alamat IP berikut ini :
 - Leo = 172.21.1.1/24
 - Aries = 172.21.1.2/24
 - Virgo = 172.21.1.3/24
 - Pisces = 172.21.1.4/24
 - Taurus = 172.21.1.5/24
 - 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 :

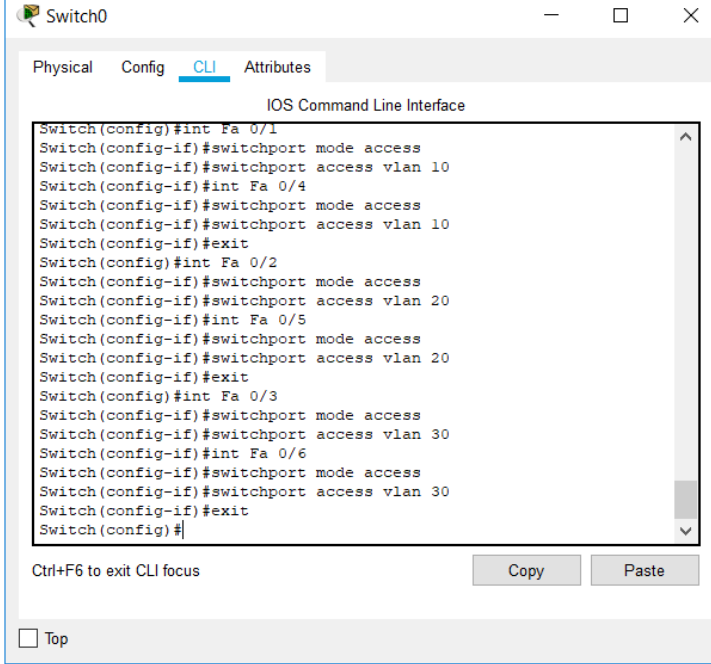
```
Switch>enable
Switch#conf term
Switch(config)#vlan 10
Switch(config-vlan)#name zodiak1
Switch(config-vlan)#exit
Switch(config)#vlan 20
Switch(config-vlan)#name zodiak2
Switch(config-vlan)#exit
Switch(config)#vlan 30
Switch(config-vlan)#name zodiak3
Switch(config-vlan)#exit
```



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 (Ariesdan Taurus) dan port VLAN zodiak3 (Virgo dan Scorpio)

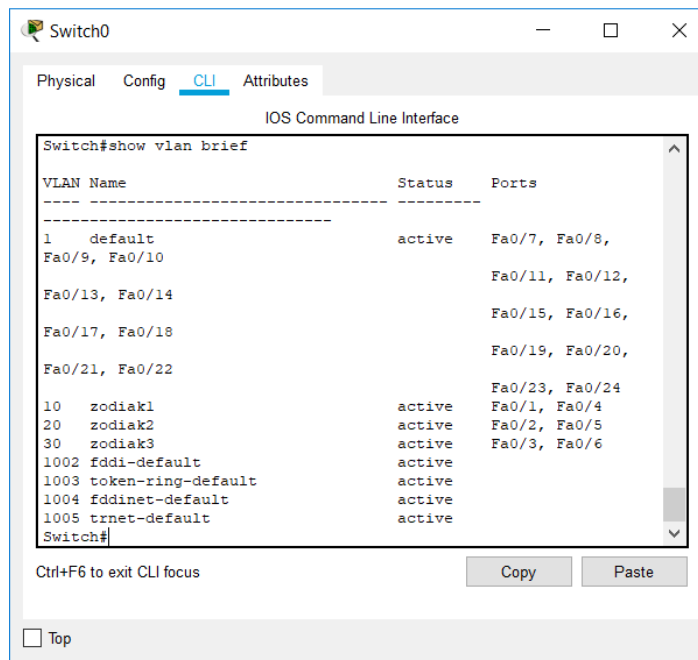


The screenshot shows a window titled "Switch0" with tabs for Physical, Config, CLI, and Attributes. The CLI tab is active, displaying the "IOS Command Line Interface". The following commands are entered:

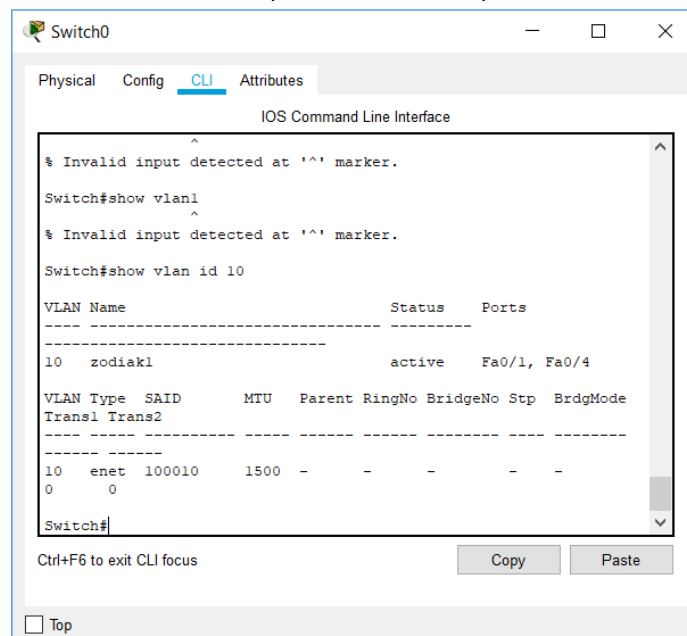
```
Switch(config)#int Fa 0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#int Fa 0/4
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#int Fa 0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#int Fa 0/5
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
Switch(config)#int Fa 0/3
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#int Fa 0/6
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#exit
Switch(config)#
```

At the bottom of the CLI window, there is a prompt "Ctrl+F6 to exit CLI focus" and buttons for "Copy" and "Paste". A "Top" button is also visible at the bottom left of the window.

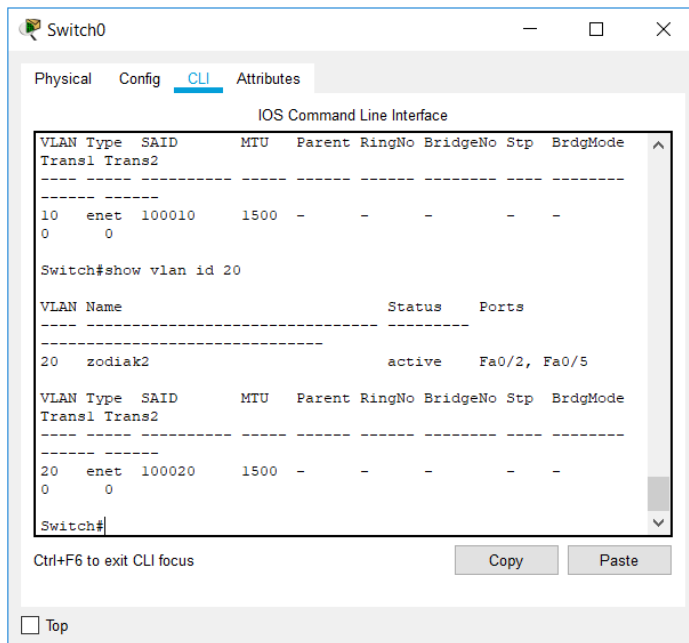
6. Pada mode user atau mode privileged, lihat konfigurasi VLAN yang telah dibuat. Langkah untuk melihat konfigurasi :
- Tekan enter
 - Masuk mode privileged
 - Ketik show vlan brief (informasi vlan keseluruhan)



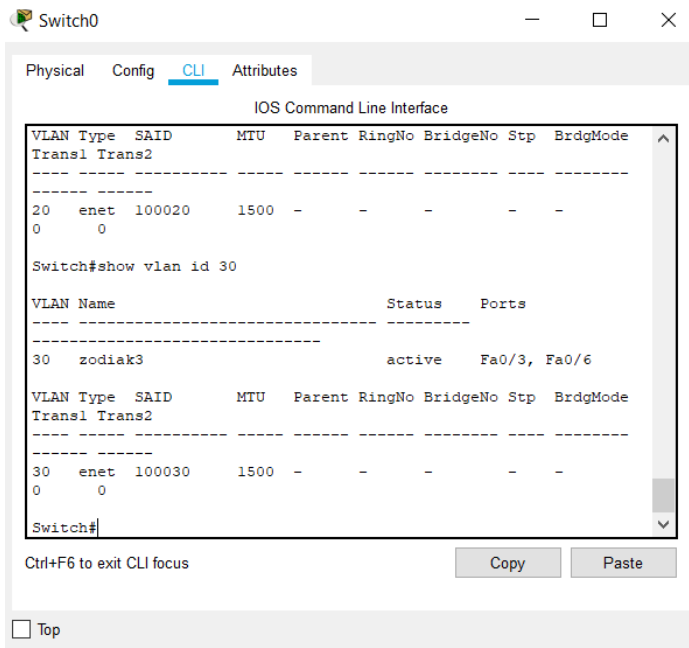
- Ketik show vlan id 10 (informasi vlan 10)



