

**NAMA : WINDI SAPUTRI**

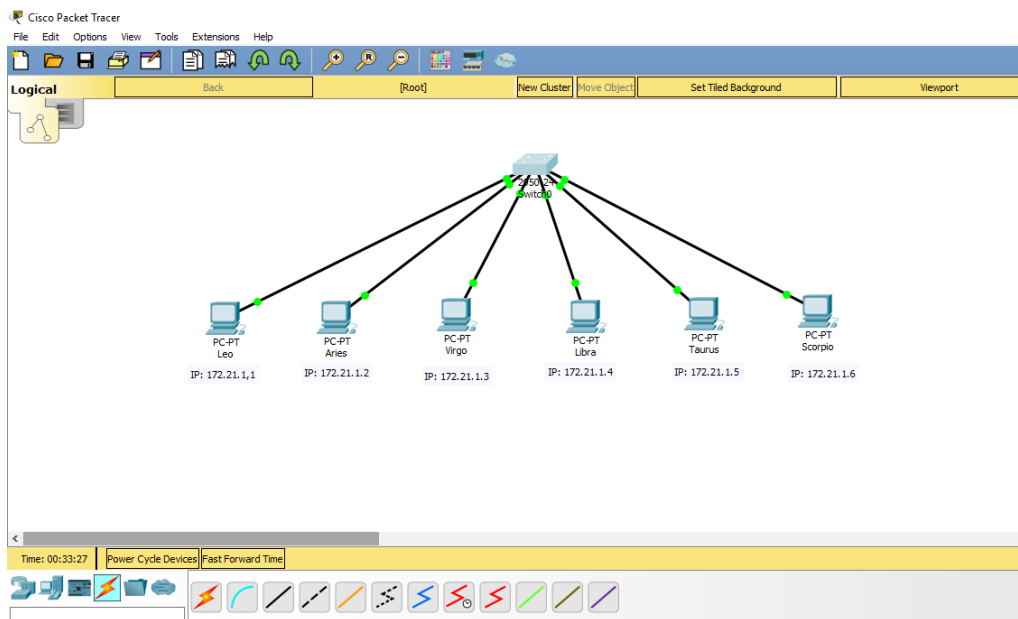
**NIM : L200170115**

**KELAS : C**

## **MODUL 4**

### **Kegiatan 1.**

#### **1. Rancangan jaringan**



#### **2. Membuat vlan dengan nama 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
```

Ctrl+F6 to exit CLI focus

Copy

Paste

### 3. Konfigurasi port untuk masing-masing pc ke vlan

#### I. untuk zodiak1 = leo(port 0/1) dan libra(port 0/4)

