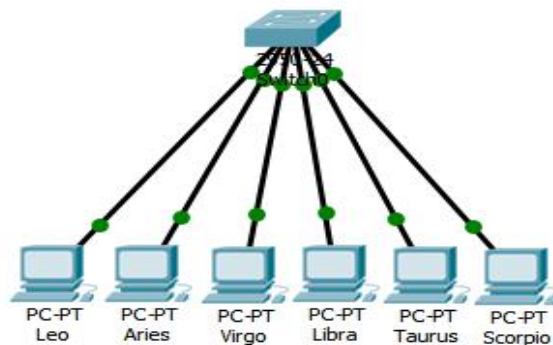


Nama : Amartya Bintang Wijat Ranti  
NIM : L200180193  
Kelas : E  
Mata Kuliah : Praktikum Jaringan Komputer

## Modul 4

### Kegiatan Praktikum

#### 1. Kegiatan 1. Topologi 1 Rancangan

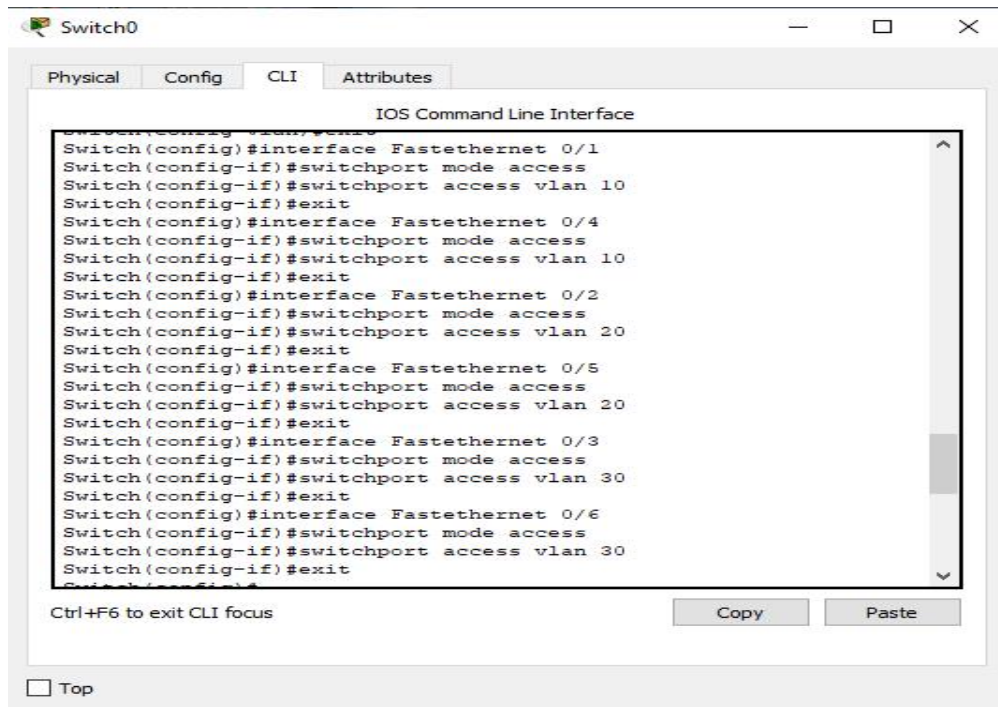


Setelah membuat topologi dengan menggunakan switch dan memberi nama masing-masing perangkat serta mengkonfigurasi IP masing-masing PC sesuai yang tertera di buku. Lalu membuat 3 VLAN dengan nama zodiak1, zodiak2, dan zodiak3.

```
Switch0
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)#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
```

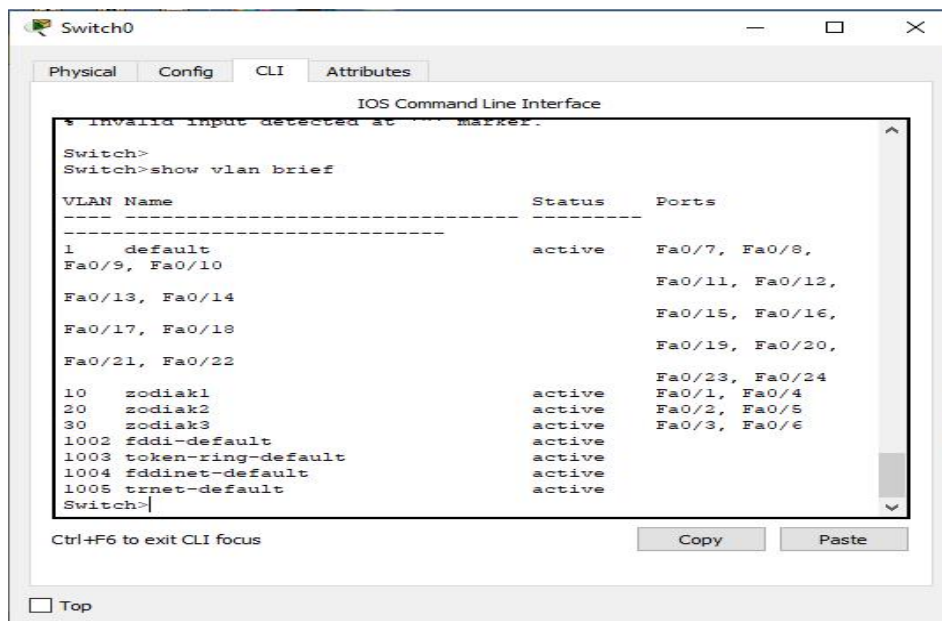
Mengkonfigurasi port port switch ke dalam VLAN zodiak1, zodiak2, dan zodiak3 dengan anggota sebagai berikut :