- Ketik show vlan id 20 (informasi vlan 20)



- Ketik show vlan id 30 (informasi vlan 30)

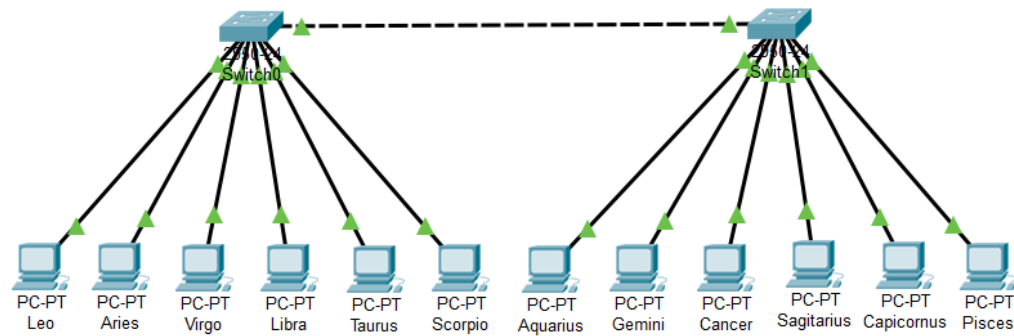


- Tugas 6A :

No	Variabel	Nilai		
1	Nomor VLAN	10	20	30
2	Nama VLAN	zodiak1	zodiak2	zodiak3
3	Port	Fa0/1, Fa0/4	Fa0/2, Fa05	Fa0/3, Fa0/6
4	Status	active	active	active

Kegiatan 2

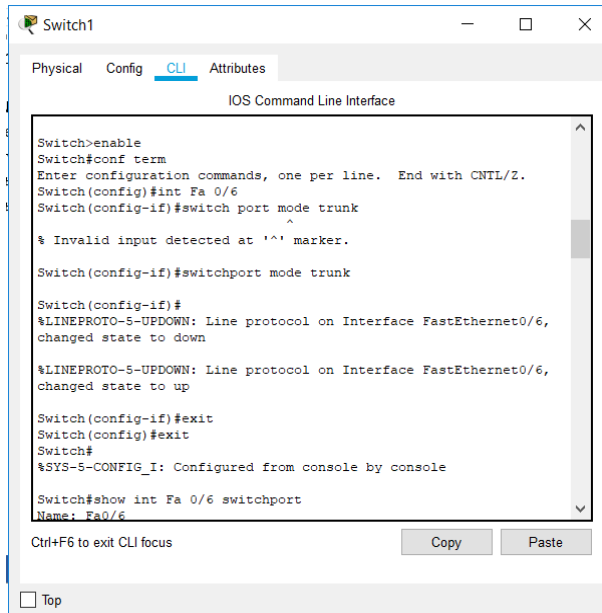
1. Menggunakan cisco packet tracer buat topologi berikut :



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
 - Sagittarius = 172.21.2.4/24
 - Capricornus = 172.21.3.3/24
 - Pisces = 172.21.3.4/24

5. Langkah pengoperasian konfigurasi VLAN trunking pada switch 1:

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



```
Switch1
Physical Config CLI Attributes
IOS Command Line Interface

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-5-UPDOWN: Line protocol on Interface FastEthernet0/6,
changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/6,
changed state to up

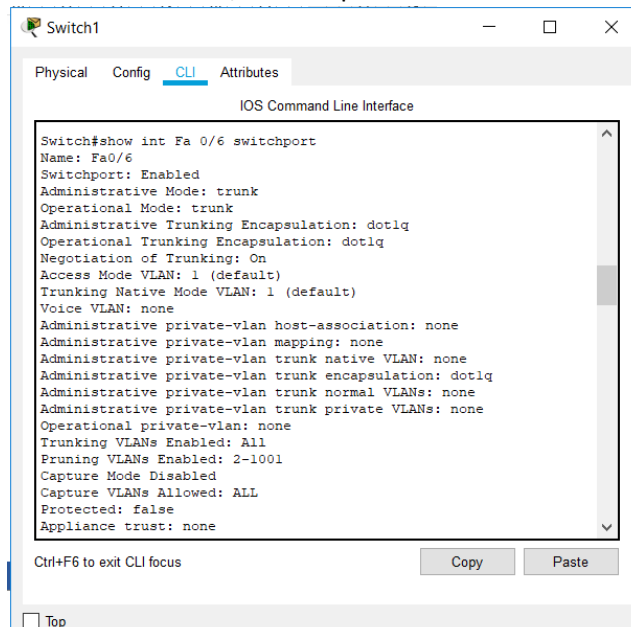
Switch(config-if)#exit
Switch(config)#exit
Switch#
%SYS-5-CONFIG_I: Configured from console by console

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

Ctrl+F6 to exit CLI focus
Copy Paste
```

