

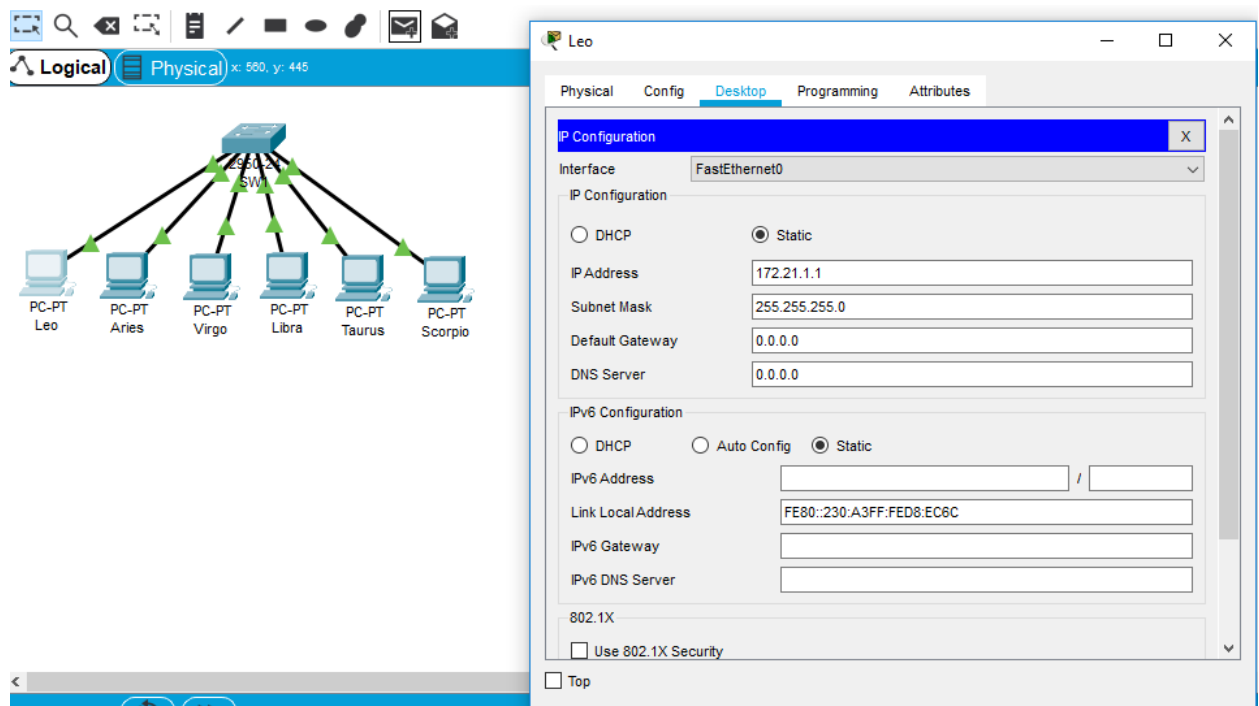
VIRLIANA AR

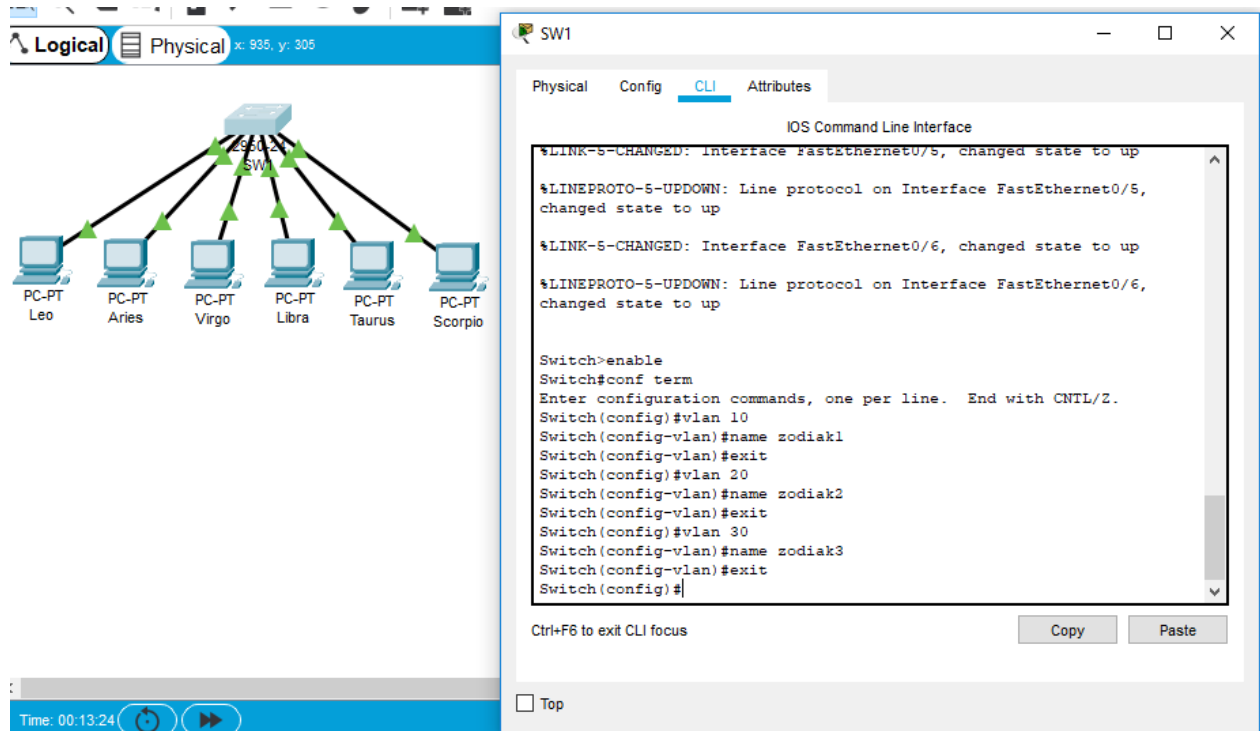
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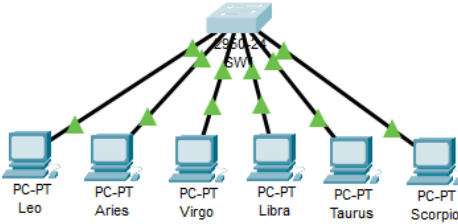
1. Praktikum 1 Topologi 1
 - a. Memberi nama masing-masing perangkat
 - b. mengkonfigurasi nama dan alamat IP





- c. konfigurasi pada switch dengan mode user
- d. Pada mode configuration ,konfigurasi port-port switch kedalam VLAN zodiak1,zodiak2 ,dan zodiak3 dengan anggota sebagai sbb:
- Zodiak 1 = leo dan libra
 - Zodiak 2 = aries dan Taurus
 - Zodiac 3 = virgo dan scorpio

LogicalPhysicalx: 313, y: 321



```
graph TD
    SW[SW] --- Leo[PC-PT Leo]
    SW --- Aries[PC-PT Aries]
    SW --- Virgo[PC-PT Virgo]
    SW --- Libra[PC-PT Libra]
    SW --- Taurus[PC-PT Taurus]
    SW --- Scorpio[PC-PT Scorpio]
```

Time: 00:11:24

SW1

PhysicalConfigCLIAttributes

IOS Command Line Interface

```
Switch(config-vlan)#exit
Switch(config)#vlan 30
Switch(config-vlan)#name zodiak3
Switch(config-vlan)#exit
Switch(config)#interface FastEthernet 0/1
Switch(config-if)#switch mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#interface FastEthernet 0/4
Switch(config-if)#switch mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#interface FastEthernet 0/2
Switch(config-if)#switch mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#interface FastEthernet 0/5
Switch(config-if)#switch mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#interface FastEthernet 0/3
Switch(config-if)#switch mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#interface FastEthernet 0/6
Switch(config-if)#switch mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#exit
Switch(config)#
```