```
Switch(config)#vlan 10
Switch(config)#interface FastEthernet0/1
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 10
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/4
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/4
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 10
Switch(config-if)#
Switch(config-if)#exit
```

#### II. untuk zodiak2 = aries (port 0/2) dan taurus (port 0/5)

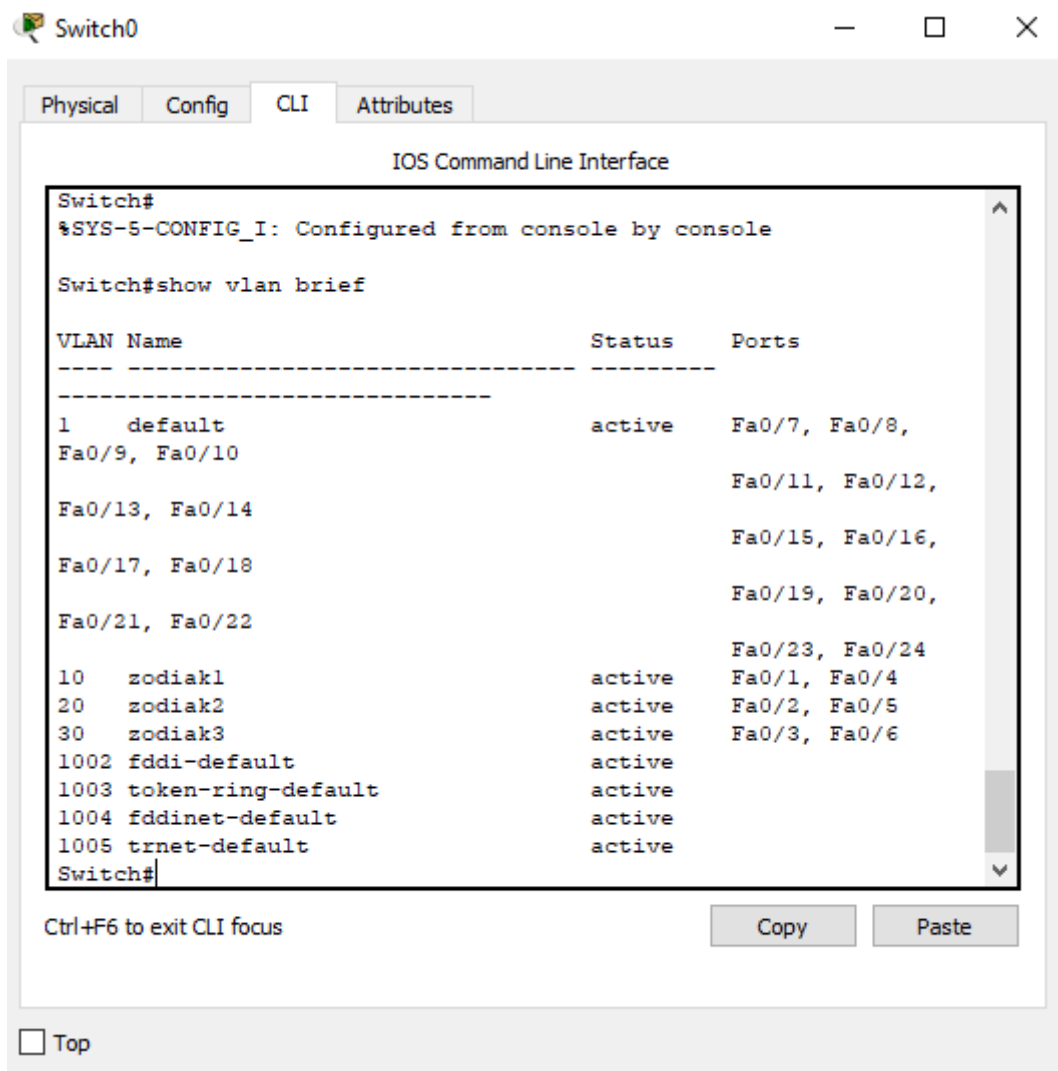
```
Switch(config)#interface FastEthernet0/2
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 20
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/5
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 20
Switch(config-if)#
Switch(config-if)#exit
```

#### III. untuk zodiak3 = virgo (port 0/3) dan scorpio (port 0/6)

```
Switch(config)#interface FastEthernet0/3
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 30
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/6
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 30
Switch(config-if)#
```

#### 4. Melihat hasil

##### I. melihat informasi vlan secara keseluruhan



The screenshot shows a network switch window titled "Switch0" with tabs for Physical, Config, CLI, and Attributes. The CLI tab is active, displaying the "IOS Command Line Interface". The command "show vlan brief" has been executed, resulting in the following output:

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 output, there is a status bar with the text "Ctrl+F6 to exit CLI focus" and two buttons: "Copy" and "Paste". At the bottom left, there is a checkbox labeled "Top".

## II. melihat vlan id 10

```
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#
```

## III. melihat vlan id 20

```
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#
```

## IV. melihat vlan id 30

```
Switch#show vlan id 30

VLAN Name                Status    Ports
-----
30   zodiak3                active    Fa0/3, Fa0/6

