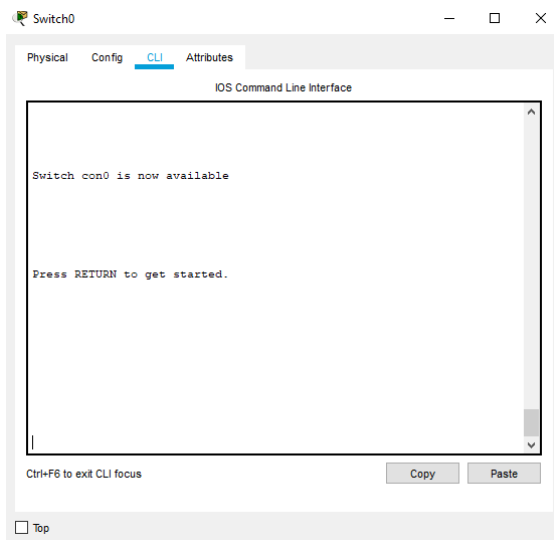
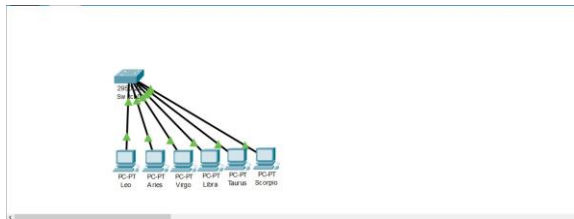


MUHAMMAD ROSYAD ADI PRATAMA
L200184044

MODUL 4

VIRTUAL LAN DAN TRUNKING



- Tugas 6A : Capture masing-masing tampilan informasi vlan dan isi tabel berikut.

Switch0

Physical Config CLI Attributes

IOS Command Line Interface

```
Switch#
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#int
Switch(config)#interface FastEthernet 0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#interface FastEthernet 0/4
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
```