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

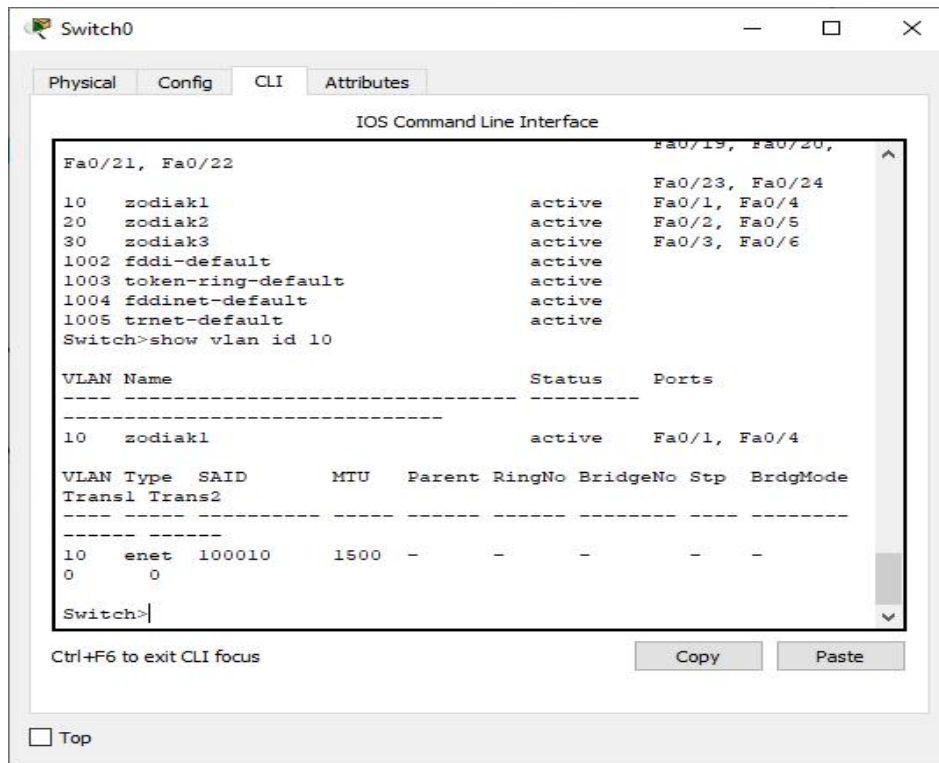


Melihat konfigurasi VLAN yang sudah dibuat :

- Show vlan brief (informasi vlan keseluruhan)

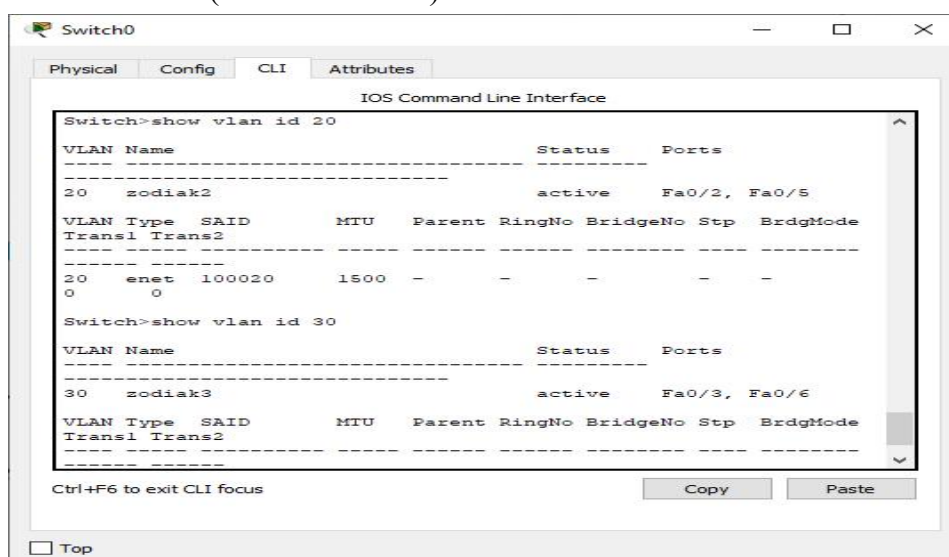


- Show vlan id 2 (informasi vlan 2)