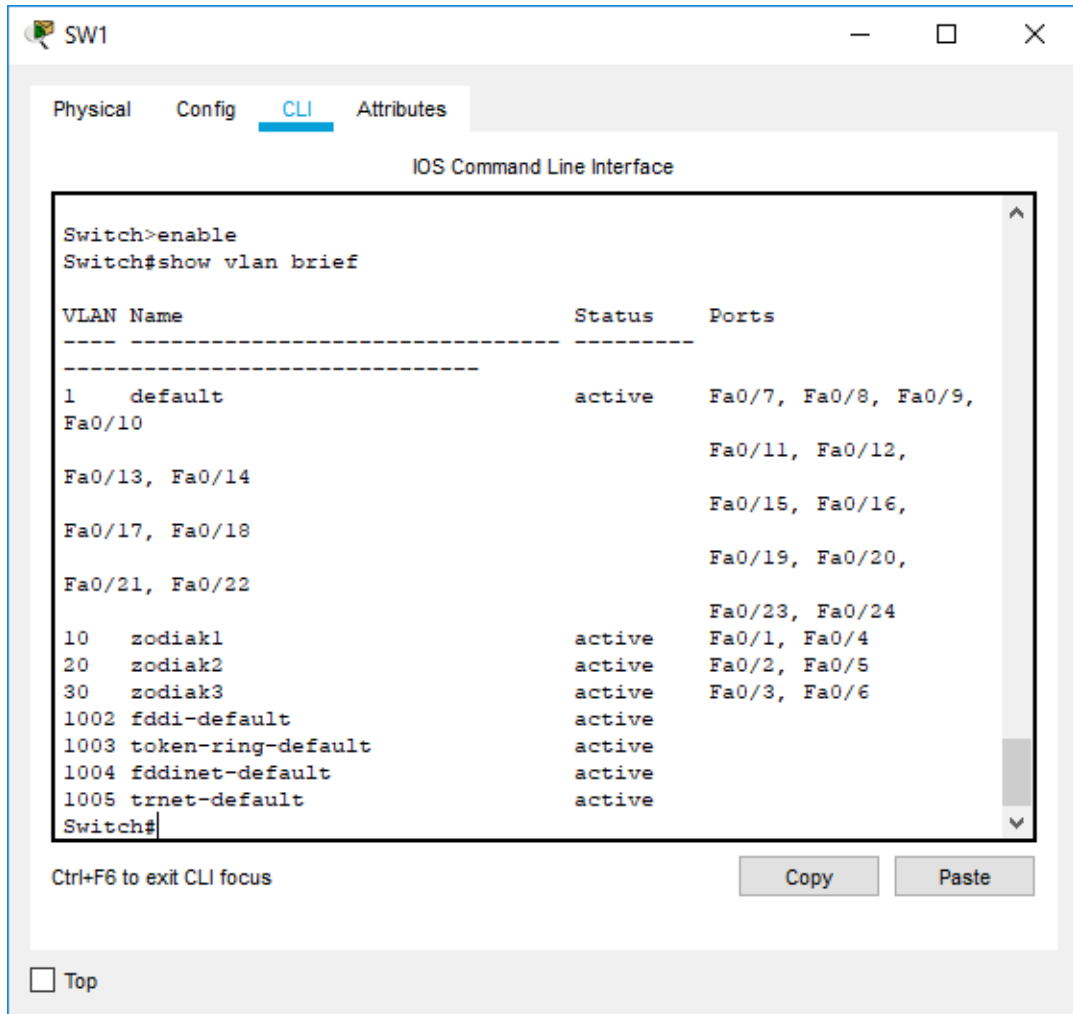
Ctrl+F6 to exit CLI focus

CopyPaste

☐ Top

e. Konfigurasi pada LAN yang telah dibuat

➤ Show vlan brief



The screenshot shows a network switch window titled "SW1" with tabs for Physical, Config, CLI, and Attributes. The CLI tab is active, displaying the "IOS Command Line Interface". The user has entered the command "show vlan brief", and the output is displayed in a table format. The table has three columns: "VLAN Name", "Status", and "Ports". The output shows several VLANs, including the default VLAN 1 and several custom VLANs (10, 20, 30, 1002, 1003, 1004, 1005). The status for all listed VLANs is "active".

VLAN Name	Status	Ports
1 default	active	Fa0/7, 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	

Below the table, there are buttons for "Copy" and "Paste", and a "Top" button at the bottom left.