Switch0

Physical

Config

CLI

Attributes

IOS Command Line Interface

Remote SPAN VLANs

Primary Secondary Type Ports

Switch#show vlan id 10

VLAN Name Status Ports

10 zodiak1 active Fa0/1, Fa0/4

VLAN Type SAID MTU Parent RingNo BridgeNo Stp BrdgMode

Trans1 Trans2

10 enet 100010 1500 - - - - - 0

0

Switch#

Switch#

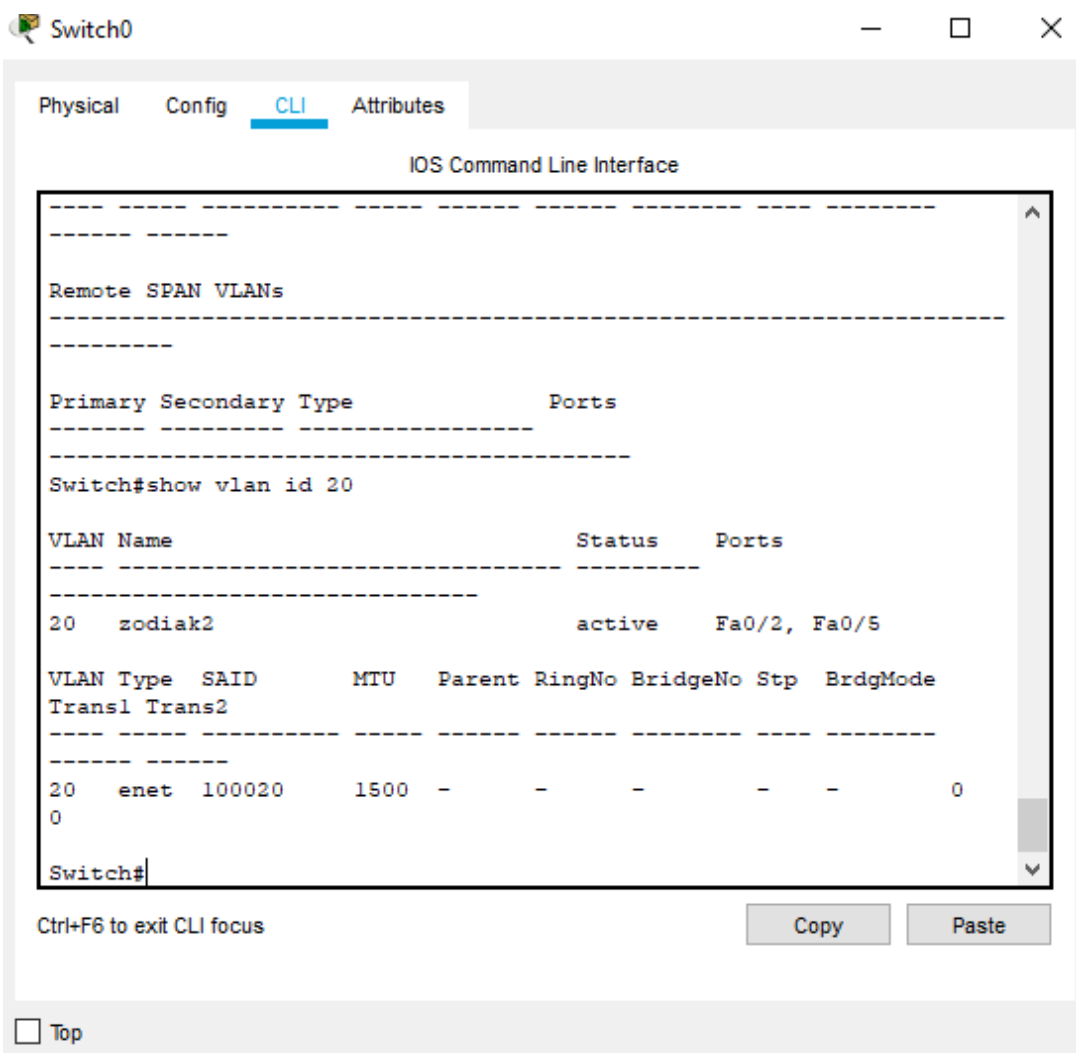
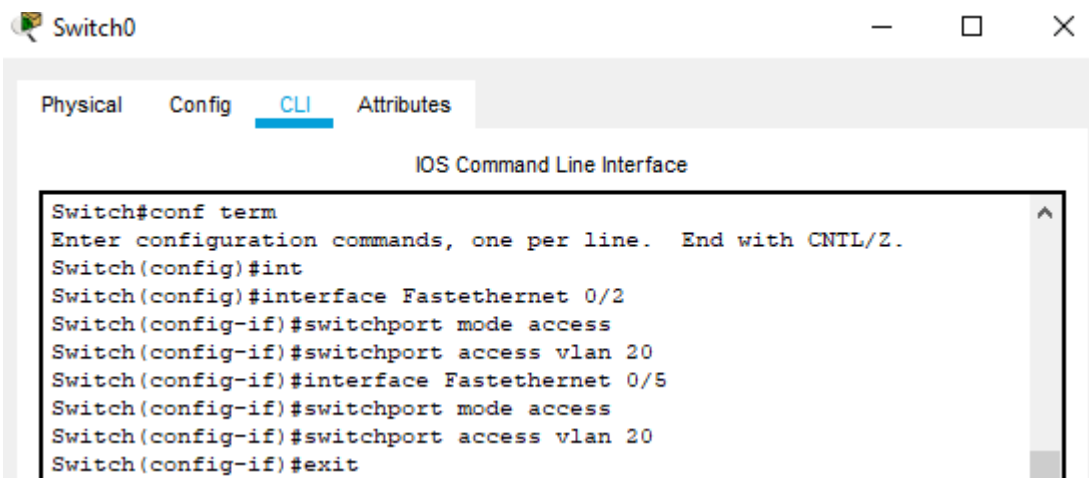
Ctrl+F6 to exit CLI focus