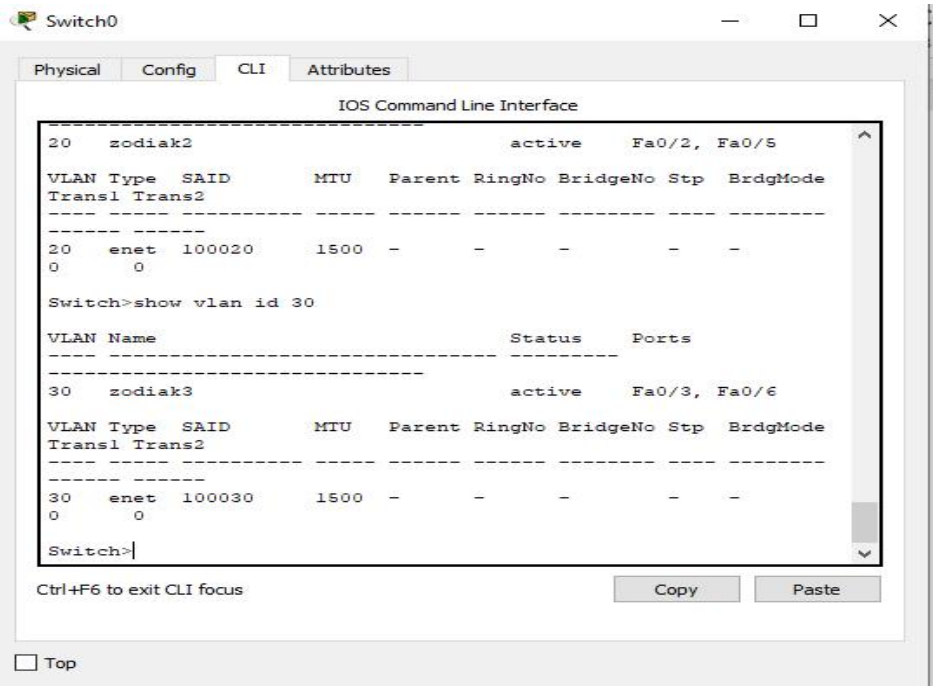
No	Variable	Nilai
1	Nomor VLAN	10
2	Nama VLAN	zodiak1
3	Port	Fa0/1, Fa0/4
4	Status	active

- Show vlan id 3 (informasi vlan 3)



No	Variable	Nilai
1	Nomor VLAN	20
2	Nama VLAN	zodiak2
3	Port	Fa0/2, Fa0/5
4	Status	active

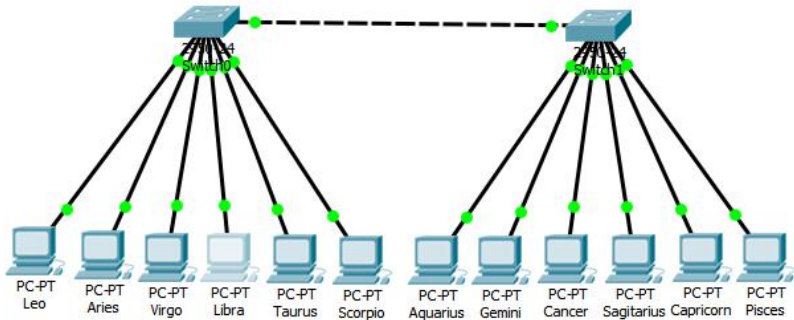
- Show vlan id 4 (informasi vlan 4)



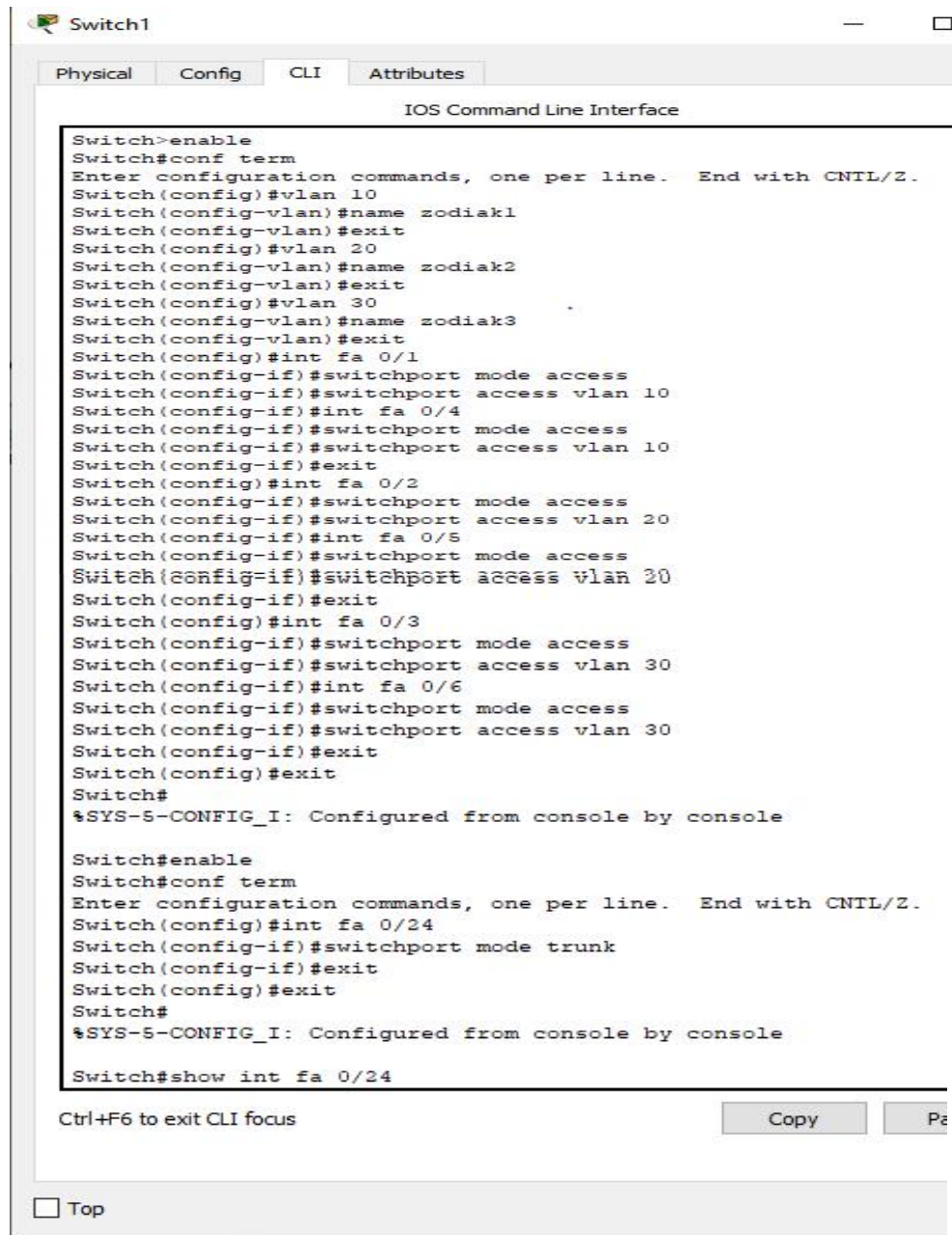
No	Variable	Nilai
1	Nomor VLAN	30
2	Nama VLAN	zodiak3
3	Port	Fa0/3, Fa0/6
4	Status	active