- Show vlan id 10

SW1

Physical Config **CLI** Attributes

IOS Command Line Interface

```
Fa0/21, Fa0/22
10    zodiak1                active    Fa0/23, Fa0/24
20    zodiak2                active    Fa0/1, Fa0/4
30    zodiak3                active    Fa0/2, Fa0/5
1002  fddi-default           active    Fa0/3, Fa0/6
1003  token-ring-default     active
1004  fddinet-default        active
1005  trnet-default          active
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

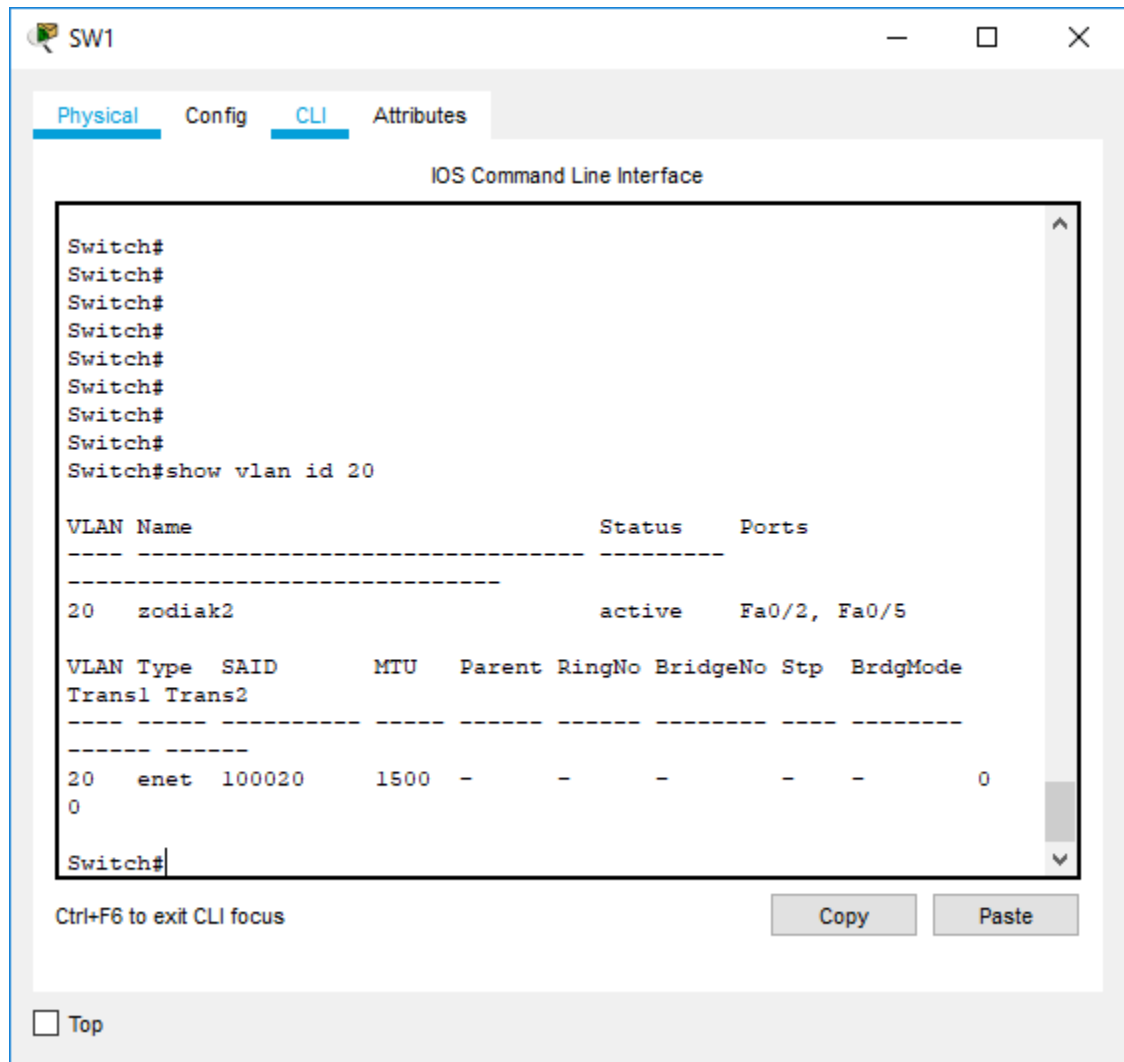
Switch#

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

- f. Show vlan id 20



The screenshot shows a network switch window titled "SW1" with tabs for Physical, Config, CLI, and Attributes. The CLI tab is active, displaying the "IOS Command Line Interface". The command "Switch#show vlan id 20" has been entered, resulting in two tables of information.

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

VLAN	Name	Status	Ports
20	zodiak2	active	Fa0/2, Fa0/5