Copy

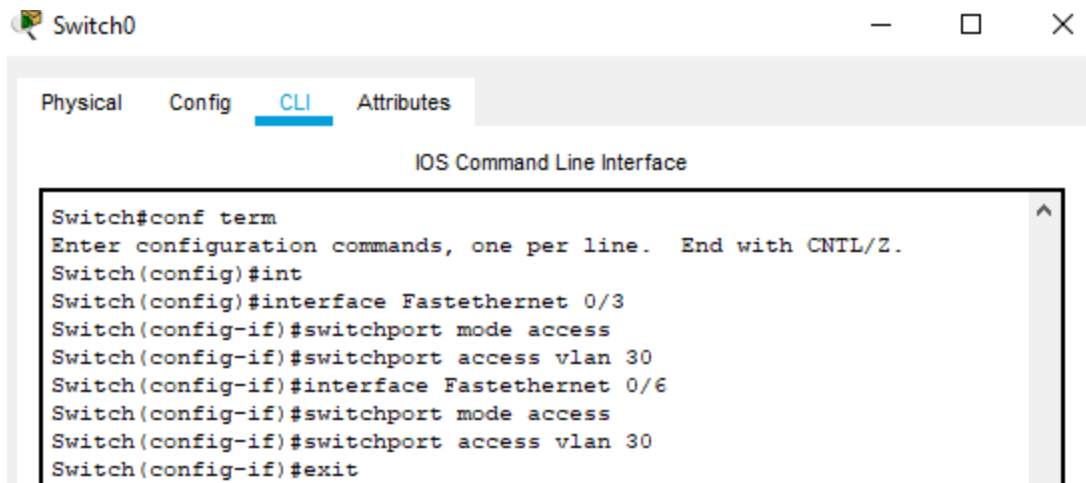
Paste

☐ Top

NO	Variabel	Nilai
1	Nomor VLAN	10
2	Nama VLAN	zodiak1
3	Port	Fa 0/1, Fa 0/4
4	Status	Active



NO	Variabel	Nilai
1	Nomor VLAN	20
2	Nama VLAN	zodiak2
3	Port	Fa 0/2 , Fa 0/5
4	Status	Active

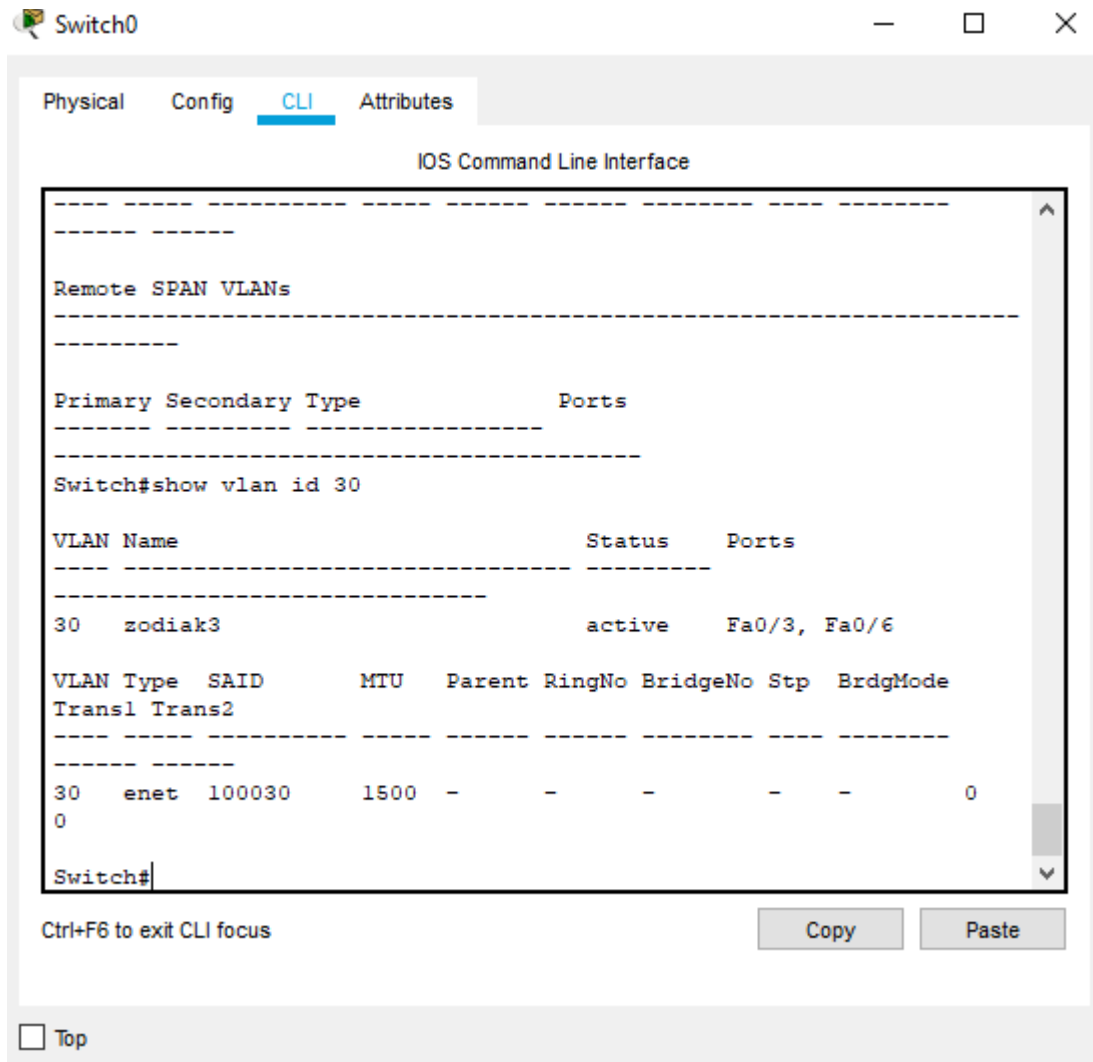


```

Switch0
Physical Config CLI Attributes
IOS Command Line Interface

Switch#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#int
Switch(config)#interface Fastethernet 0/3
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#interface Fastethernet 0/6
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#exit

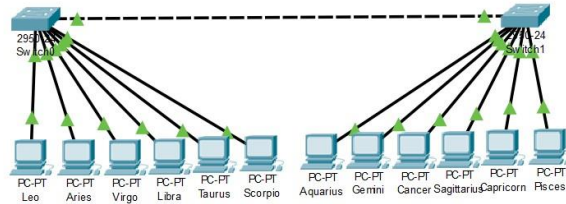
```



