

NAMA : ARLIN WIDYA RAHAYU

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KELAS : A

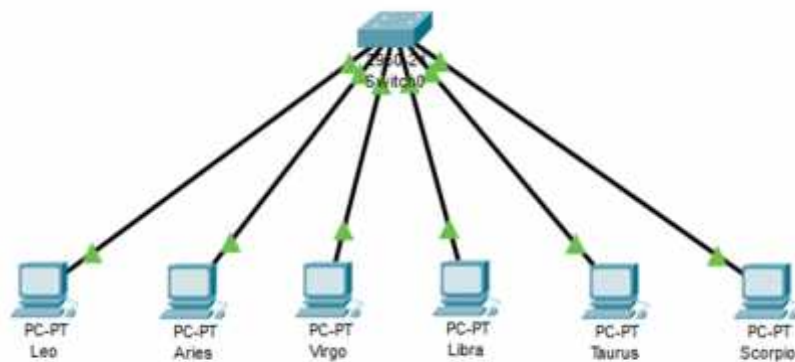
MODUL 4

VIRTUAL LAN DAN TRUNKING

C. Kegiatan Praktikum

Kegiatan 1. Topologi 1

Pembuatan Topologi



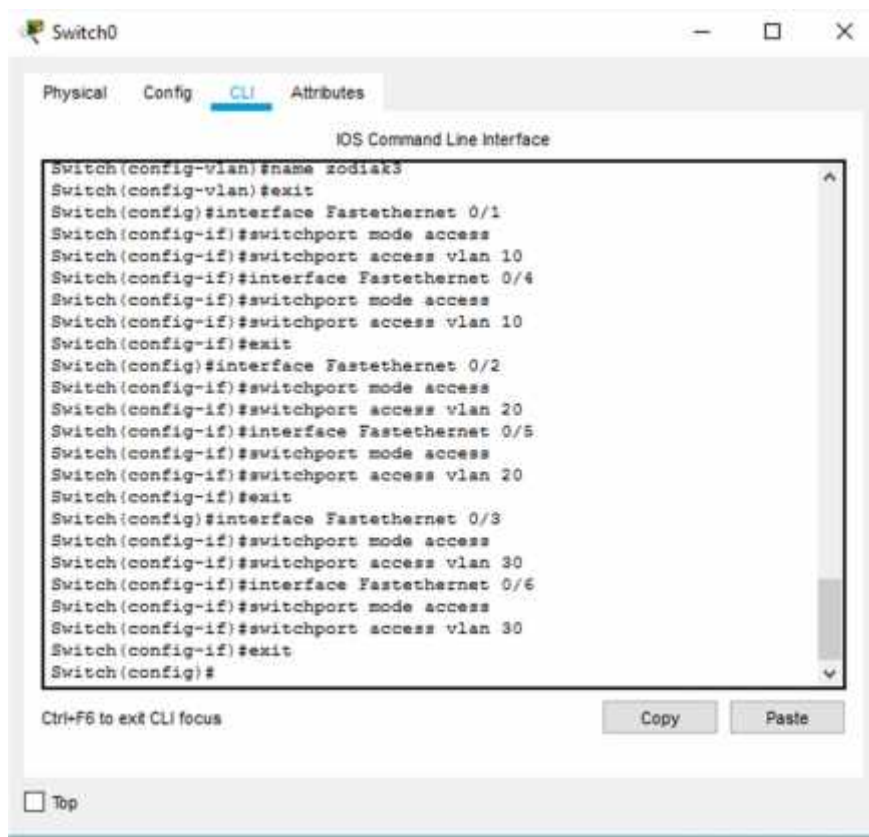
Konfigurasi VLAN

```
Switch0
Physical Config CLI Attributes
IOS Command Line Interface

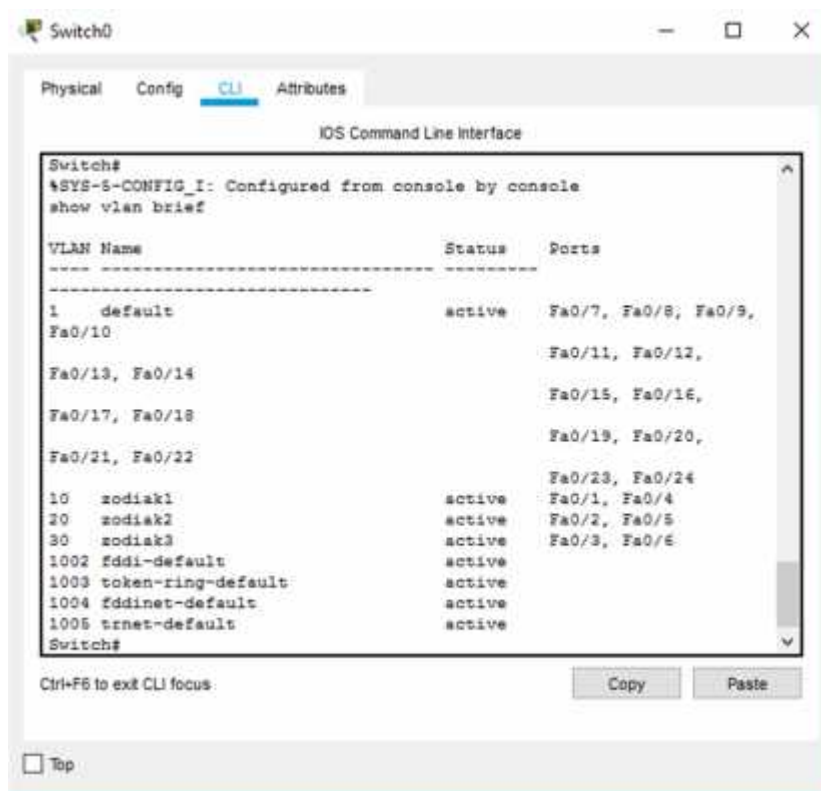
%LINK-5-CHANGED: Interface FastEthernet0/5, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/5,
changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/6, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/6,
changed state to up

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)#
```

Konfigurasi port-port ke VLAN



Melihat konfigurasi VLAN



Show VLAN id 10, show VLAN id 20, show VLAN id 30

Switch0

Physical Config **CLI** Attributes

IOS Command Line Interface

```
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#show vlan id 20
```