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

Switch#

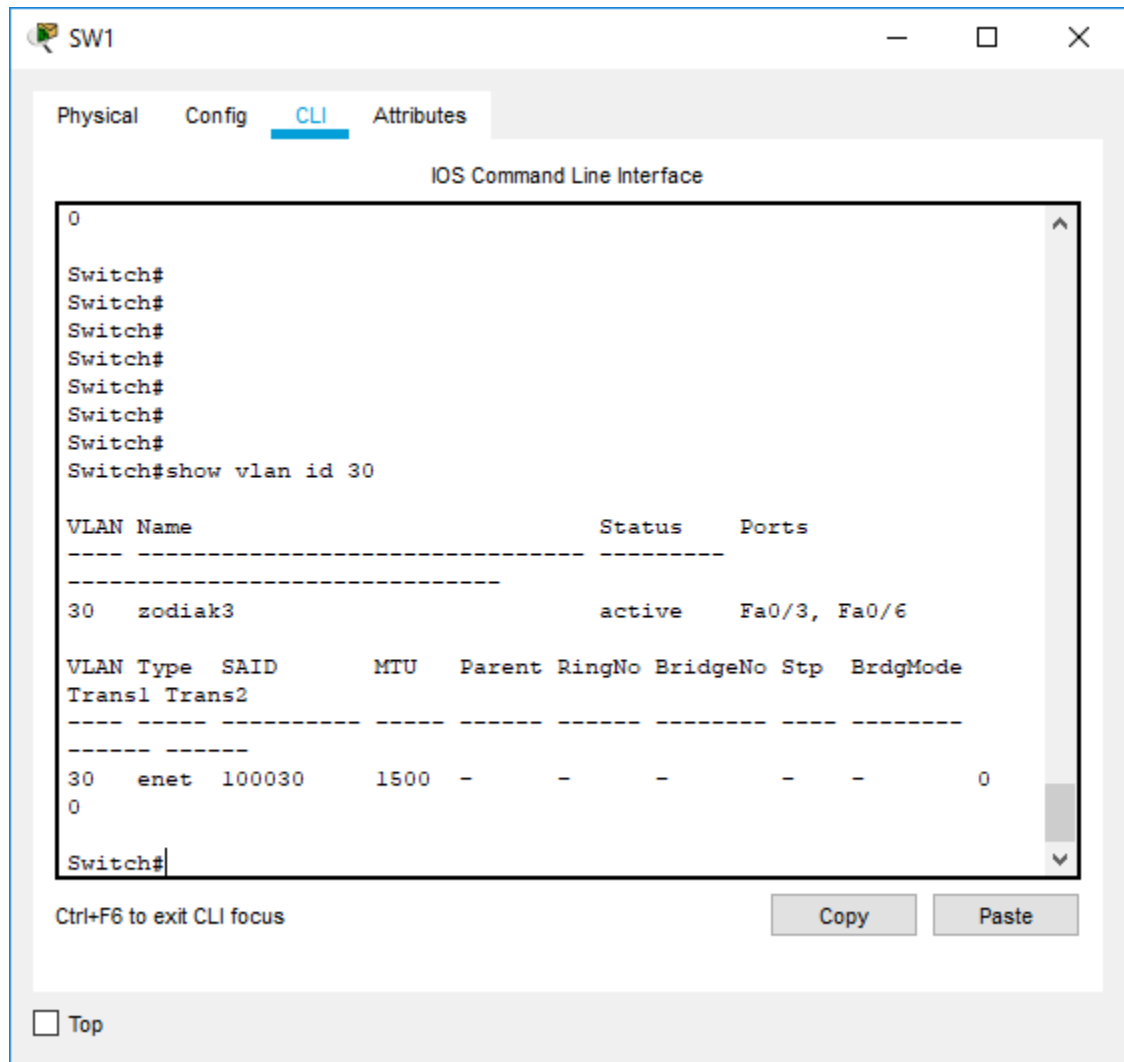
Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

- g. S

h. how vlan id 30



TUGAS 6A

No	Variable	Nilai		
1	Nomor vlan	10	20	30
2	Nama vlan	Zodiak1	Zodiak2	Zodiak3
3	Port	Fa 0/1, fa 0/4	Fa 0/2, fa 0/5	Fa 0/3, fa 0/6
4	status	Active	Active	Active

TUGAS 6B

Penjelasan :

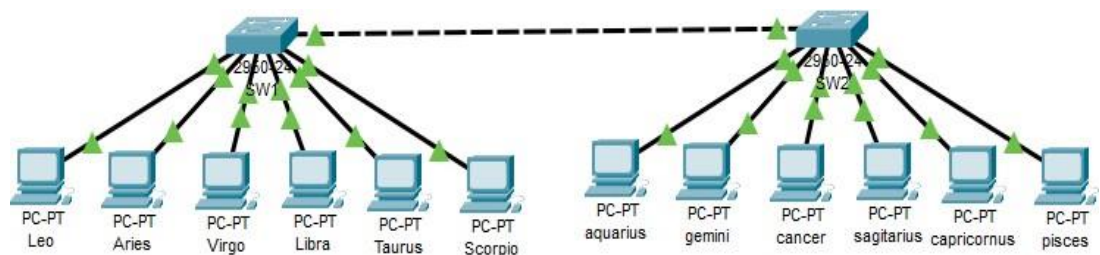
Nomor VLAN 10 dengan nama VLAN zodiak1 memiliki port fa 0/1 dan fa 0/4 status VLAN nya active.

Nomor VLAN 20 dengan nama VLAN zodiak2 memiliki port fa 0/2 dan fa 0/5 status VLAN nya active.

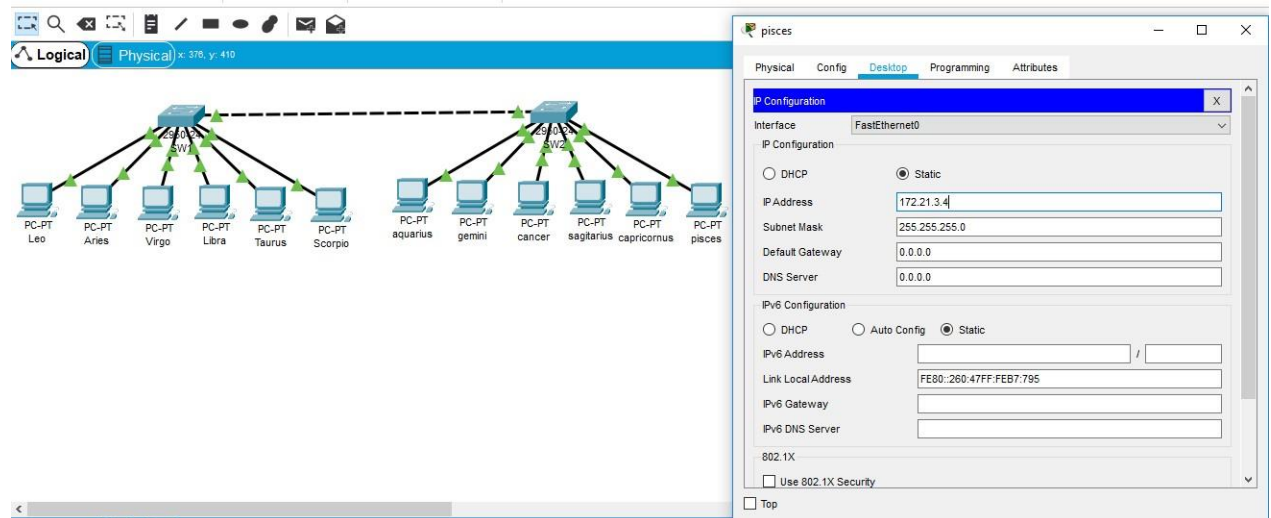
Nomor VLAN 30 dengan nama VLAN zodiak3 memiliki port fa 0/3 dan fa 0/6 status VLAN nya active.

2. KEGIATAN 2 TOPOLOGI 2

a. Memberi nama masing-masing perangkat

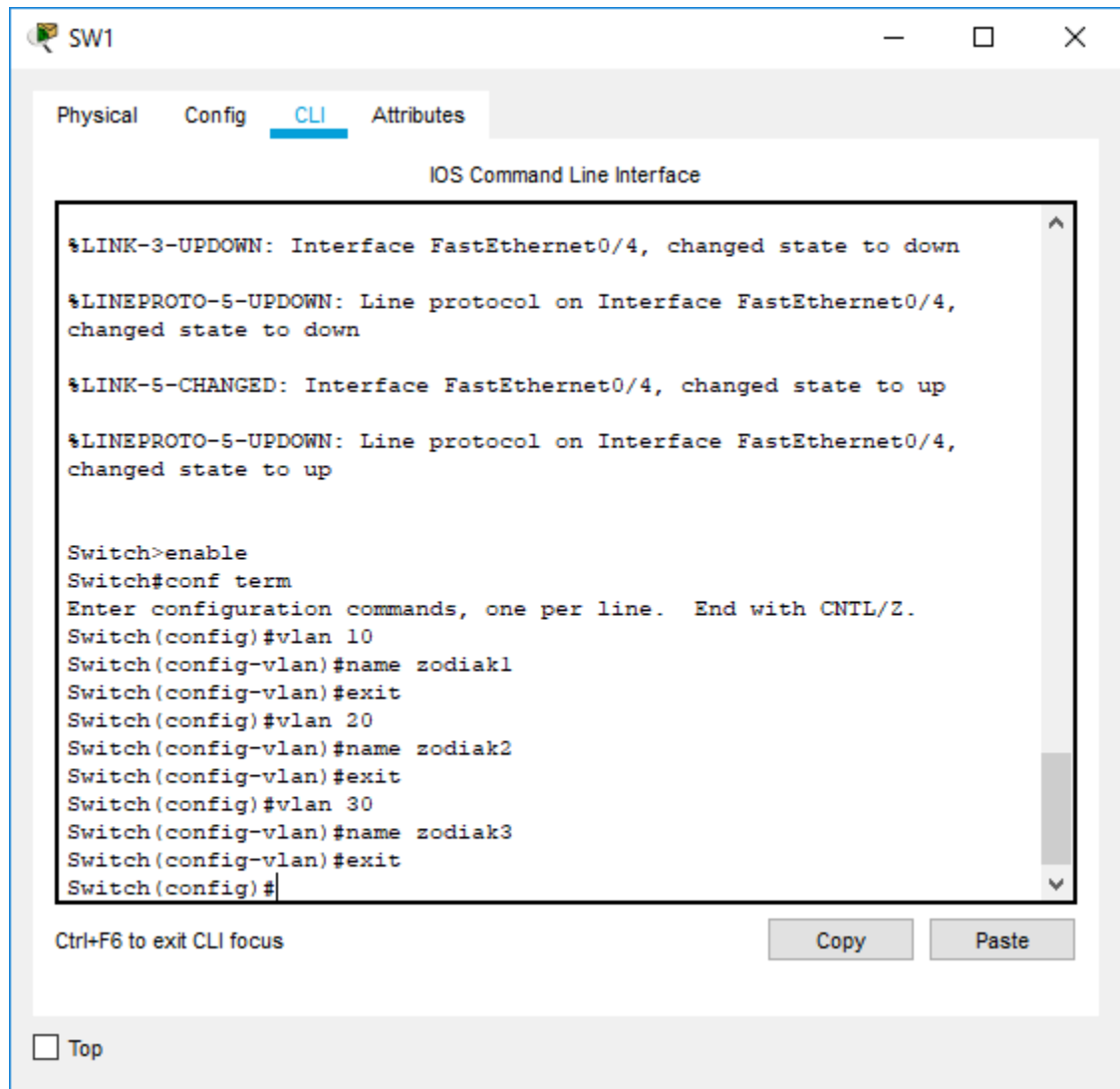


b. Konfigurasi masing-masing PC dengan nama dan alamat IP



c. konf

- d. igurasi pada switch 1 dengan mode user



IOS Command Line Interface

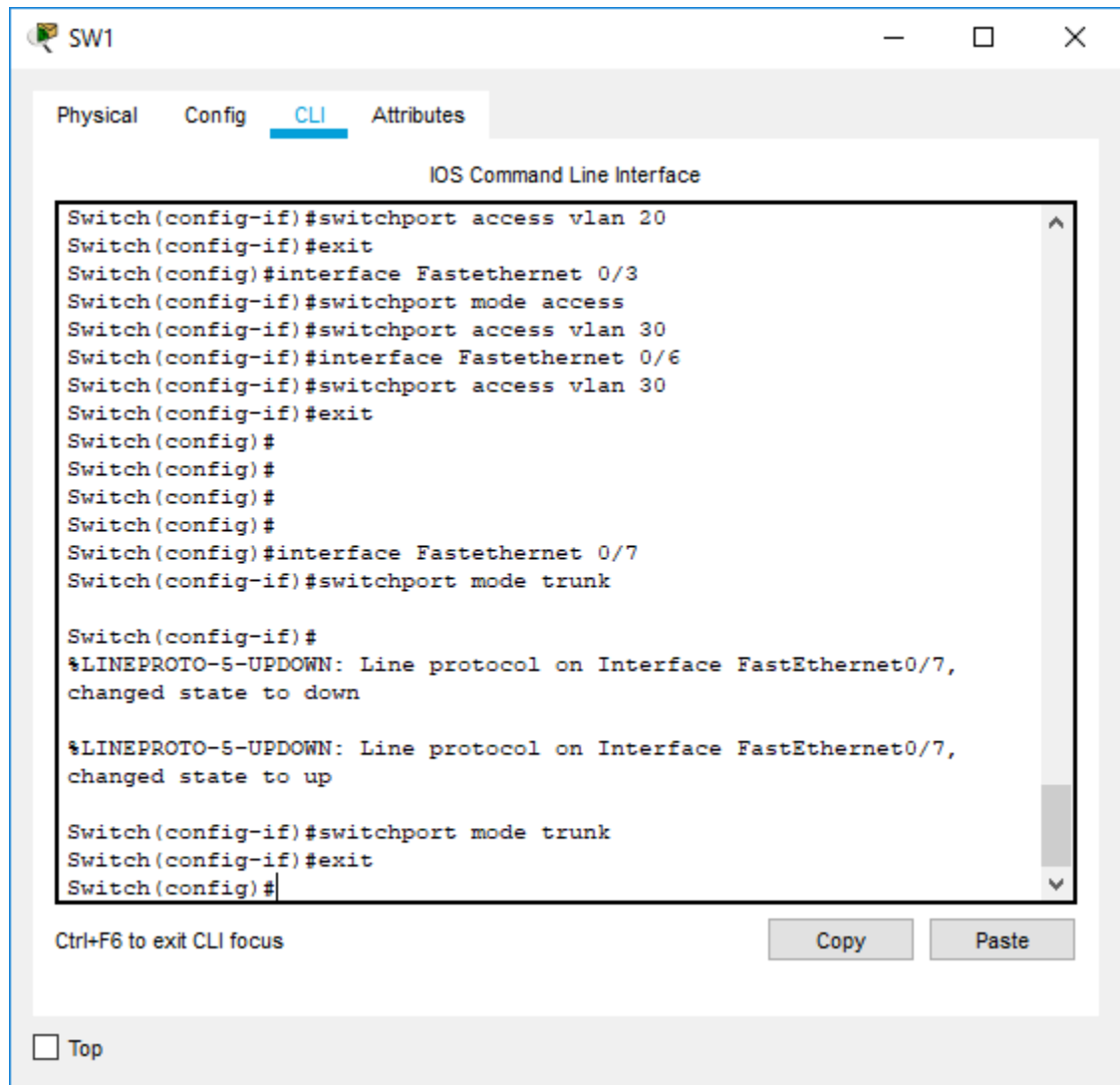