NO	Variabel	Nilai
1	Nomor VLAN	30
2	Nama VLAN	zodiak3
3	Port	Fa 0/3, Fa 0/6
4	Status	Active

- Tugas 6B : Jelaskan secara singkat hasil yang anda peroleh dari tugas 6A.

Kegitan 2. Topologi 2



Switch#conf term
Switch3

Physical Config **CLI** Attributes

IOS Command Line Interface

```
Switch#show interface fastethernet 0/7 switchport
Name: Fa0/7
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
--More--
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

- Ketik *show interface fastethernet 0/?? trunk* (?? Nomor port trunking)

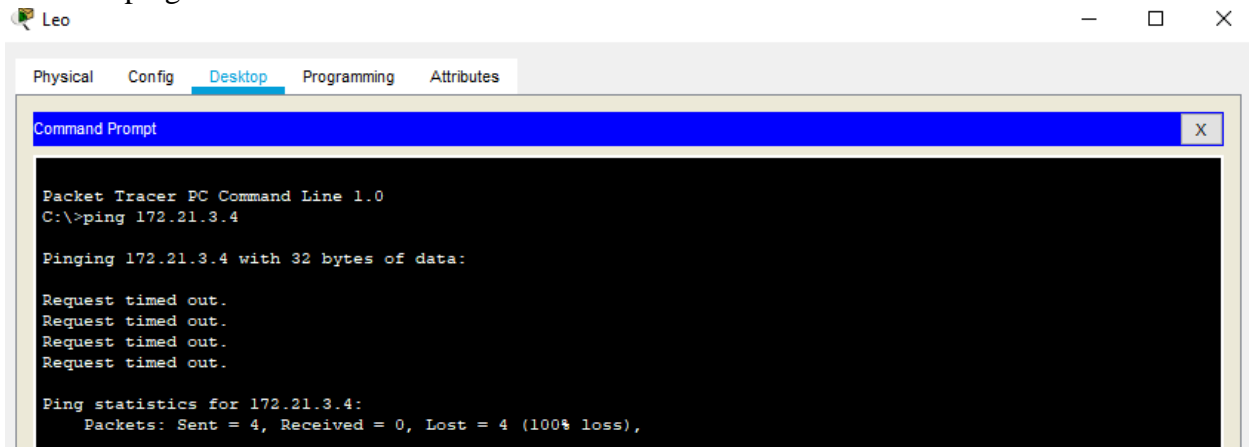
- ketik show vlan