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

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

```
Switch#
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

Switch0

Physical

Config

CLI

Attributes

IOS Command Line Interface

Switch#show vlan id 20

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

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

Switch#show vlan id 30

VLAN Name	Status	Ports
30 zodiak3	active	Fa0/3, 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

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Tugas 6A

Capture masing-masing tampilan informasi vlan dan isi tabel berikut.

Jawab:

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

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 6 A.

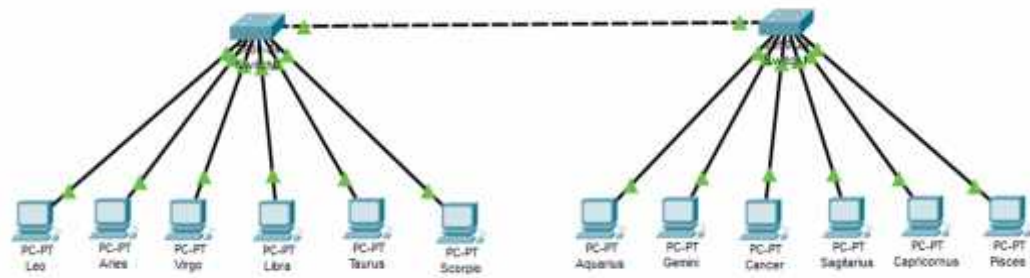
Jawab:

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

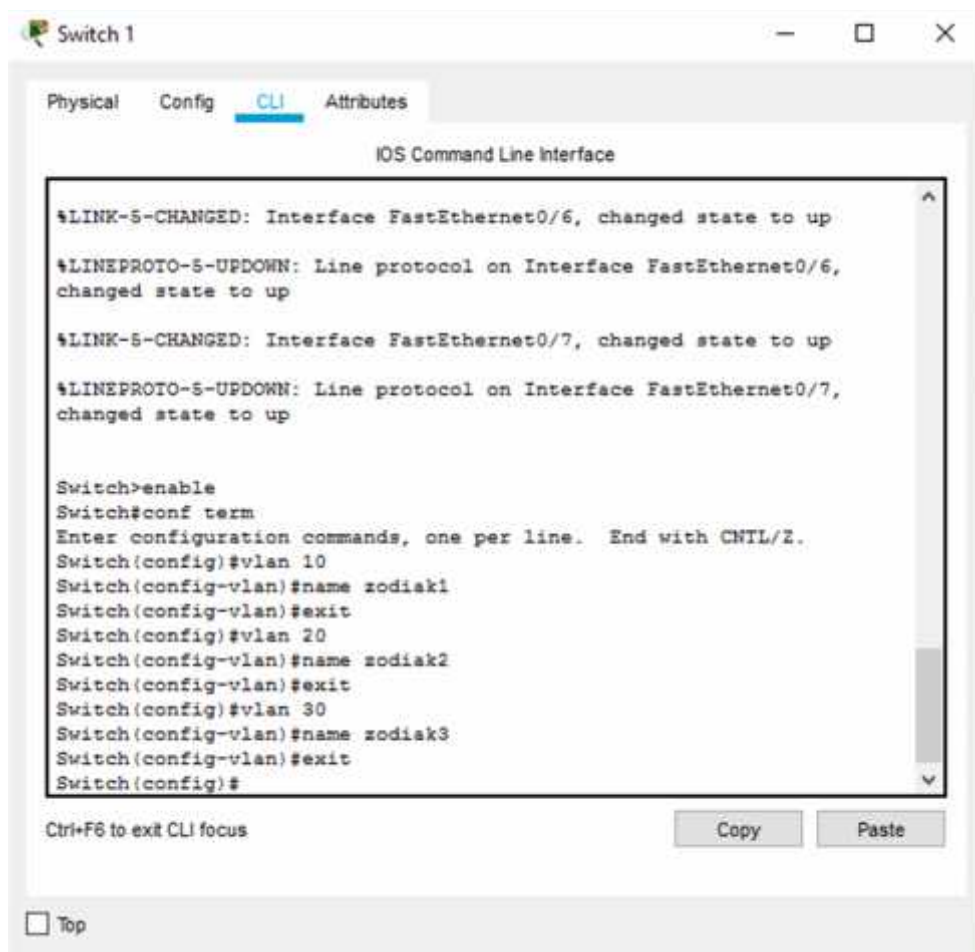
Nomor VLAN 20 dengan nama VLAN zodiak2 memiliki port fa 0/2 dan fa 0/5 status VLAN nya active.

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