```
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#interface FastEthernet 0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#interface FastEthernet 0/4
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface FastEthernet 0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#interface FastEthernet 0/5
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
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 access vlan 30
Switch(config-if)#exit
Switch(config)#
```

Ctrl+F6 to exit CLI focus

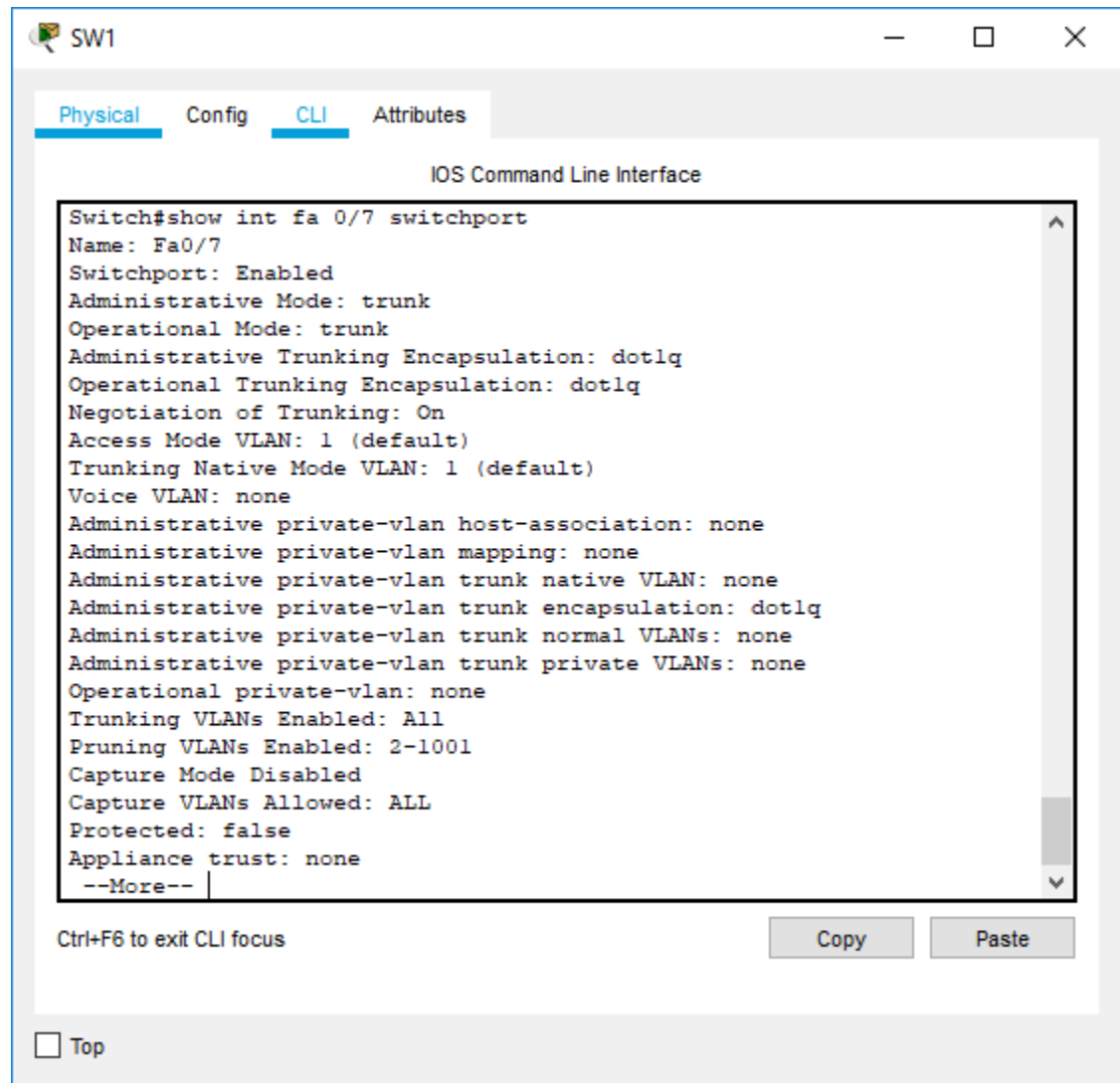
Copy

Paste

- e. Melakukan konfigurasi trunk pada port 0/7



f. Hasil



- i. Show int trunk

The screenshot shows a network switch configuration window for SW1. The 'CLI' tab is active, displaying the IOS Command Line Interface. The interface shows various private-vlan trunk settings, followed by the output of the 'show int trunk' command for Fa0/7, and the output of the 'show vlan' command.

Physical Config **CLI** Attributes

IOS Command Line Interface