```
Switch#show vlan
```

VLAN Name	Status	Ports
1 default	active	Fa0/8, Fa0/9, Fa0/10, Fa0/11, Fa0/12, Fa0/13, Fa0/14, Fa0/15, Fa0/16, Fa0/17, Fa0/18, Fa0/19, Fa0/20, Fa0/21, Fa0/22, Fa0/23, Fa0/24
10 zodiak1	active	Fa0/1, Fa0/4
20 zodiak2	active	Fa0/2, Fa0/5
30 zodiak3	active	Fa0/3, Fa0/6
1002 fddi-default	active	
1003 token-ring-default	active	
1004 fddinet-default	active	
1005 trnet-default	active	

VLAN Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode
Trans1	Trans2						

- Tugas 7A : Jelaskan secara singkat hasil yang anda peroleh dari langkah 7. Dari langkah 7A dapat diperoleh kesimpulan bahwa kita bisa melihat interface fa berapa yang akan diubah modenya ke mode trunk. Mode itu bertujuan untuk koneksi antar switch dengan vlan yang sama. Lalu kita juga bias melihat keseluruhan vlan yang ada.
- 2. Lakukan ping dari PC leo ke PC Pisces.



- Tugas 8A : Jelaskan secara singkat mengapa hasil yang anda peroleh dari langkah 8 mendapatkan status “reply”? Karena di switch 2 belum dibuat interface sebagai penghubung dengan switch 1.

```
C:\>ping 172.21.1.3

Pinging 172.21.1.3 with 32 bytes of data:

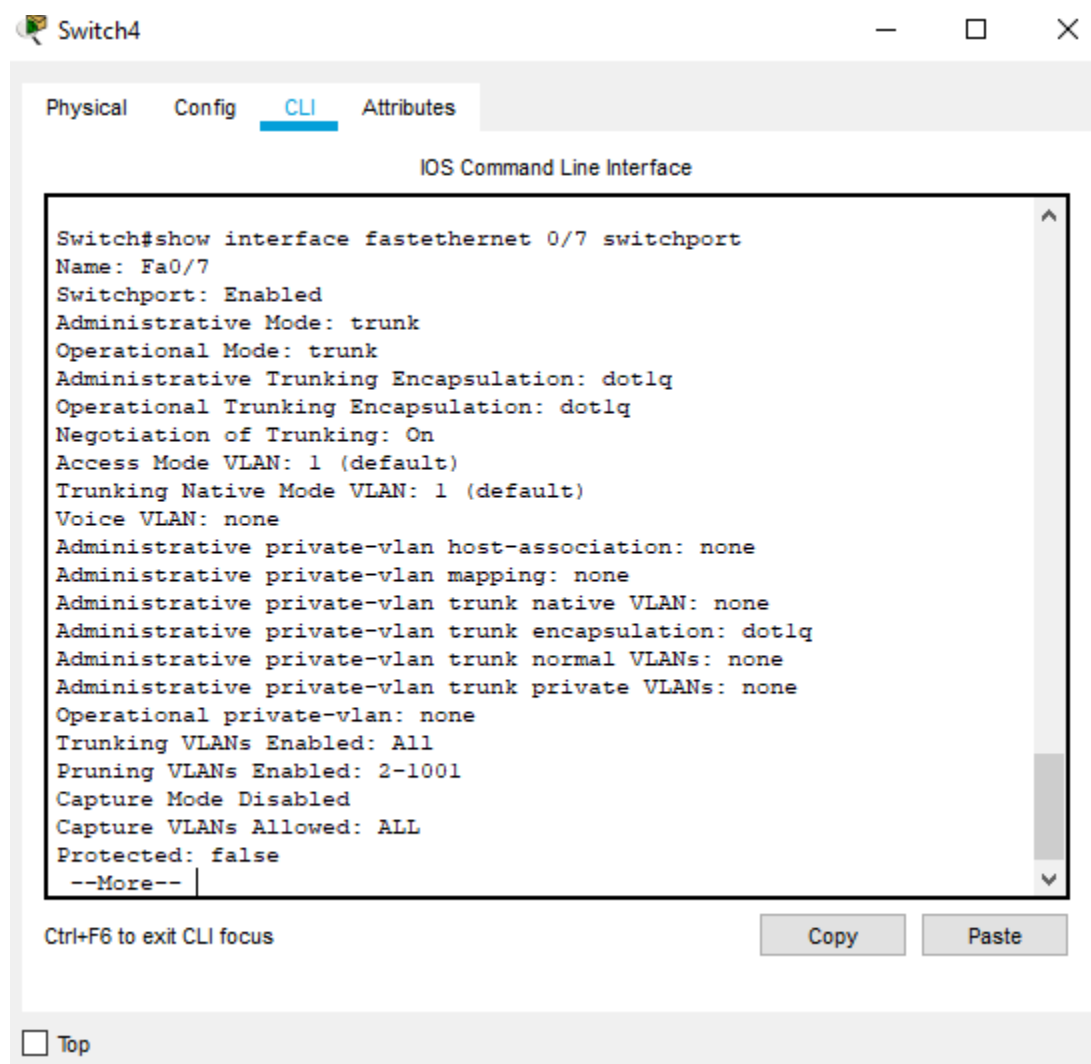
Reply from 172.21.1.3: bytes=32 time=1ms TTL=128
Reply from 172.21.1.3: bytes=32 time<1ms TTL=128
Reply from 172.21.1.3: bytes=32 time<1ms TTL=128
Reply from 172.21.1.3: bytes=32 time=1ms TTL=128