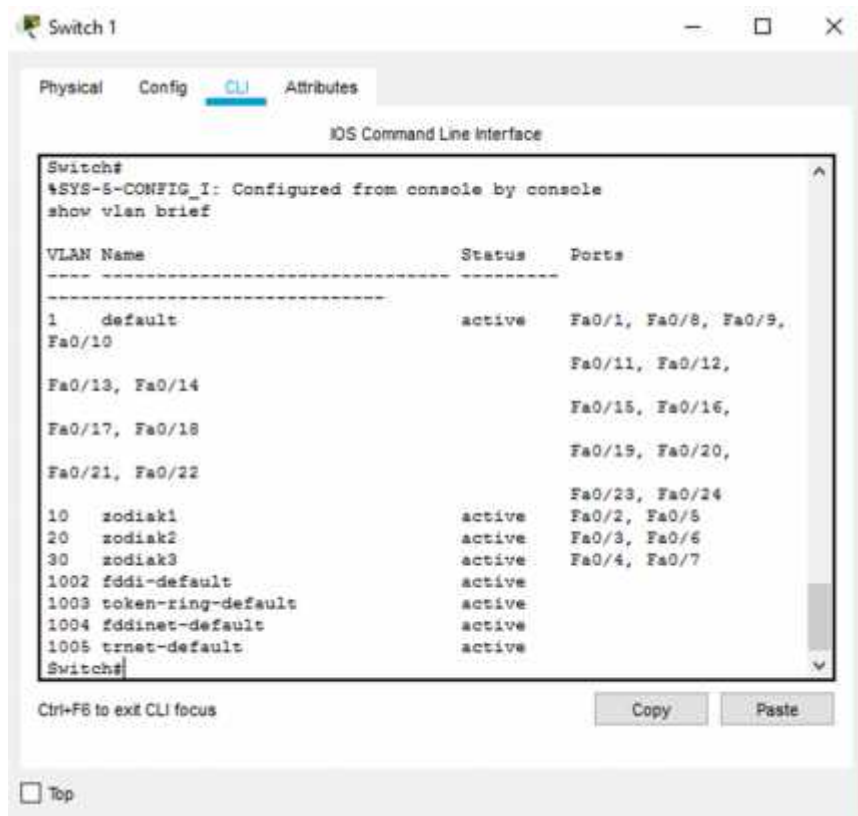
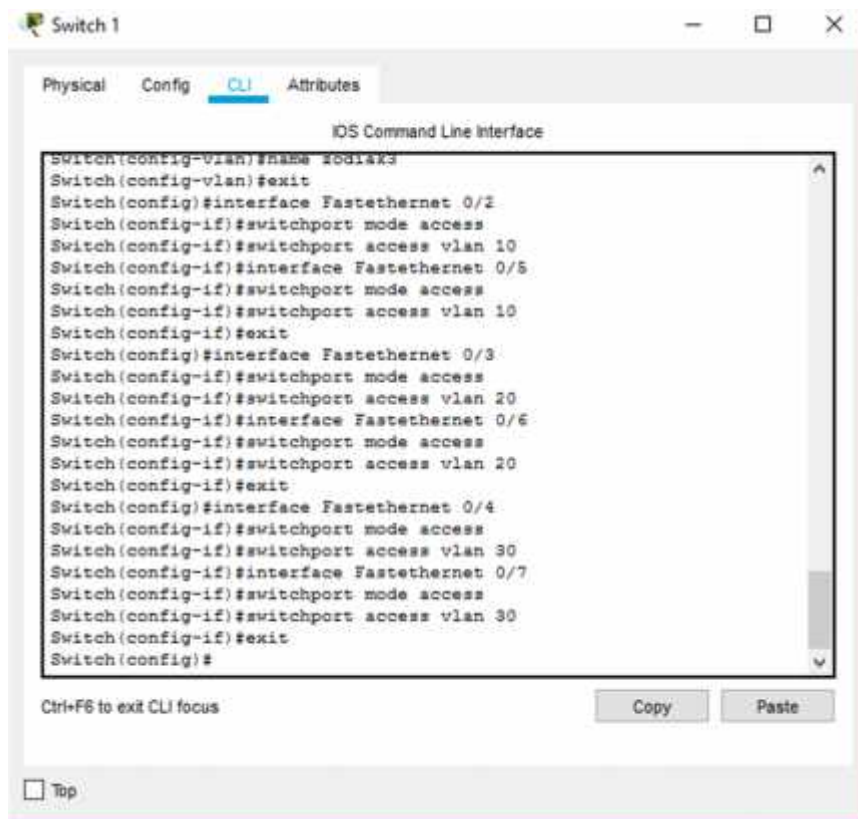
Kegiatan 2. Topologi 2



Konfigurasi VLAN



Konfigurasi port-port VLAN



Switch 1

Physical Config **CLI** Attributes

IOS Command Line Interface

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

VLAN Name	Status	Ports
10 zodiak1	active	Fa0/2, Fa0/5

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


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

VLAN Name	Status	Ports
20 zodiak2	active	Fa0/3, Fa0/6

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

Ctrl+F6 to exit CLI focus

Copy Paste

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Switch 1

Physical Config **CLI** Attributes

IOS Command Line Interface

VLAN Name	Status	Ports
20 zodiak2	active	Fa0/3, Fa0/6

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


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

VLAN Name	Status	Ports
30 zodiak3	active	Fa0/4, Fa0/7

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

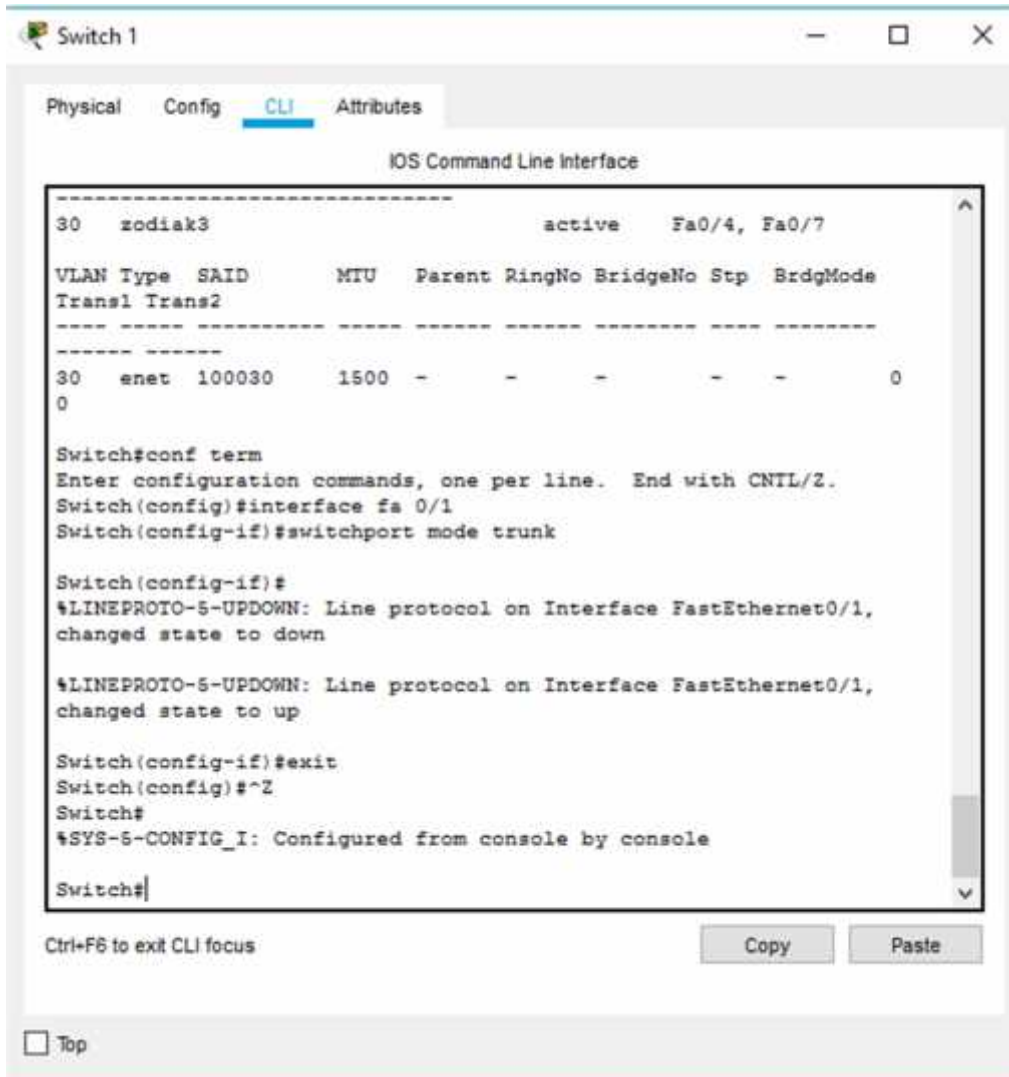