## 2. Kegiatan 2. Topologi 2

### Rancangan



Setelah membuat topologi dengan menggunakan switch dan memberi nama masing-masing perangkat serta mengkonfigurasi IP masing-masing PC sesuai yang tertera di buku. Lalu membuat 3 VLAN dengan nama zodiak1, zodiak2, dan zodiak3.



```
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)#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
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)#exit
Switch#
%SYS-5-CONFIG_I: Configured from console by console

Switch#enable
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#int fa 0/24
Switch(config-if)#switchport mode trunk
Switch(config-if)#exit
Switch(config)#exit
Switch#
%SYS-5-CONFIG_I: Configured from console by console

Switch#show int fa 0/24
```

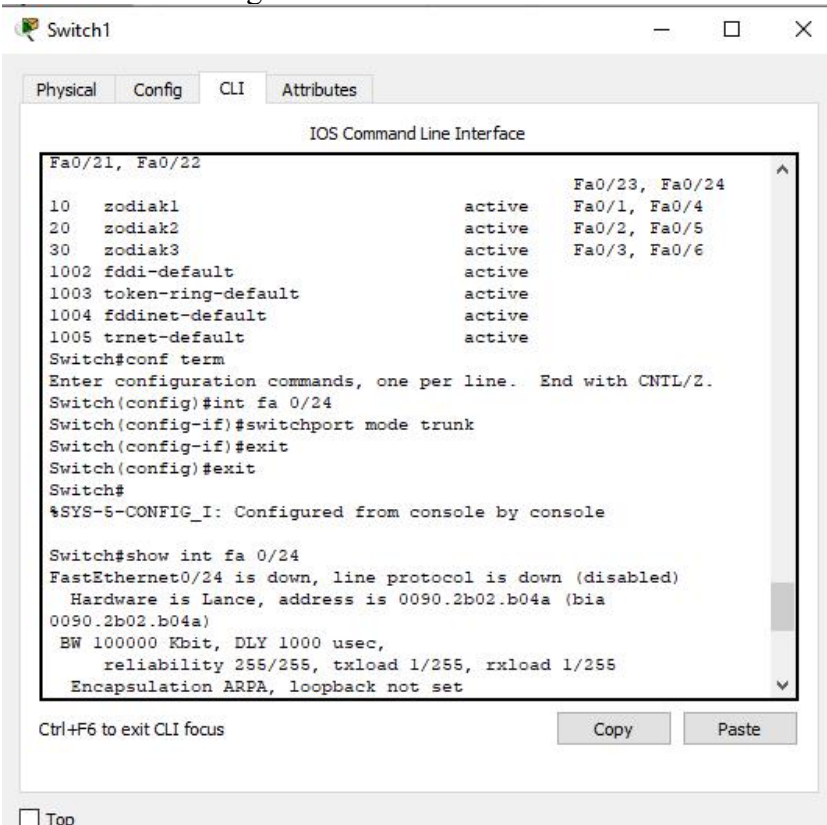
Ctrl+F6 to exit CLI focus

Copy Pa

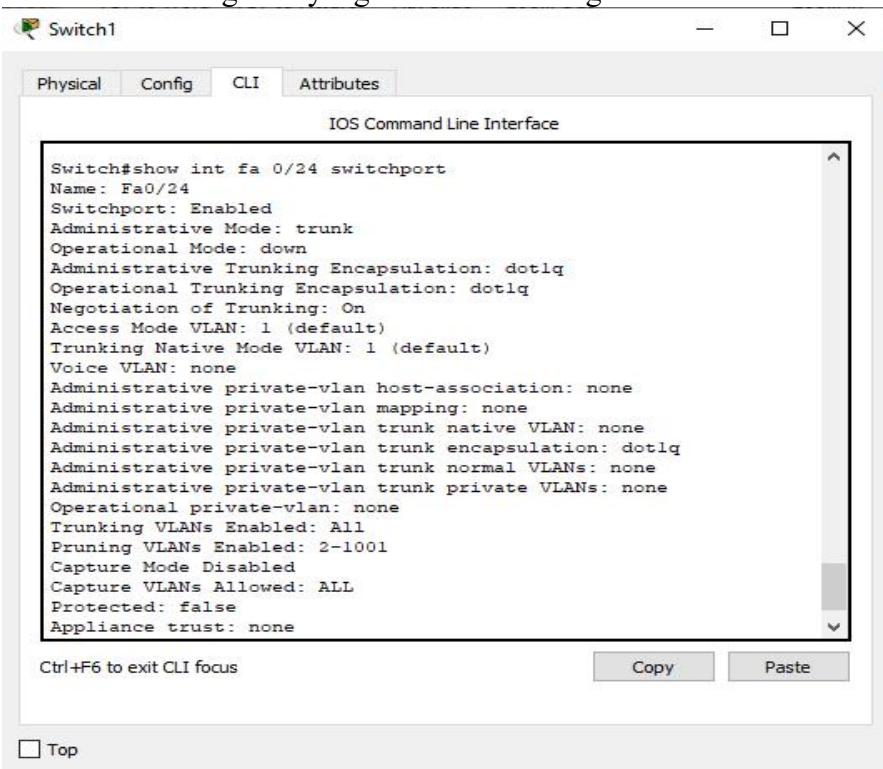
☐ Top