```
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

Switch#show int trunk
Port      Mode      Encapsulation  Status      Native vlan
Fa0/7     on        802.1q         trunking    1

Port      Vlans allowed on trunk
Fa0/7     1-1005

Port      Vlans allowed and active in management domain
Fa0/7     1,10,20,30

Port      Vlans in spanning tree forwarding state and not pruned
Fa0/7     1,10,20,30

Switch#show vlan
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

j. Show vlan

SW1

Physical Config CLI Attributes

IOS Command Line Interface

```
Port          Vlans in spanning tree forwarding state and not pruned
Fa0/7         1,10,20,30
```

```
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
1	enet	100001	1500	-	-	-	-	-	0	0
10	enet	100010	1500	-	-	-	-	-	0	0
20	enet	100020	1500	-	-	-	-	-	0	0
30	enet	100030	1500	-	-	-	-	-	0	0
1002	fddi	101002	1500	-	-	-	-	-	0	0
1003	tr	101003	1500	-	-	-	-	-	0	0
1004	fdnet	101004	1500	-	-	-	ieee	-	0	0
1005	trnet	101005	1500	-	-	-	ibm	-	0	0

VLAN	Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode	Trans1	Trans2
------	------	------	-----	--------	--------	----------	-----	----------	--------	--------

```
Remote SPAN VLANs
```

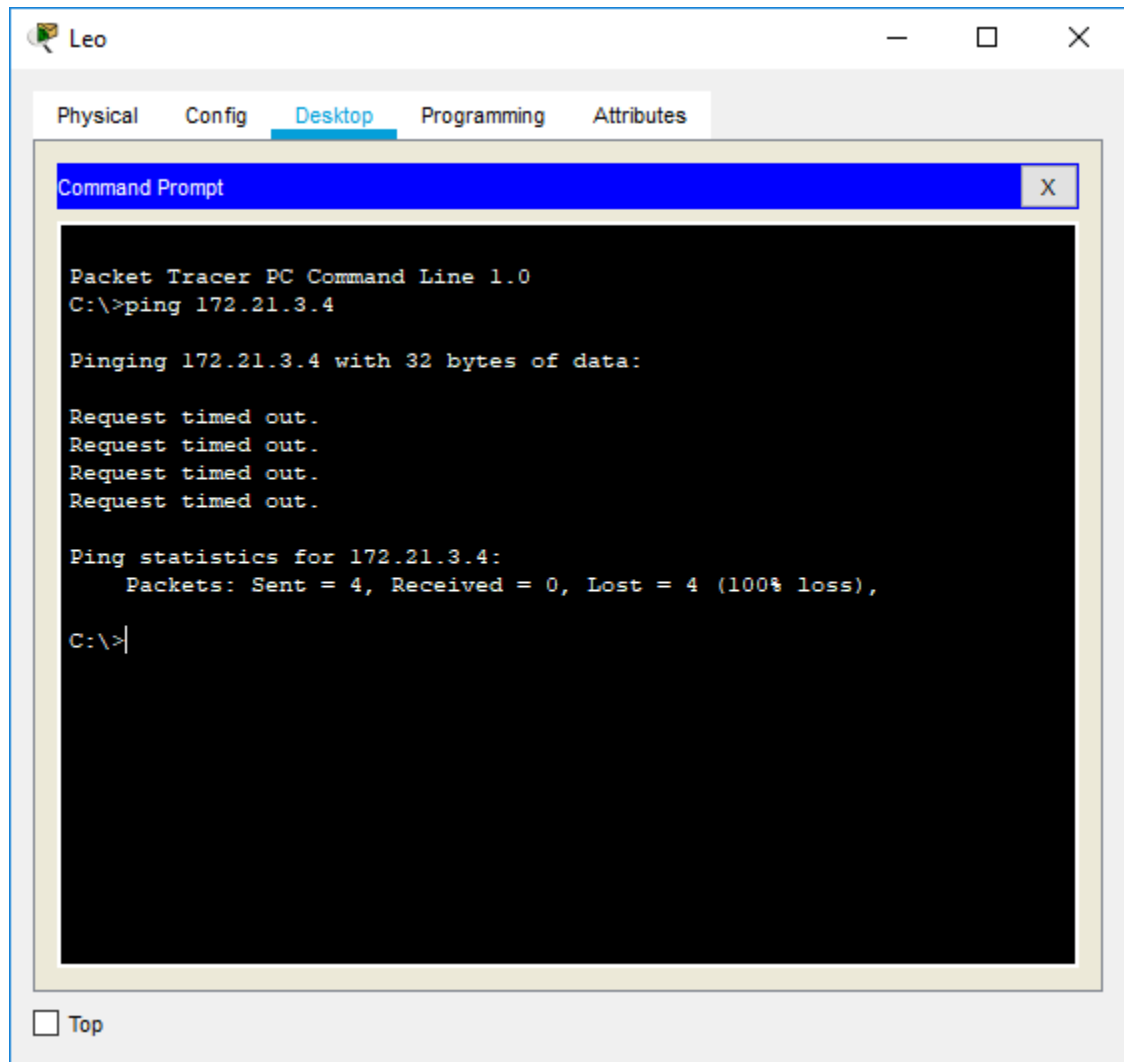
```
--More--
```

Ctrl+F6 to exit CLI focus

TUGAS 7A:

Untuk port 0/7 pada switch 0 telah disetting untuk trunk dan berhasil sehingga port 0/7 tidak tersedia untuk vlan.

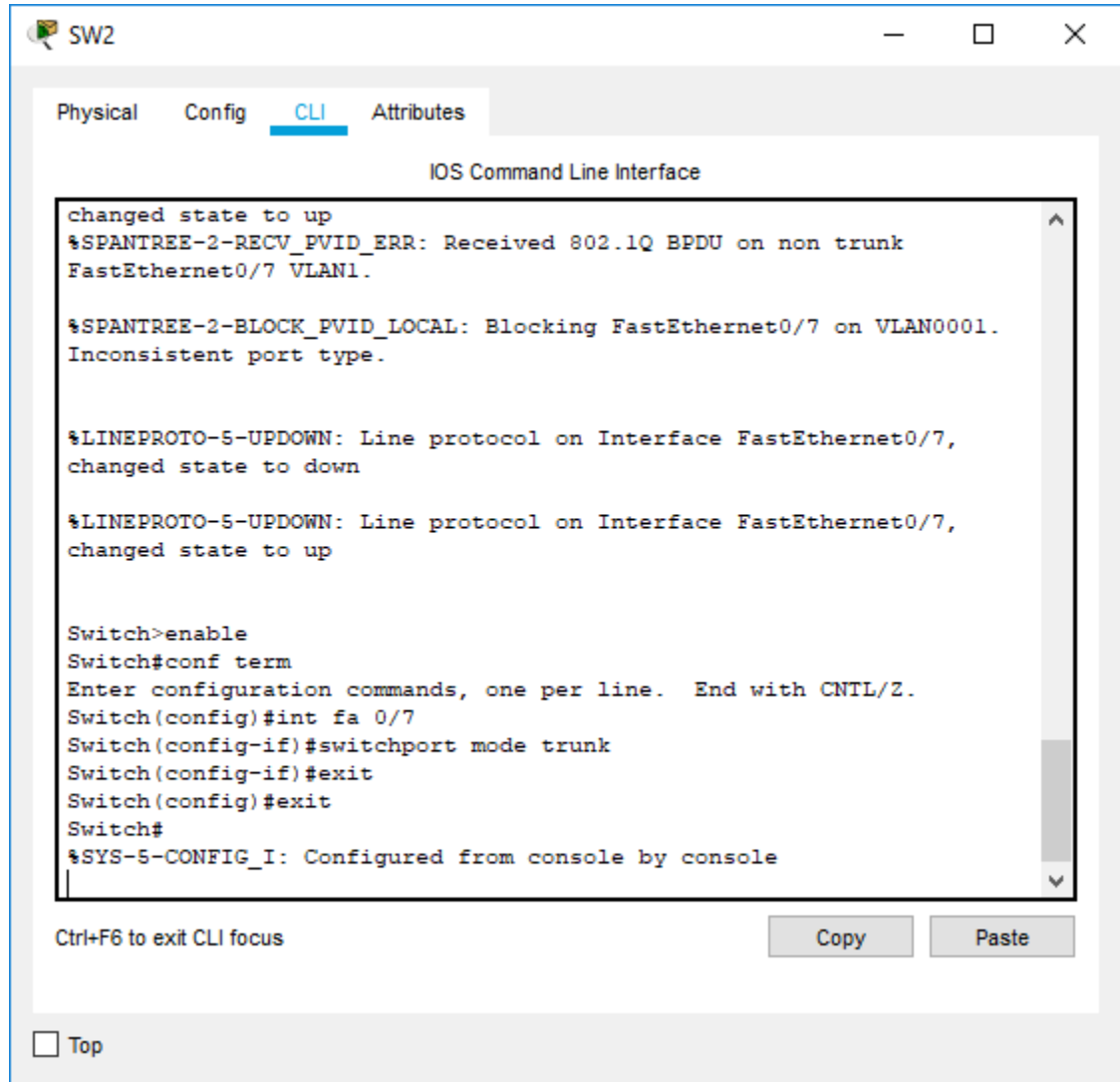
g. Lakukan ping dari pc leo ke pc pisces



Tugas 8A:

Hasilnya adalah RTO karena berada pada jaringan yang berbeda dan pada switch 1 belum disetting trunk.

- h. Melakukan konfigurasi trunk pada switch 2



SW2

Physical Config **CLI** Attributes

IOS Command Line Interface

```
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#int fa 0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switch access vlan 10
Switch(config-if)#int fa 0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switch access vlan 10
Switch(config-if)#exit
Switch(config)#int fa 0/3
Switch(config-if)#switchport mode access
Switch(config-if)#switch access vlan 20
Switch(config-if)#int fa 0/4
Switch(config-if)#switchport mode access
Switch(config-if)#switch access vlan 20
Switch(config-if)#exit
Switch(config)#int fa 0/5
Switch(config-if)#switchport mode access
Switch(config-if)#switch access vlan 30
Switch(config-if)#int fa 0/6
Switch(config-if)#switchport mode access
Switch(config-if)#switch access vlan 30
Switch(config-if)#exit
Switch(config)#
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

Logical Physical x 340, y: 1

SW1 SW2

PC-PT Leo PC-PT Aries PC-PT Virgo PC-PT Libra PC-PT Taurus PC-PT Scorpio

PC-PT aquarius PC-PT gemini PC-PT cancer PC-PT ssgitarus PC-PT capricornus PC-PT pisces