6. Melihat konfigurasi :

- Ketik show int Fa 0/6 switchport

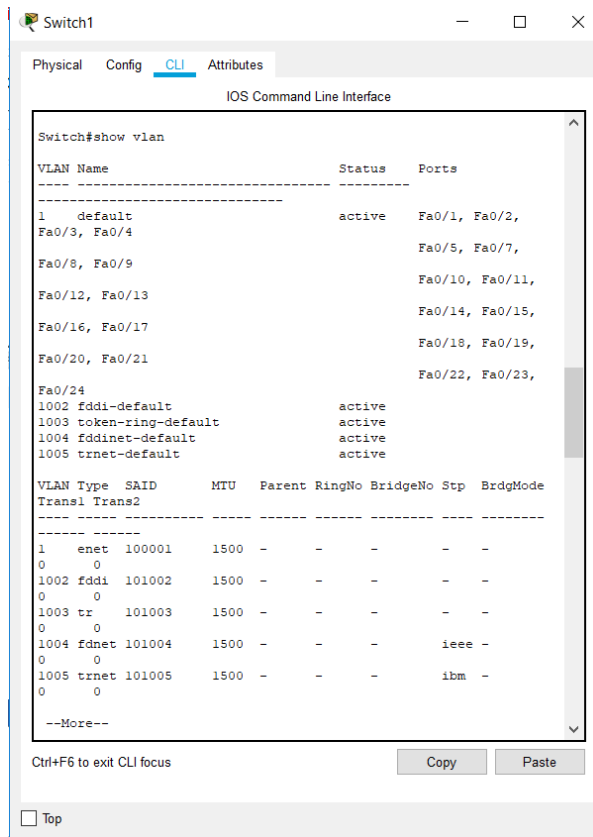


```
Switch1
Physical Config CLI Attributes
IOS Command Line Interface

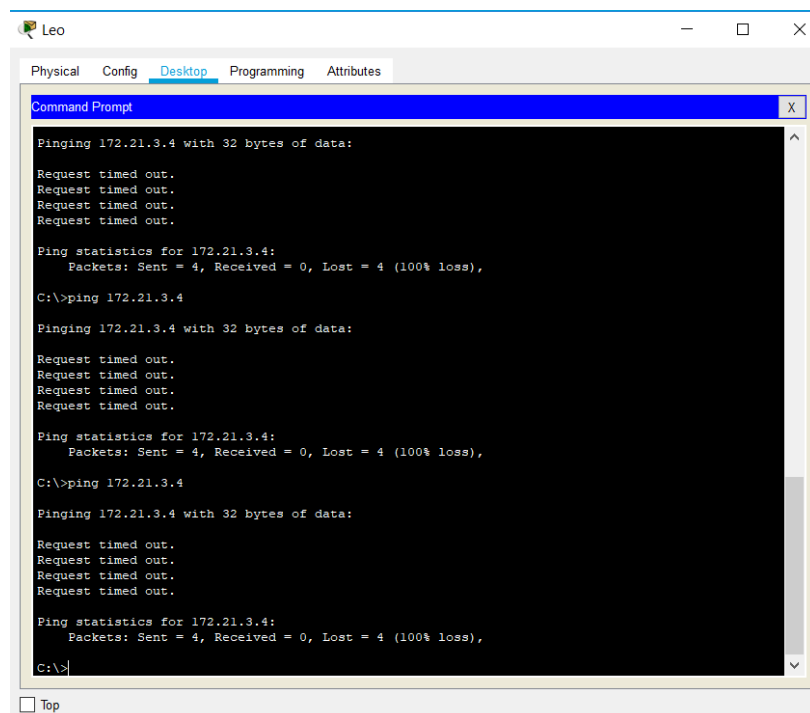
Switch#show int Fa 0/6 switchport
Name: Fa0/6
Switchport: Enabled
Administrative Mode: trunk
Operational Mode: trunk
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: On
Access Mode VLAN: 1 (default)
Trunking Native Mode VLAN: 1 (default)
Voice VLAN: none
Administrative private-vlan host-association: none
Administrative private-vlan mapping: none
Administrative private-vlan trunk native VLAN: none
Administrative private-vlan trunk encapsulation: dot1q
Administrative private-vlan trunk normal VLANs: none
Administrative private-vlan trunk private VLANs: none
Operational private-vlan: none
Trunking VLANs Enabled: All
Pruning VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none

Ctrl+F6 to exit CLI focus
Copy Paste
```