```
Switch#
```

Ctrl+F6 to exit CLI focus

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Langkah 6. Konfigurasi VLAN Trunking pada Switch 1



Switch 1

Physical Config **CLI** Attributes

IOS Command Line Interface

```
30 zodiak3 active Fa0/4, Fa0/7
```

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

```
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#interface fa 0/1
Switch(config-if)#switchport mode trunk

Switch(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1,
changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1,
changed state to up

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

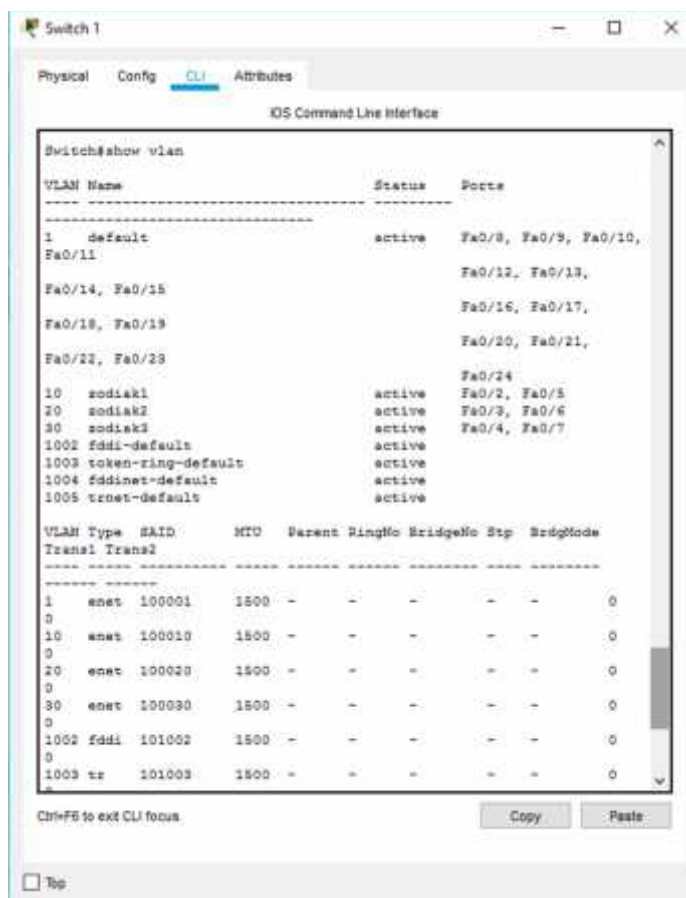