## Melakukan trunking

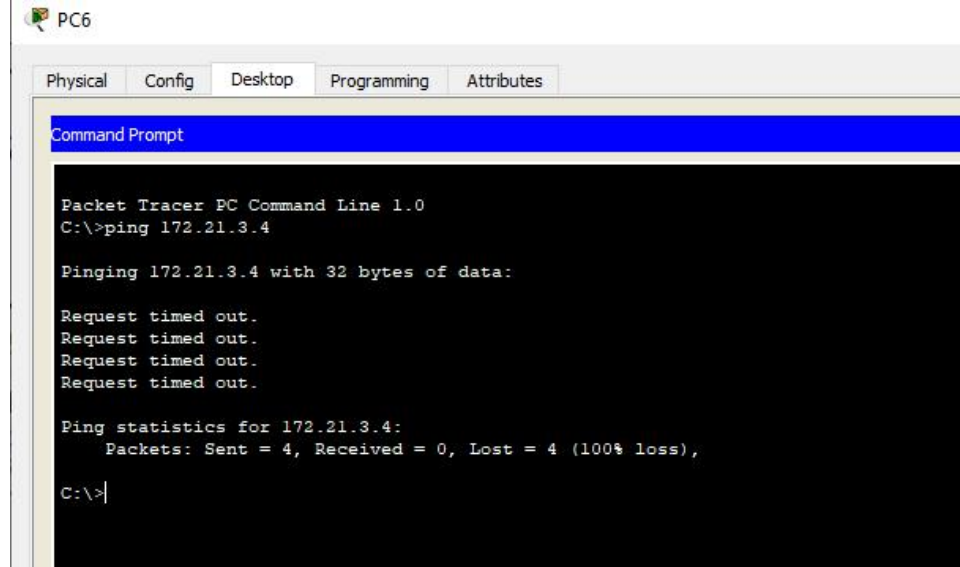


## Melakukan konfigurasi yang sudah di trunking



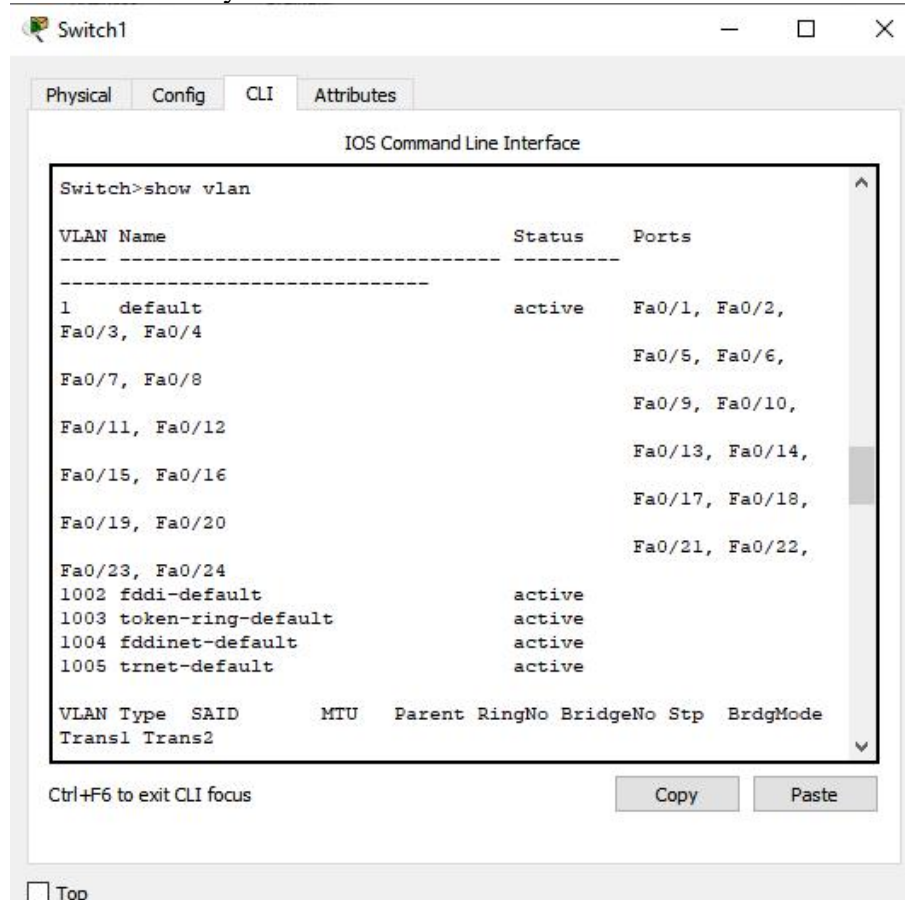
Pada Konfigurasi ini Port yang sudah terkonfigurasi ke dalam vlan yaitu, Port 0/1 sampai Port 0/6, sedangkan Port 0/24 untuk Trunking antar Switch

## Uji ping dari PC Leo ke PC Pisces

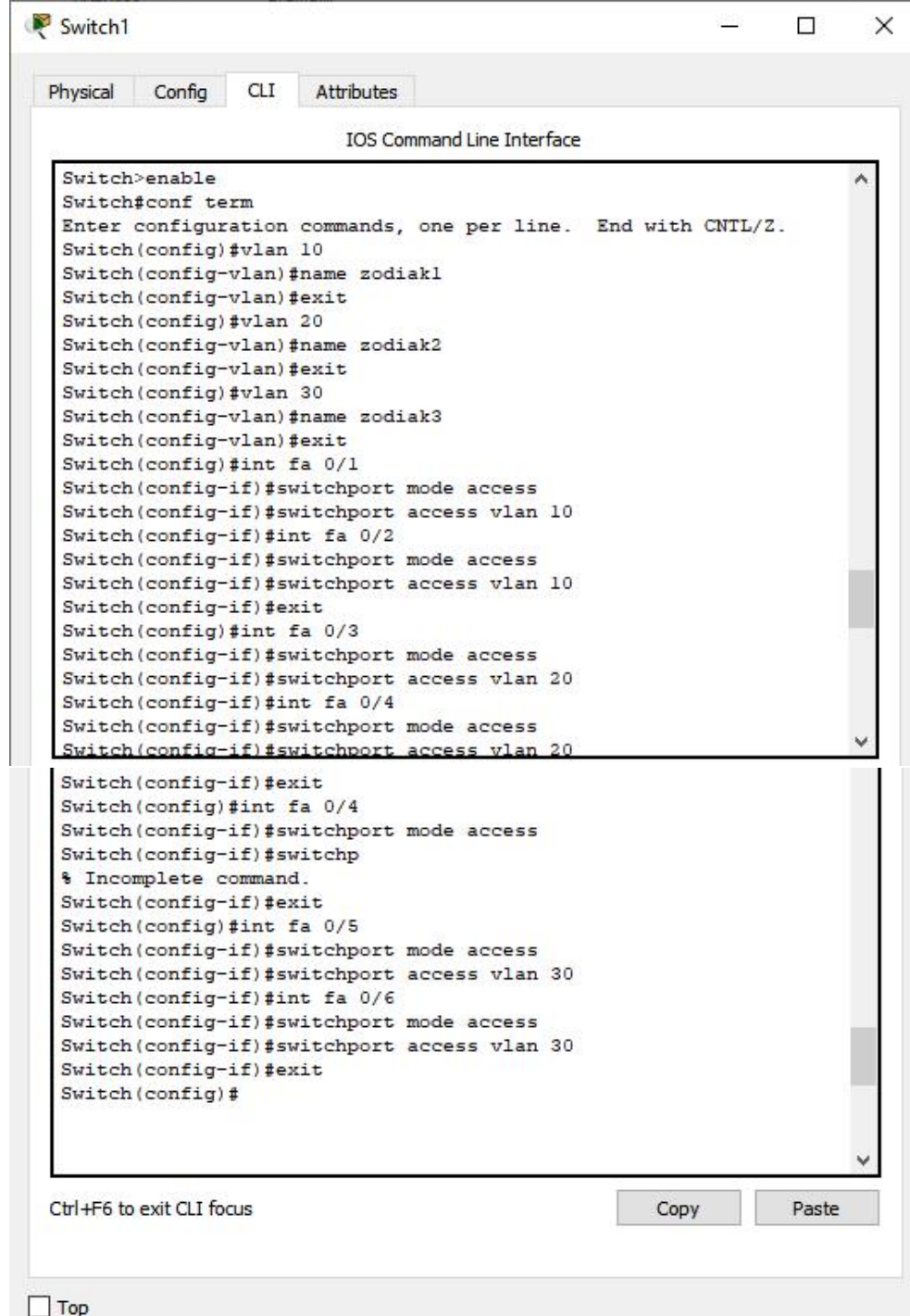


Hasilnya RTO, karena pada PC Pisces tidak berada pada VLAN yang sama dengan PC Leo