SW2

Physical Config **CLI** Attributes

IOS Command Line Interface

```
Switch#show int fa 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
Trunking VLANs Enabled: 2-1001
Capture Mode Disabled
Capture VLANs Allowed: ALL
Protected: false
Appliance trust: none
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

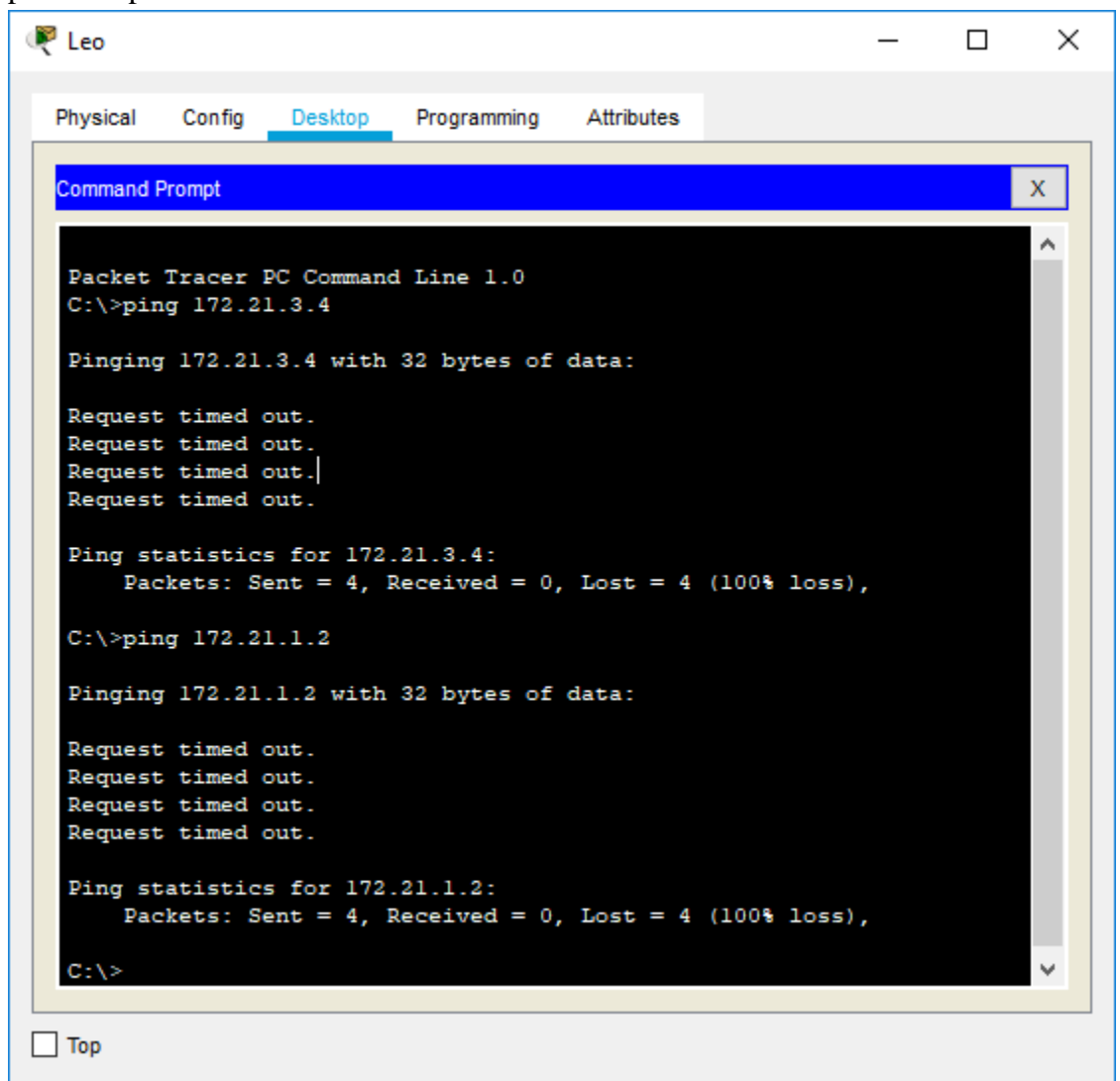
TUGAS 10A

Jelaskan secara singkat hasil yang anda peroleh dari langkah 10.

Jawab:

Hasil yang diperoleh berupa informasi mengenai konfigurasi VLAN Trunking pada Switch 2.

- i. melakukan ping dari
 - 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

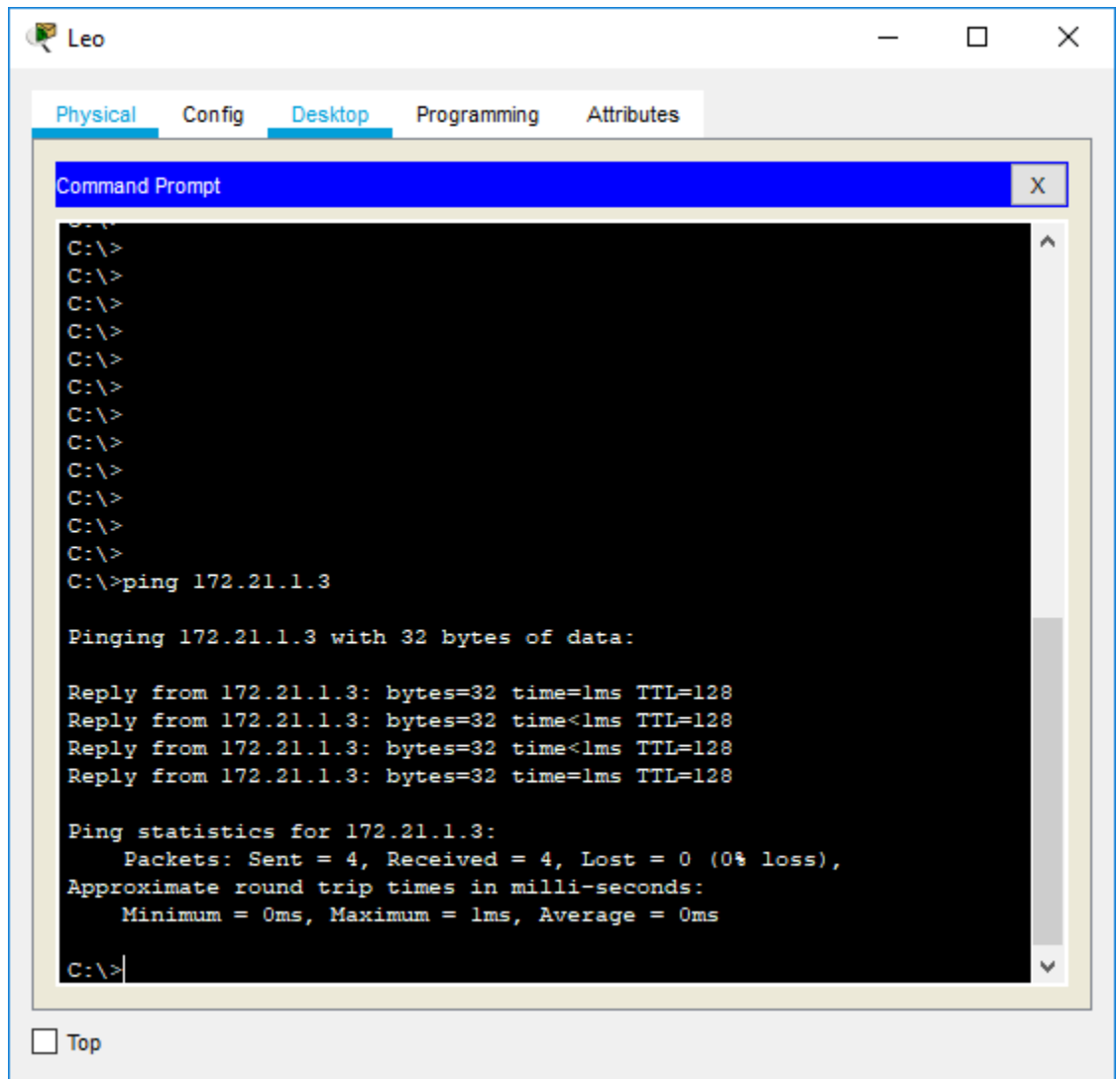
Pinging 172.21.1.2 with 32 bytes of data:

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

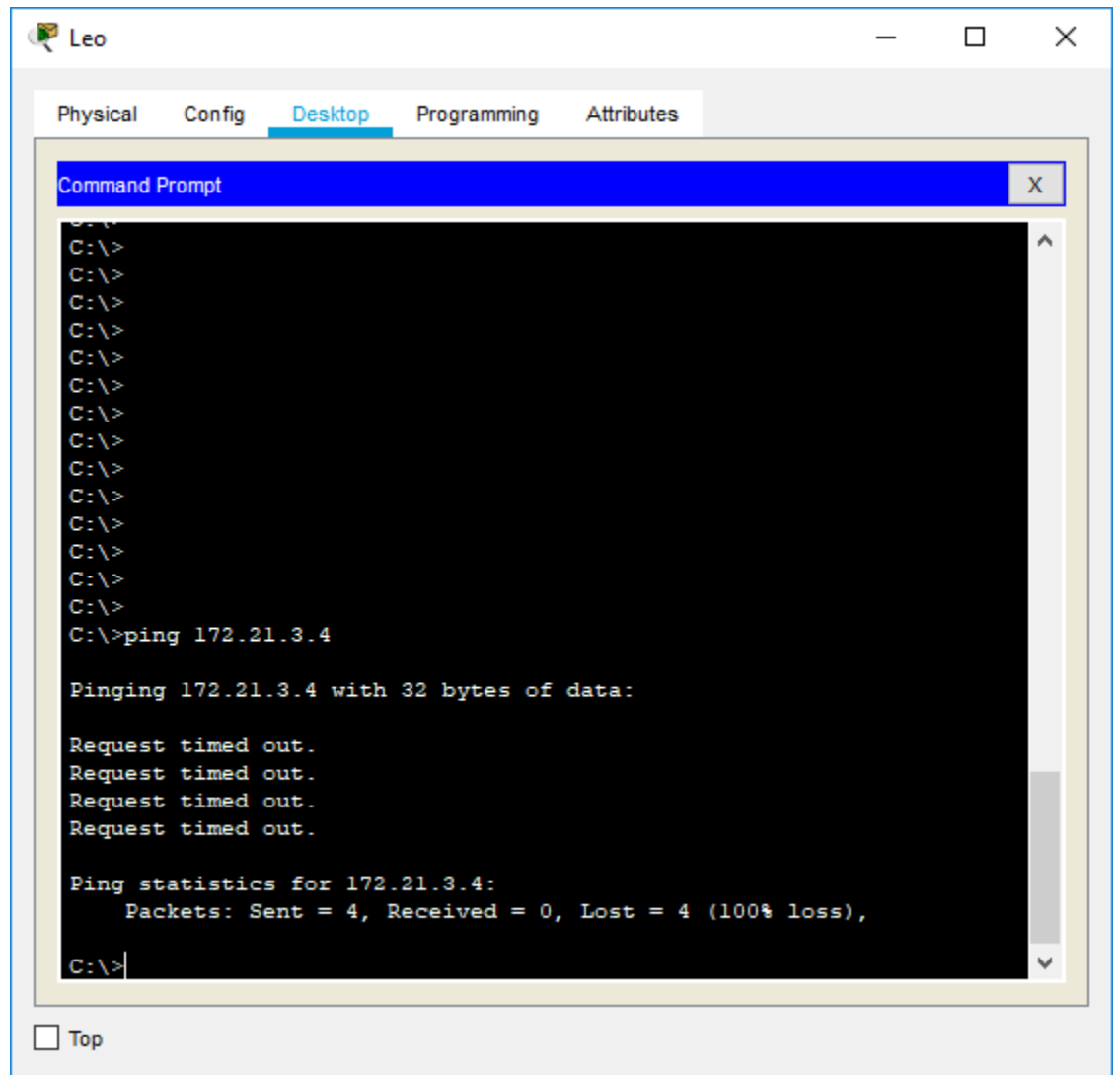
Ping statistics for 172.21.1.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```

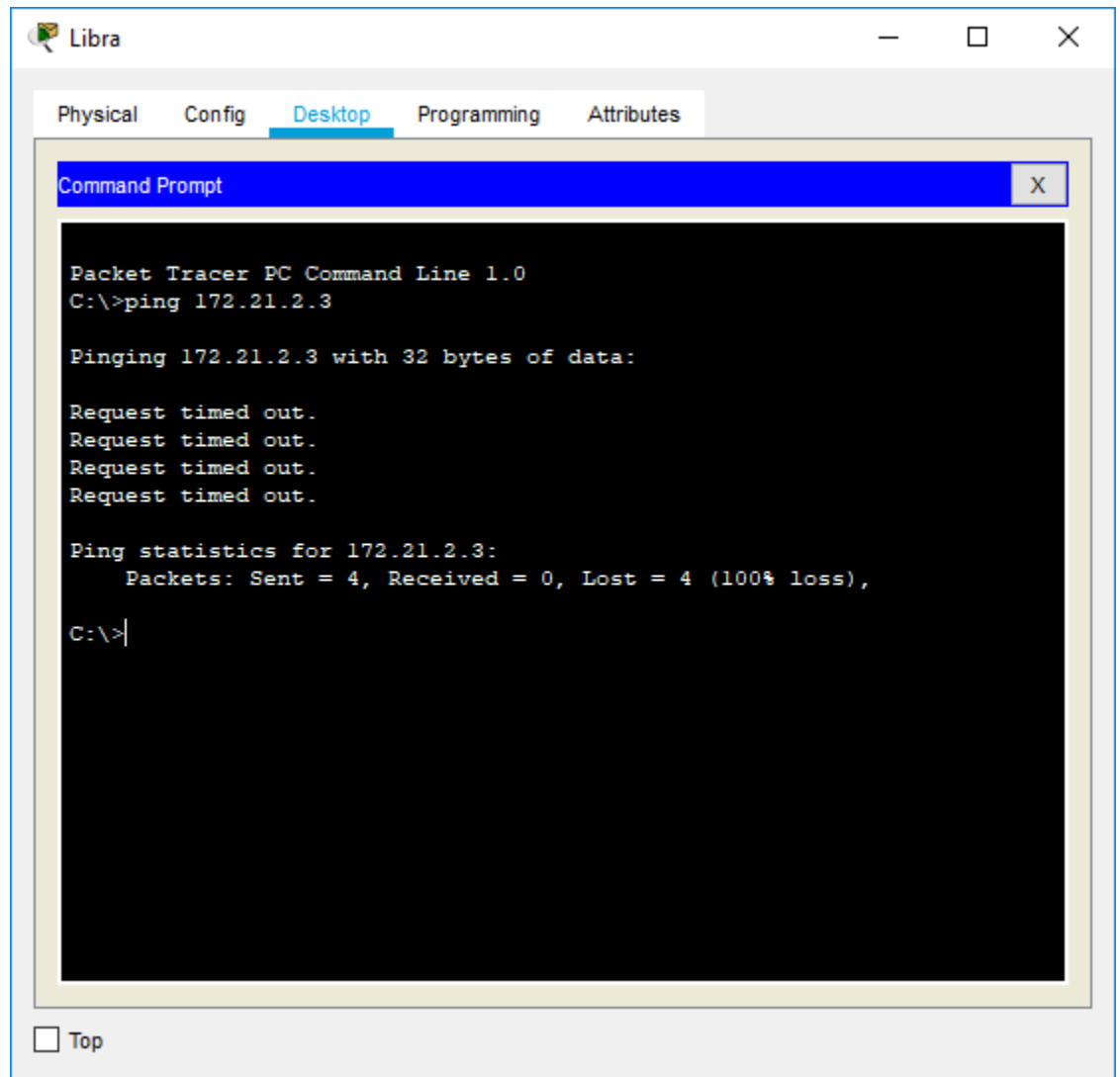
- pc leo ke pc aquarius