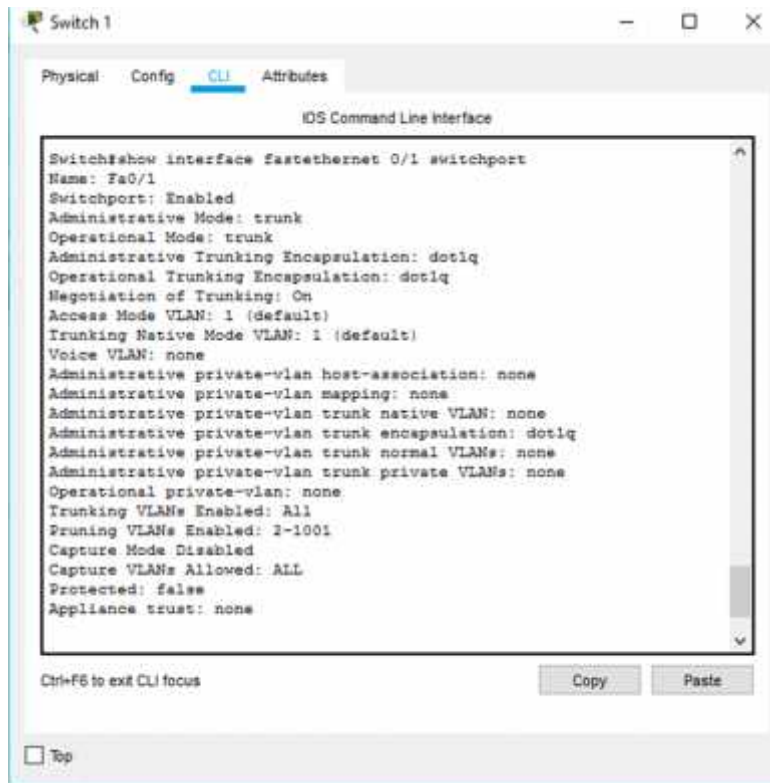
Switch#
```

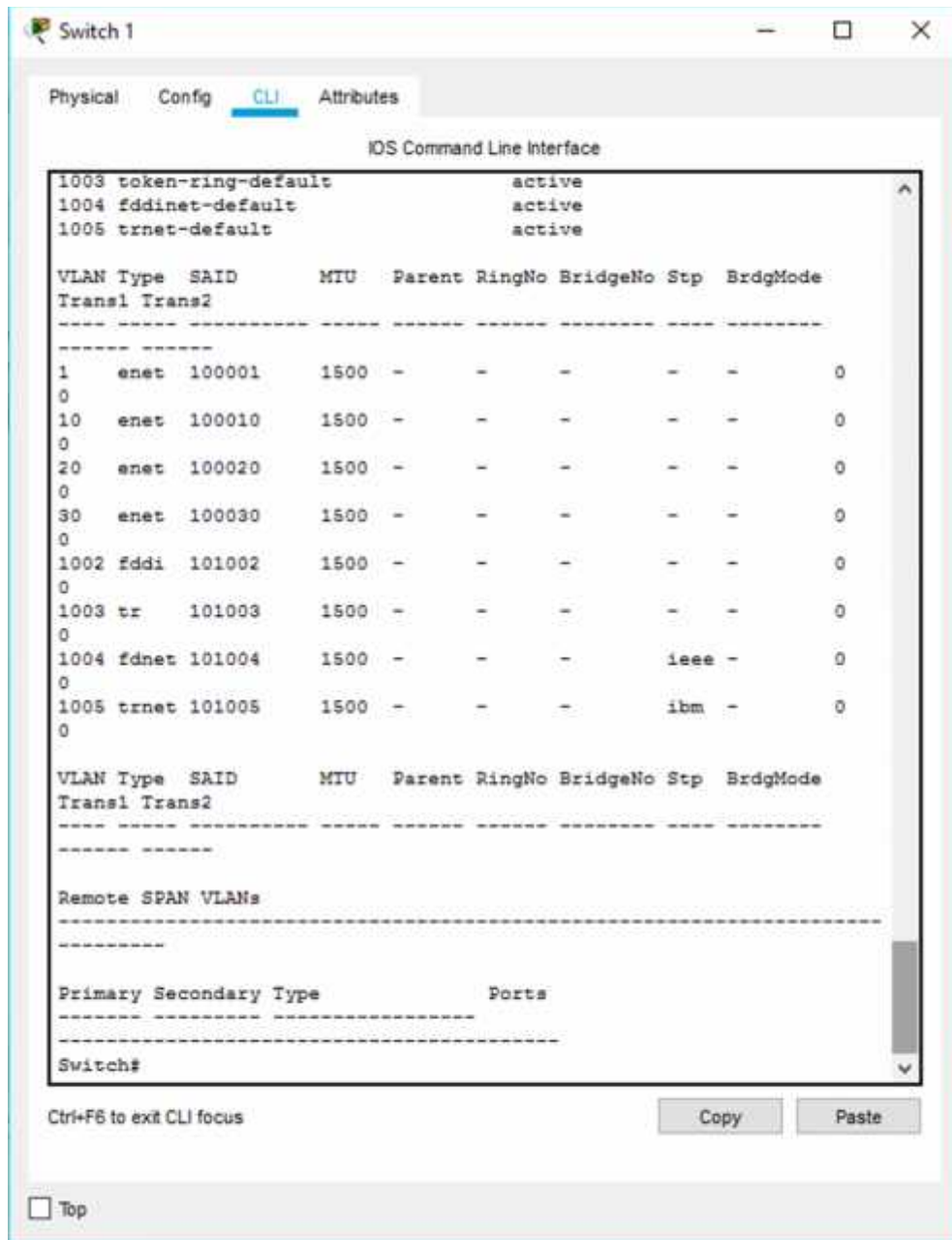
Ctrl+F6 to exit CLI focus

Copy Paste

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Langkah 7. Melihat konfigurasi Trunking





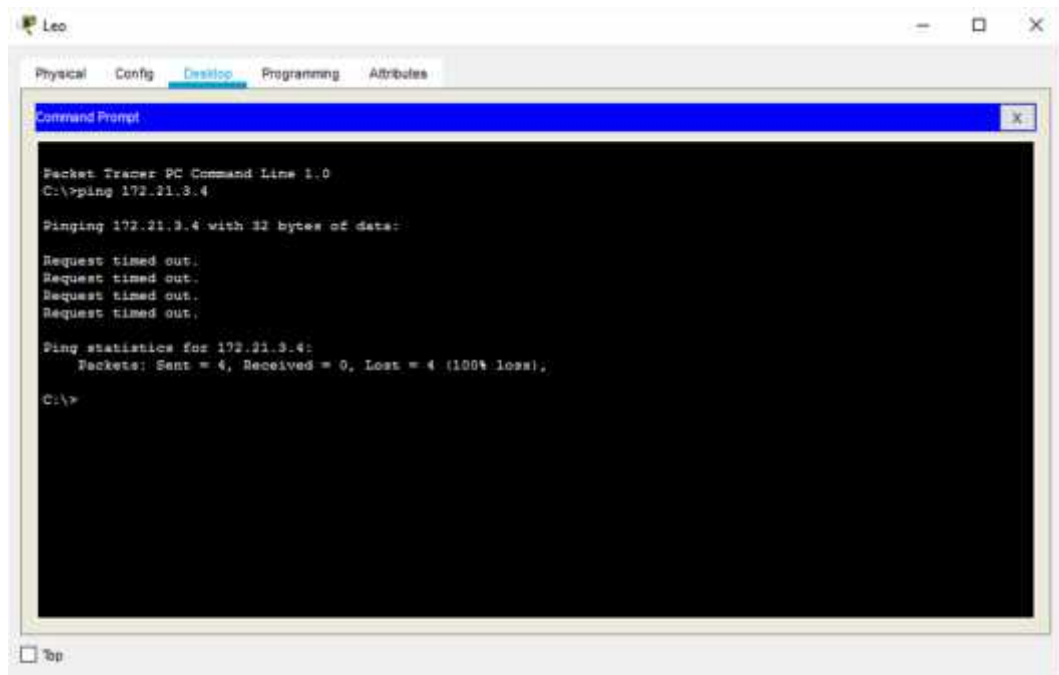
Tugas 7A

Jelaskan secara singkat hasil yang anda peroleh dari langkah 7

Jawab:

Hasil yang diperoleh dari langkah 7 berupa informasi mengenai konfigurasi trunking pada Switch 1.

Langkah 8. Ping PC Leo ke PC Pisces



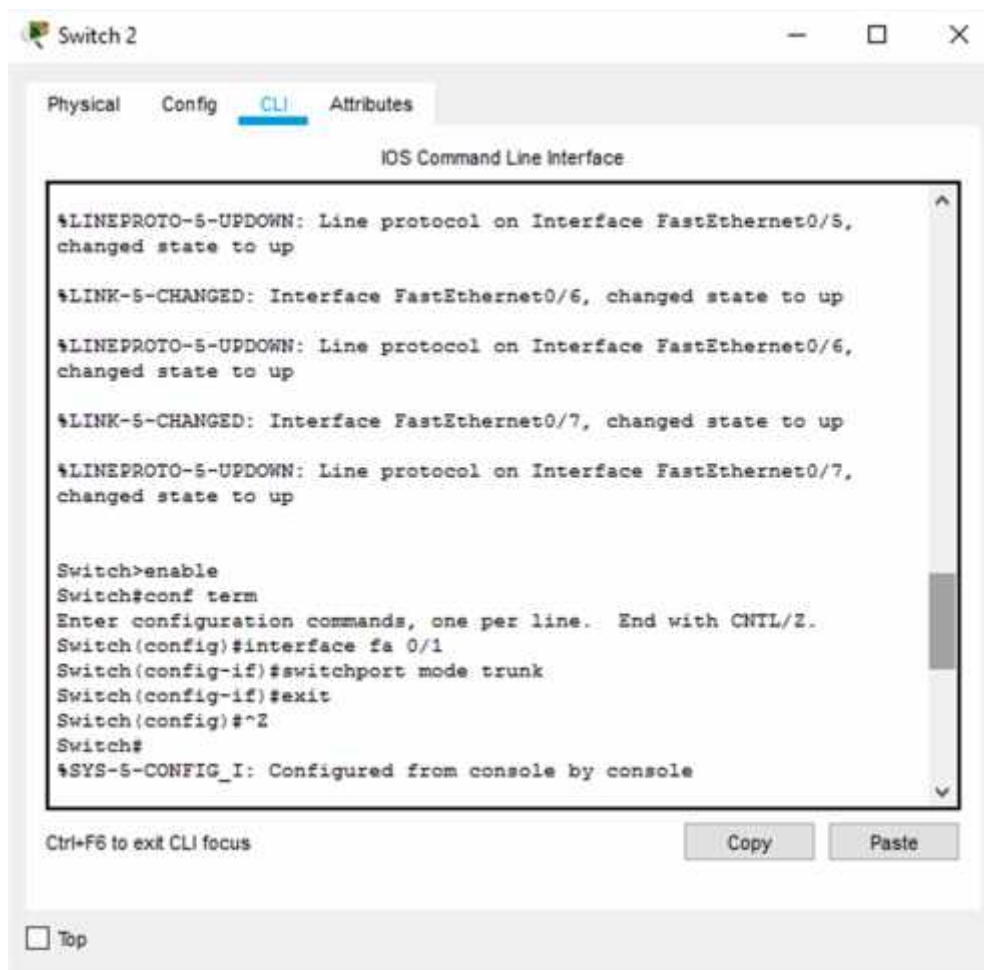
Tugas 8A

Jelaskan secara singkat mengapa hasil yang anda peroleh dari langkah 8 mendapatkan status “reply”?

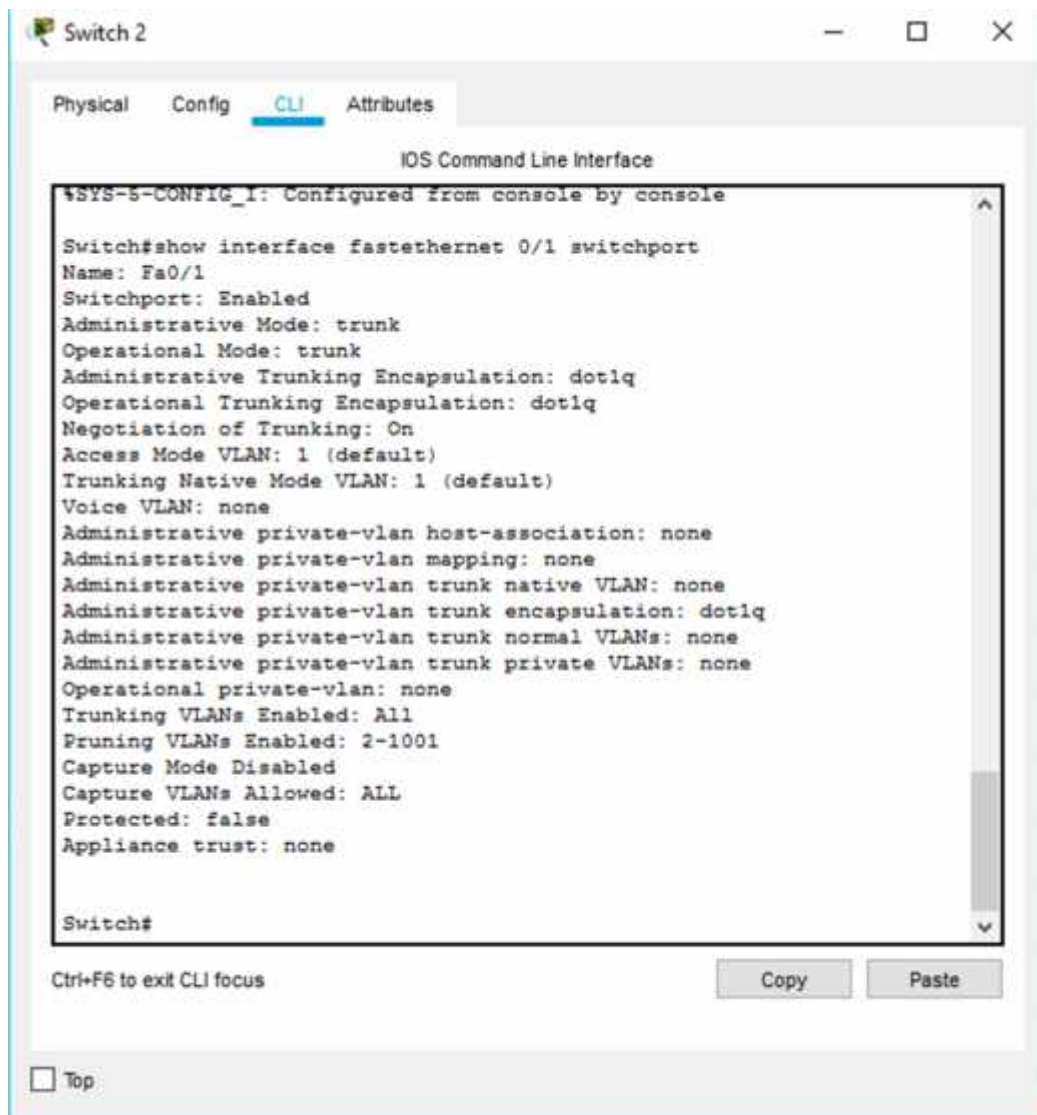