Pada langkah ini Port-port Fastethernet belum terkonfigurasi ke dalam VLAN, bahkan VLAN nya belum dibuat



Konfigurasi port-port switch ke dalam vlan zodiak1, zodiak2, dan zodiak3 :



```
Switch>enable
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
Switch(config)#int fa 0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#int fa 0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#int fa 0/3
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#int fa 0/4
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
Switch(config)#int fa 0/4
Switch(config-if)#switchport mode access
Switch(config-if)#switchp
% Incomplete command.
Switch(config-if)#exit
Switch(config)#int fa 0/5
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)#
```

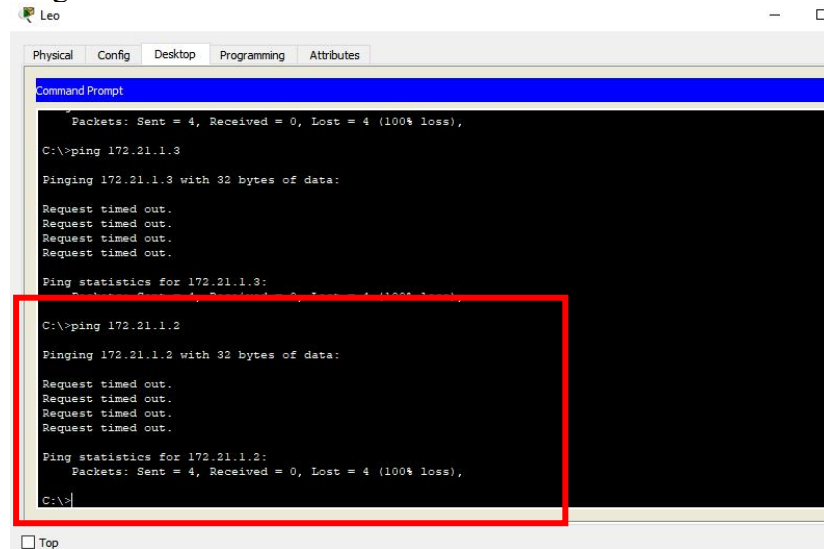
Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