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:\>
```

Ping Leo ke Aquarius

3. Lakukan konfigurasi VLAN trunking pada switch 2 seperti langkah 6.
4. Pada *mode user* atau *mode privileged* , lihat konfigurasi vlan pada switch 2.



Langkah pengoperasian untuk melihat konfigurasi

- Tekan enter
- Masuk *mode privileged*
- Ketik *show vlan*

Switch4

Physical Config **CLI** Attributes

IOS Command Line Interface

```
Switch#show vlan
```

VLAN Name	Status	Ports
1 default	active	Fa0/1, Fa0/2, Fa0/3, Fa0/4, Fa0/5, Fa0/6, Fa0/8, Fa0/9, Fa0/10, Fa0/11, Fa0/12, Fa0/13, Fa0/14, Fa0/15, Fa0/16, Fa0/17, Fa0/18, Fa0/19, Fa0/20, Fa0/21, Fa0/22, Fa0/23, Fa0/24
1002 fddi-default	active	
1003 token-ring-default	active	
1004 fddinet-default	active	
1005 trnet-default	active	

VLAN Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode
Trans1	Trans2						

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

- Tugas 10A : Jelaskan secara singkat hasil yang anda peroleh dari langkah 10.
5. Pada *mode configuration* , konfigurasi port-port switch ke dalam VLAN zodiak1, zodiak2, dan zodiak3 dengan anggota sebagai berikut :

```
Switch#
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
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
```

- zodiak1 = aquarius dan gemini

```
Switch#show vlan id 10
```

VLAN Name	Status	Ports
10 zodiak1	active	Fa0/1, Fa0/2

VLAN Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode
Trans1	Trans2						
10	enet	100010	1500	-	-	-	-
0							0

- zodiak2 = cancer dan sagitarius

```
Switch#show vlan id 20
```

VLAN Name	Status	Ports
20 zodiak2	active	Fa0/3, Fa0/4

VLAN Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode
Trans1	Trans2						
20	enet	100020	1500	-	-	-	-
0							0