Jawab:

Hasil dari ping PC Leo ke PC Pisces adalah “Request timed out” karena PC Leo dan PC Pisces tidak satu VLAN.

Langkah 9. Konfigurasi Trunking pada Switch 2



Langkah 10. Melihat konfigurasi VLAN pada Switch 2



Switch 2

Physical
Config
CLI
Attributes

IOS Command Line Interface

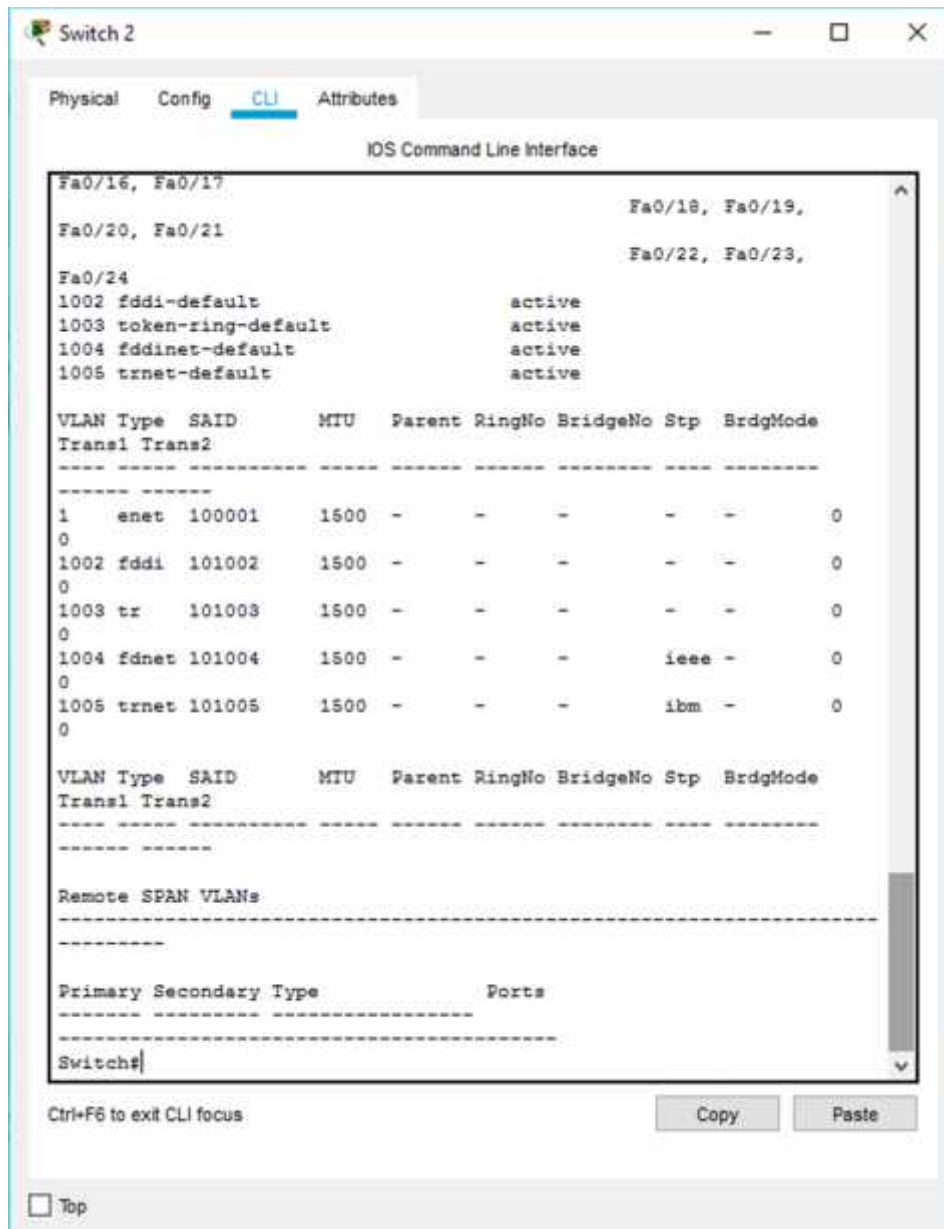
```
Switch#show vlan
```

VLAN Name	Status	Ports
1 default	active	Fa0/2, Fa0/3, Fa0/4, Fa0/5, Fa0/6, 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
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
1	enet	100001	1500	-	-	-	-
0							
1002	fddi	101002	1500	-	-	-	-
0							
1003	tr	101003	1500	-	-	-	-
0							