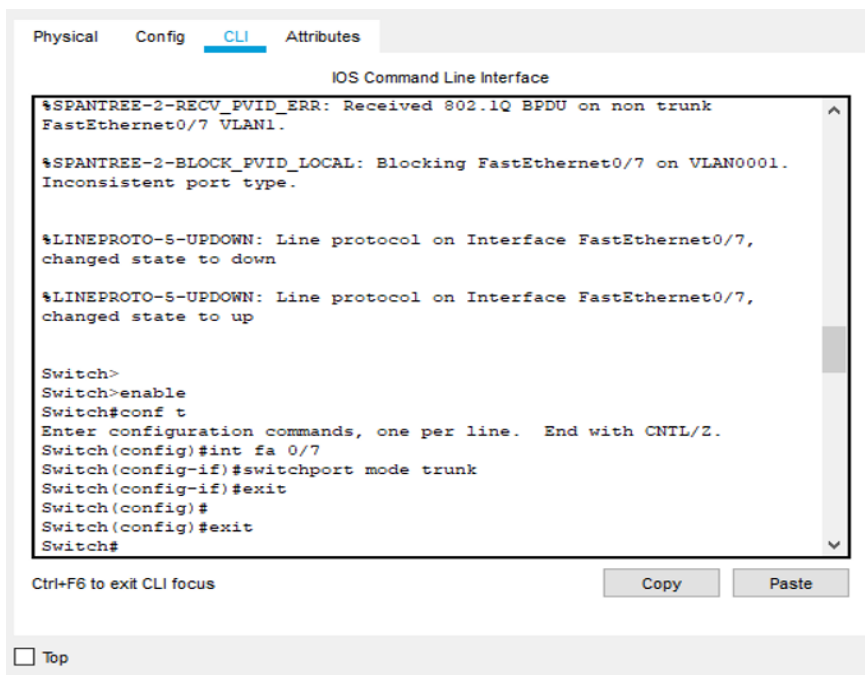
- Ketik show vlan



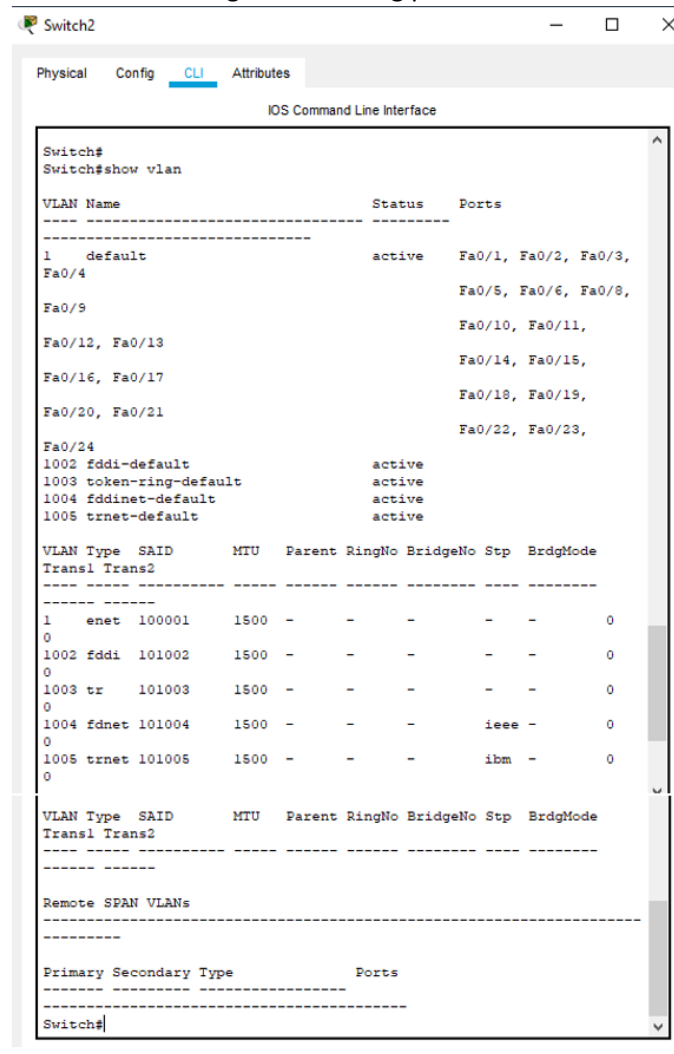
7. Ping PC Leoke PC Pisces



8. Konfigurasi VLAN trunking pada switch 2

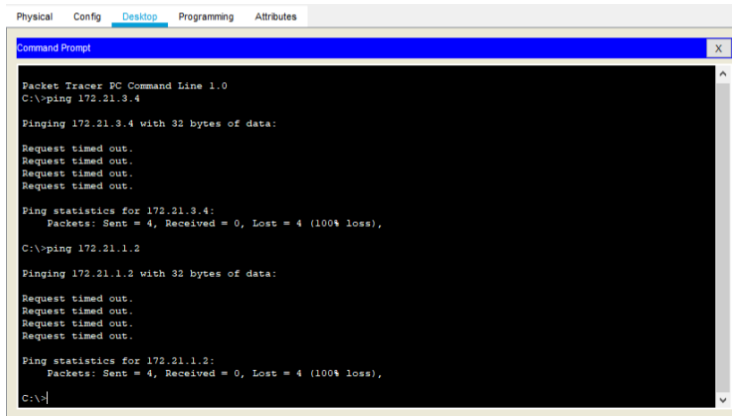


9. Melihat hasil konfigurasi trunking pada switch 2



10. Uji coba ping

➤ PC Leo ke PC Aries



```
Packet Tracer PC Command Line 1.0
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:\>ping 172.21.1.2

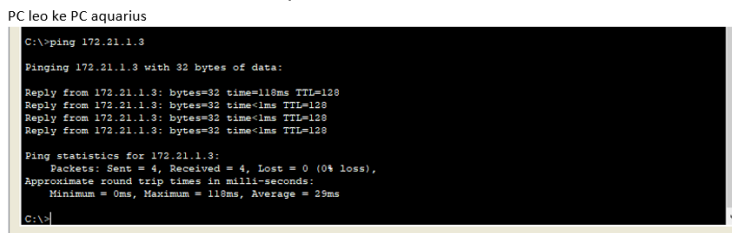
Pinging 172.21.1.2 with 32 bytes of data:

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

Ping statistics for 172.21.1.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```

➤ PC Leo ke PC Aquarius



```
C:\>ping 172.21.1.3

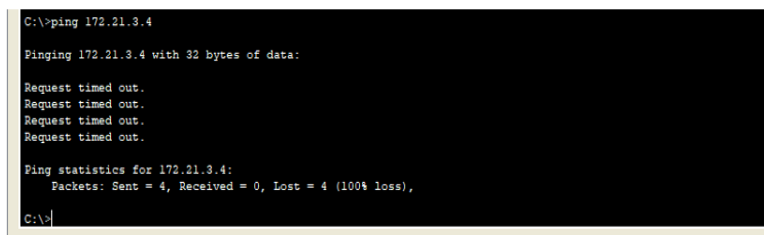
Pinging 172.21.1.3 with 32 bytes of data:

Reply from 172.21.1.3: bytes=32 time=118ms 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 = 118ms, Average = 29ms

C:\>
```

➤ PC Leo ke PC Pisces



```
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:\>
```

➤ PC Libra ke PC Cacer



```
Libra
Physical Config Desktop Programming Attributes

Packet Tracer PC Command Line 1.0
C:\>ping 172.21.2.3

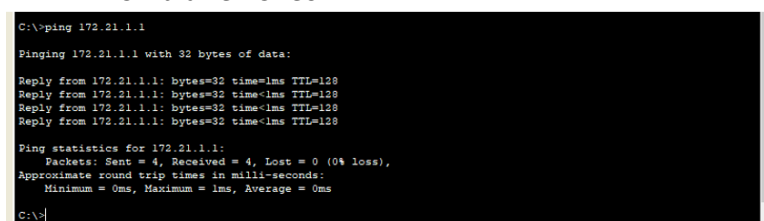
Pinging 172.21.2.3 with 32 bytes of data:

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:\>
```

➤ PC Libra ke PC Leo



```
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 tersebut disimpulkan bahwa PC pada VLAN yang sama akan menghasilkan status Reply
- Akan tetapi jika berada pada VLAN yang berbeda akan menghasilkan status Request Time Out