```
Switch#
```

- zodiak3 = capricornus dan pisces

```
Switch#show vlan id 30
```

VLAN Name	Status	Ports
30 zodiak3	active	Fa0/5, Fa0/6

VLAN Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode
Trans1	Trans2						
30	enet	100030	1500	-	-	-	-
0							0

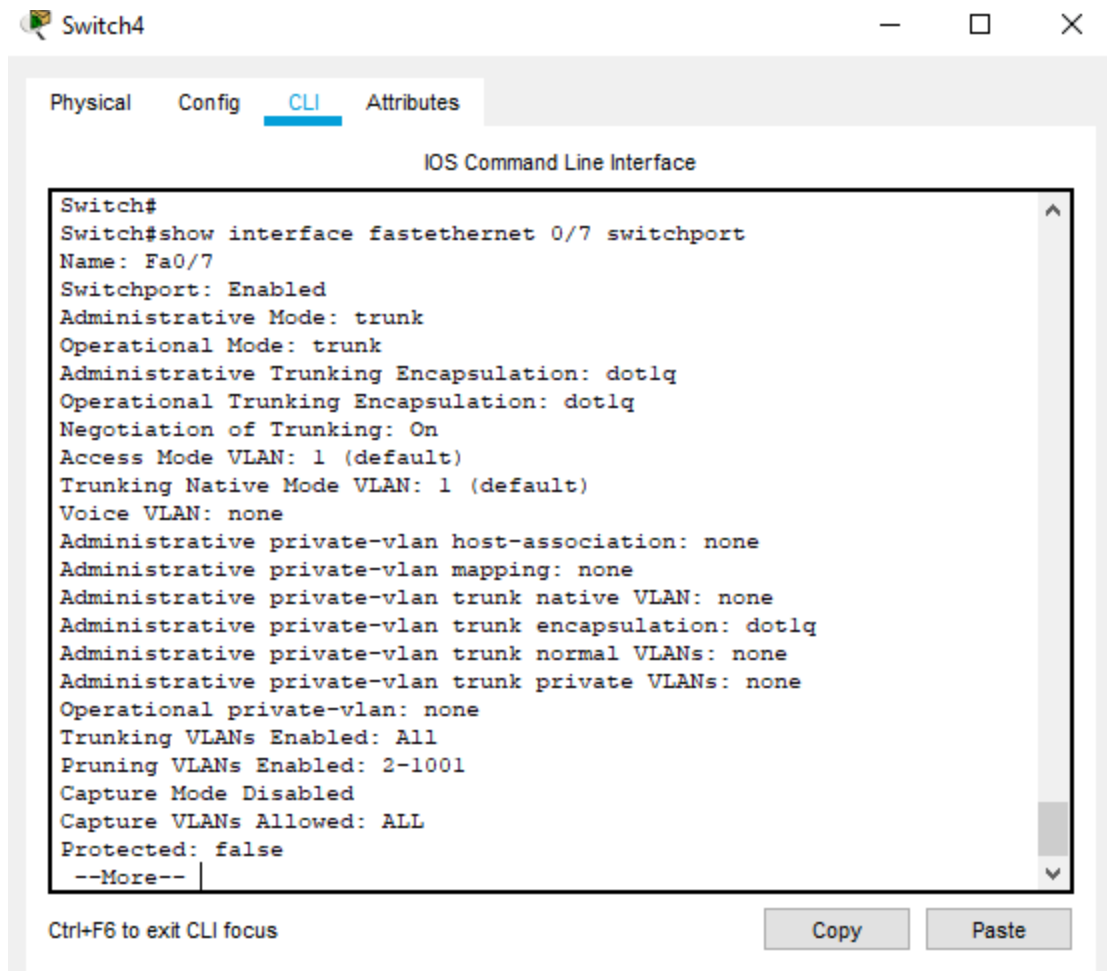
```
Switch#
```

Ctrl+F6 to exit CLI focus

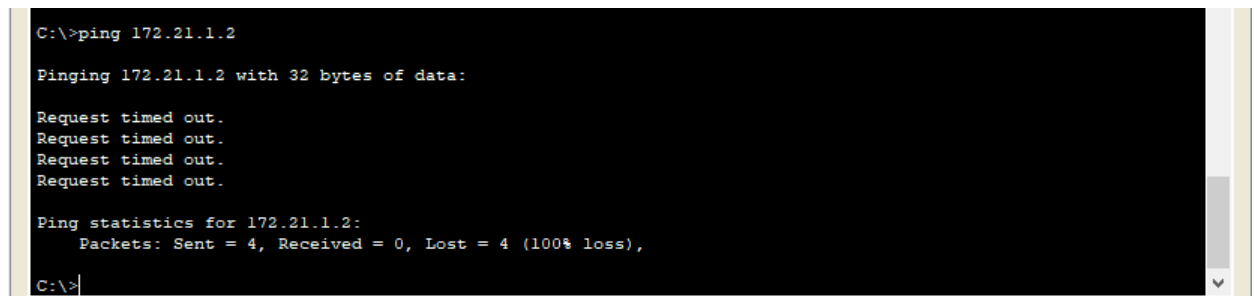
Copy

Paste

6. Lakukan ping dari PC leo ke PC aries, PC leo ke PC aquarius , PC leo ke PC pisces , PC libra ke Cancer dan PC libra ke Leo.



Leo ke Aries



Leo ke 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=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
```

Leo ke 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),
```

Libra ke Cancer

```
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:\>|
```

Libra ke Leo

```
C:\>ping 172.21.1.1

Pinging 172.21.1.1 with 32 bytes of data:

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

Ping statistics for 172.21.1.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

- Tugas 12A : Jelaskan secara singkat hasil yang anda peroleh dari langkah 8.
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.