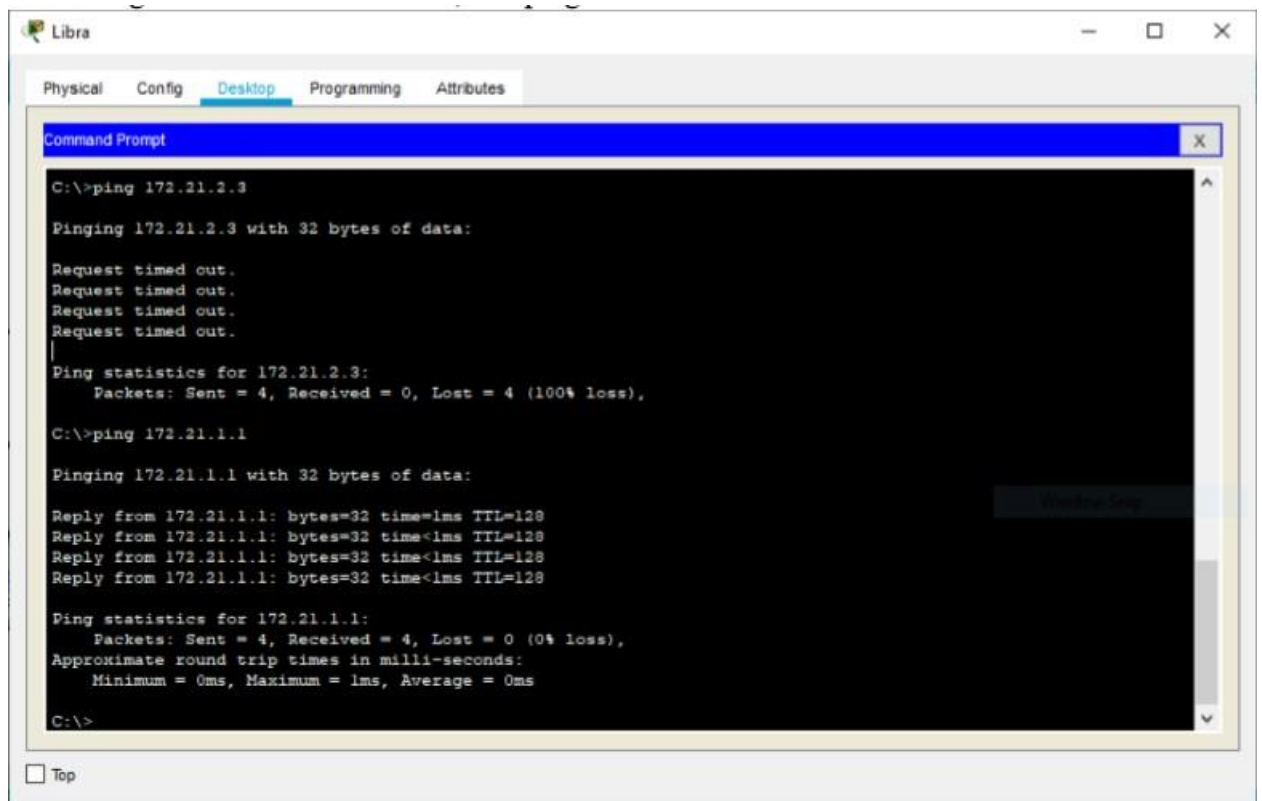
- Pc leo ke pc pisces



- Pc libra ke pc cancer



➤ Pc libra ke pc leo



The screenshot shows a Packet Tracer window titled "Libra" with tabs for Physical, Config, Desktop, Programming, and Attributes. The Desktop tab is active, displaying a Command Prompt window. The Command Prompt shows the results of two ping commands. The first command is `C:\>ping 172.21.2.3`, which results in four "Request timed out." messages and a summary showing 100% loss. The second command is `C:\>ping 172.21.1.1`, which results in four successful replies with a time of 1ms and a summary showing 0% loss.

```
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:

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:\>
```

TUGAS 12A:

Dari hasil yang diperoleh bahwa akan mendapatkan hasil reply apabila pc berada pada jaringan dan vlan yang sama. Sedangkan apabila hanya sama dari salah satu vlan atau jaringan maka hasilnya juga akan RTO.