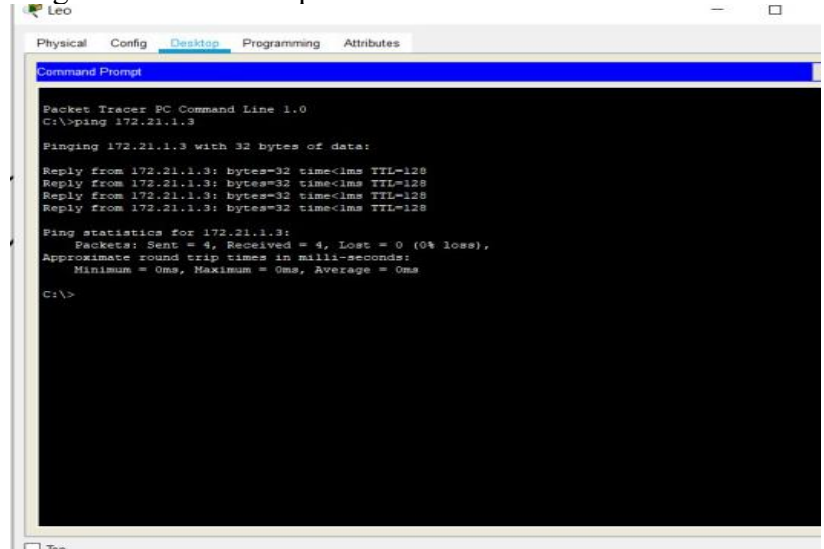


## Ping dari PC Leo e PC Aries



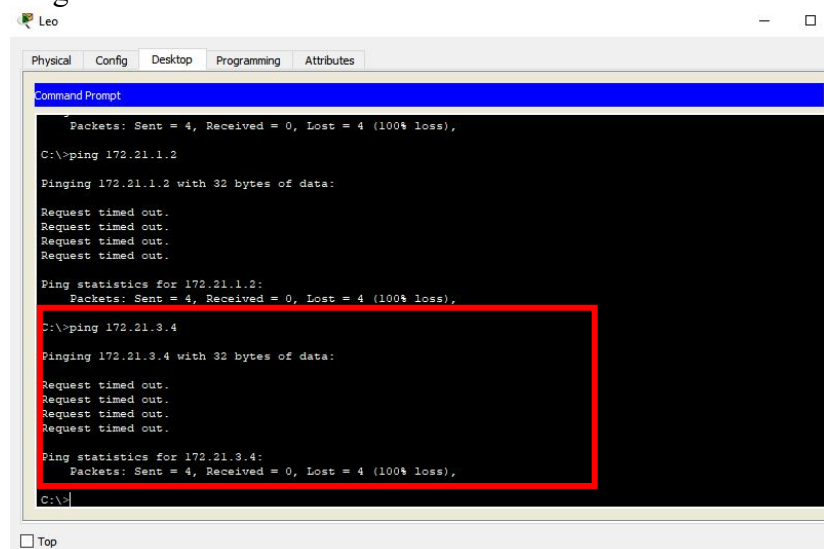
```
Leo
Physical Config Desktop Programming Attributes
Command Prompt
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>ping 172.21.1.3
Pinging 172.21.1.3 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 172.21.1.3:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
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),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>
```

## Ping PC Leo ke PC Aquarius



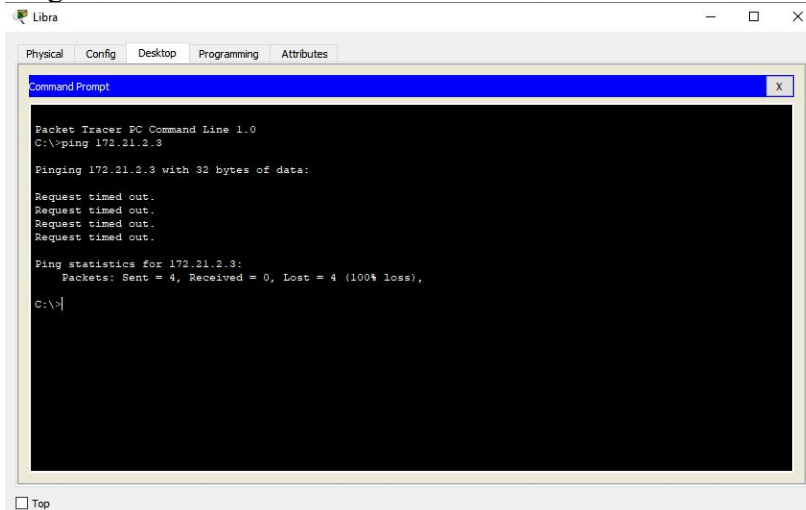
```
Leo
Physical Config Desktop Programming Attributes
Command Prompt
Packet Tracer PC Command Line 1.0
C:\>ping 172.21.1.3
Pinging 172.21.1.3 with 32 bytes of data:
Reply from 172.21.1.3: bytes=32 time<1ms TTL=128
Reply from 172.21.1.3: bytes=32 time<1ms TTL=128
Reply from 172.21.1.3: bytes=32 time<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 = 0ms, Average = 0ms
C:\>
```

## Ping PC Leo ke PC Pisces



```
Leo
Physical Config Desktop Programming Attributes
Command Prompt
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),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
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),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>
```

## Ping PC Libra ke PC Cancer



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

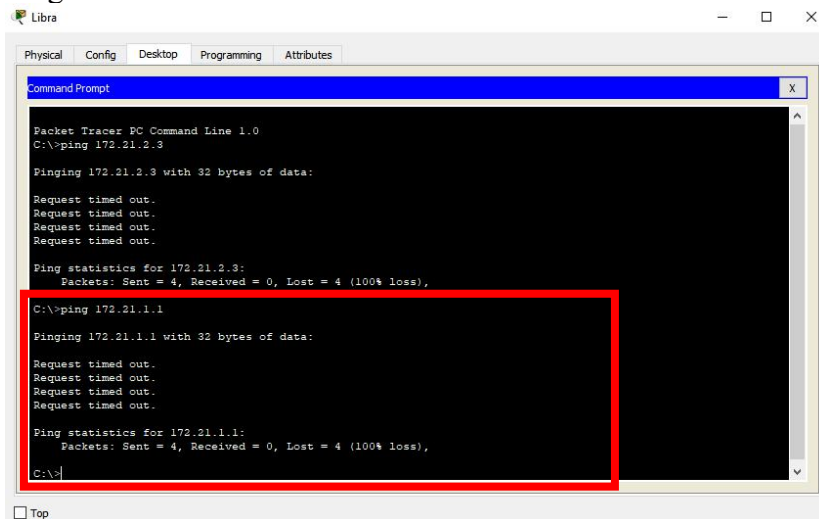
Pinging 172.21.2.3 with 32 bytes of data:

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:\>
```

## Ping PC Libra ke PC Leo



```
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:\>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),

C:\>
```

Dari beberapa hasil percobaan di atas, dapat disimpulkan apabila PC berada pada Vlan yang sama dan Network yang sama, maka akan menghasilkan balasan atau reply dari IP tujuan pada saat melakukan pengujian Ping, Seperti contohnya PC Leo ke PC Aquarius. Selain itu akan menghasilkan RTO.

## Tugas

Untuk semua tugas diatas dikumpulkan kepada asisten masing-masing dalam bentuk hard copy pada pertemuan berikutnya.