1004	fdnet	101004	1500	-	-	-	ieee
0							
1005	trnet	101005	1500	-	-	-	ibm
0							

Ctrl+F6 to exit CLI focus
Copy
Paste

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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.

Langkah 11. Konfigurasi port-port switch ke VLAN



The screenshot shows a window titled "Switch 2" with tabs for "Physical", "Config", "CLI", and "Attributes". The "CLI" tab is active, displaying the "IOS Command Line Interface". The terminal output shows the following commands and responses:

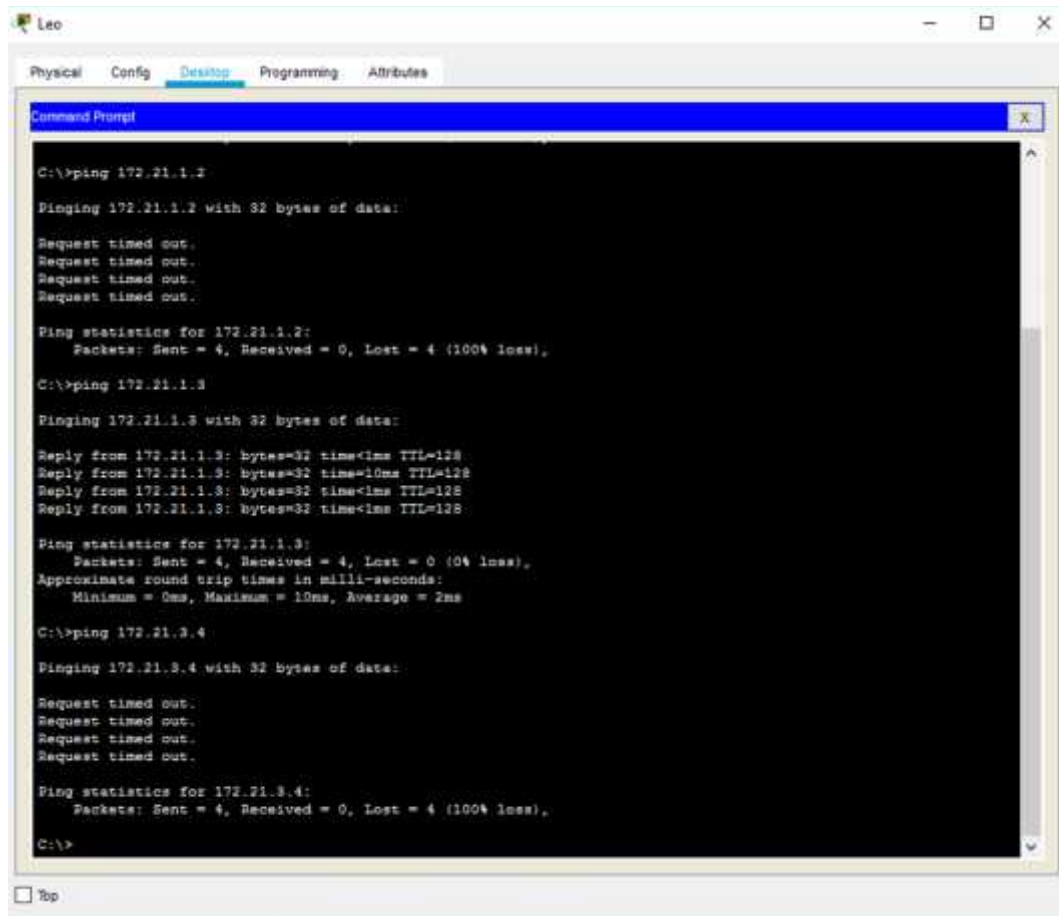
```
Switch(config-if)#
Switch(config-if)#~Z
Switch#
%SYS-5-CONFIG_I: Configured from console by console

Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#vlan 10
Switch(config-vlan)#name sodiak1
Switch(config-vlan)#exit
Switch(config)#vlan 20
Switch(config-vlan)#name sodiak2
Switch(config-vlan)#exit
Switch(config)#vlan 30
Switch(config-vlan)#name sodiak3
Switch(config-vlan)#exit
Switch(config)#interface Fastethernet 0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#interface Fastethernet 0/3
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface Fastethernet 0/4
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 0/6
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#interface Fastethernet 0/7
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 status bar that says "Ctrl+F6 to exit CLI focus" and two buttons: "Copy" and "Paste". Below the CLI window, there is a "Top" button with a small square icon next to it.

Langkah 12

Ping PC Leo ke PC Aries, PC Leo ke PC Aquarius, PC Leo ke PC Pisces



```
Leo
Physical  Config  Desktop  Programming  Attributes

Command Prompt

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:\>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=10ms 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 = 10ms, Average = 2ms

C:\>ping 172.21.3.4

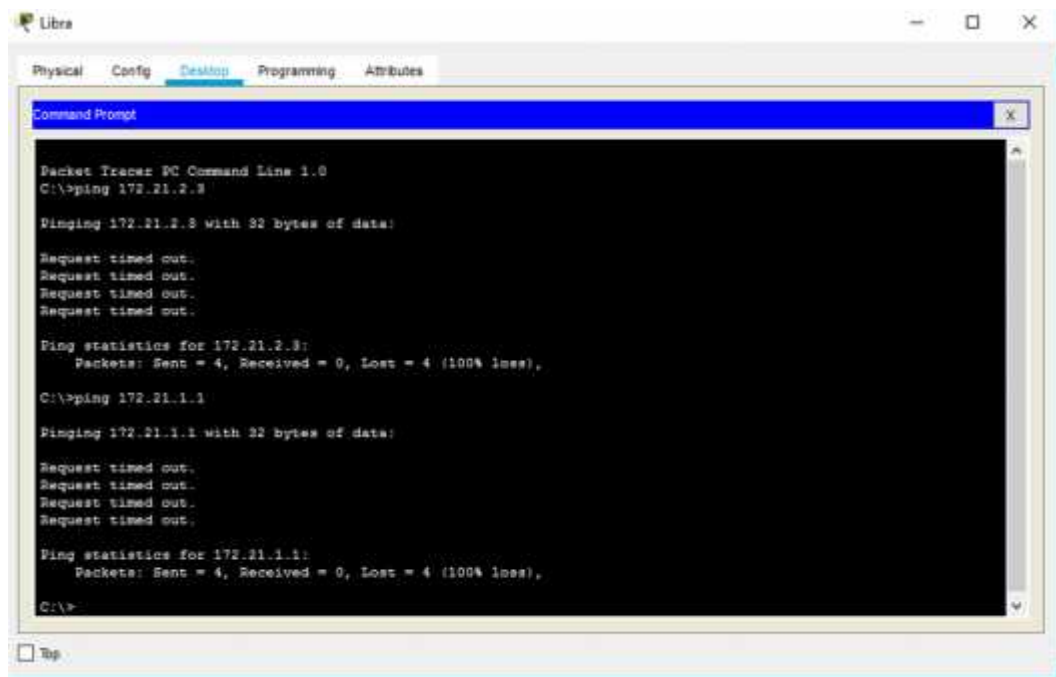
Pinging 172.21.3.4 with 32 bytes of data:

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 PC Libra ke PC Cancer, dan ping PC Libra ke PC Leo



Tugas 12A

Jelaskan secara singkat hasil yang anda peroleh dari langkah 8.

Jawab:

Hasil yang diperoleh dari langkah 8 adalah “Request timed out”.