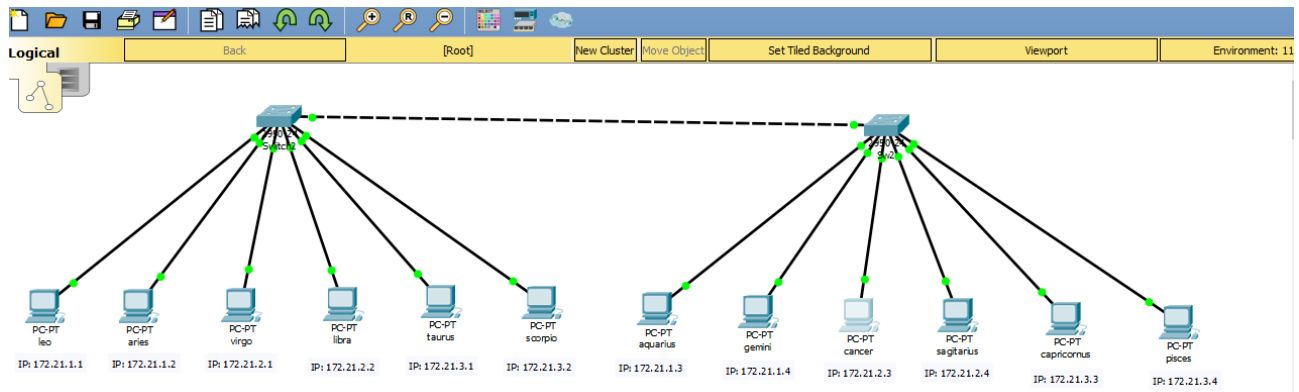
VLAN Type  SAID      MTU   Parent RingNo BridgeNo Stp  BrdgMode
Trans1 Trans2
-----
30   enet    100030   1500  -     -     -     -     -
0     0

Switch#
```

No.	Variabel	Nilai		
1	Nomor Vlan	10	20	30
2	Nama Vlan	zodiak1	zodiak2	zodiak3
3	Port	0/1, 0/4	0/2, 0/5	0/3, 0/6
4	Status	Active	Active	Active

## Kegiatan 2

### 1. Rancangan jaringan



### 2. Membuat vlan dengan nama zodiak1, zodiak2, dan zodiak3

```
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)#
```

### 3. Konfigurasi port untuk masing-masing pc ke vlan

#### I. untuk zodiak1 = leo (port 0/1) dan aries (port 0/4)

```
Switch(config)#interface FastEthernet0/1
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 10
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/4
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 10
Switch(config-if)#
Switch(config-if)#exit
```

## II. untuk zodiak2 = virgo (port 0/2) dan libra (port 0/5)

```
Switch(config)#interface FastEthernet0/2
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 20
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/5
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 20
Switch(config-if)#
Switch(config-if)#exit
```

## III. untuk zodiak3 = taurus (port 0/3) dan scorpio (port 0/6)

```
Switch(config)#interface FastEthernet0/3
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 30
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/6
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 30
Switch(config-if)#
```

Ctrl+F6 to exit CLI focus

## 4. Melakukan konfigurasi trunk pada port 0/24

```
Switch(config-if)#exit
Switch(config)#interface fa 0/24
Switch(config-if)#switchport mode trunk
Switch(config-if)#exit
Switch(config)#
```

## 5. Hasil

```
Switch#show int fa 0/24 switchport
```

```
Name: Fa0/24
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
```

```
Switch#
```

```
Switch#show int trunk
```

Port	Mode	Encapsulation	Status	Native vlan
Fa0/24	on	802.1q	trunking	1

Port	Vlans allowed on trunk
Fa0/24	1-1005

Port	Vlans allowed and active in management domain
Fa0/24	1,10,20,30

Port	Vlans in spanning tree forwarding state and not pruned
Fa0/24	1,10,20,30

```
Switch#
```

```
Switch#show vlan
```

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
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	

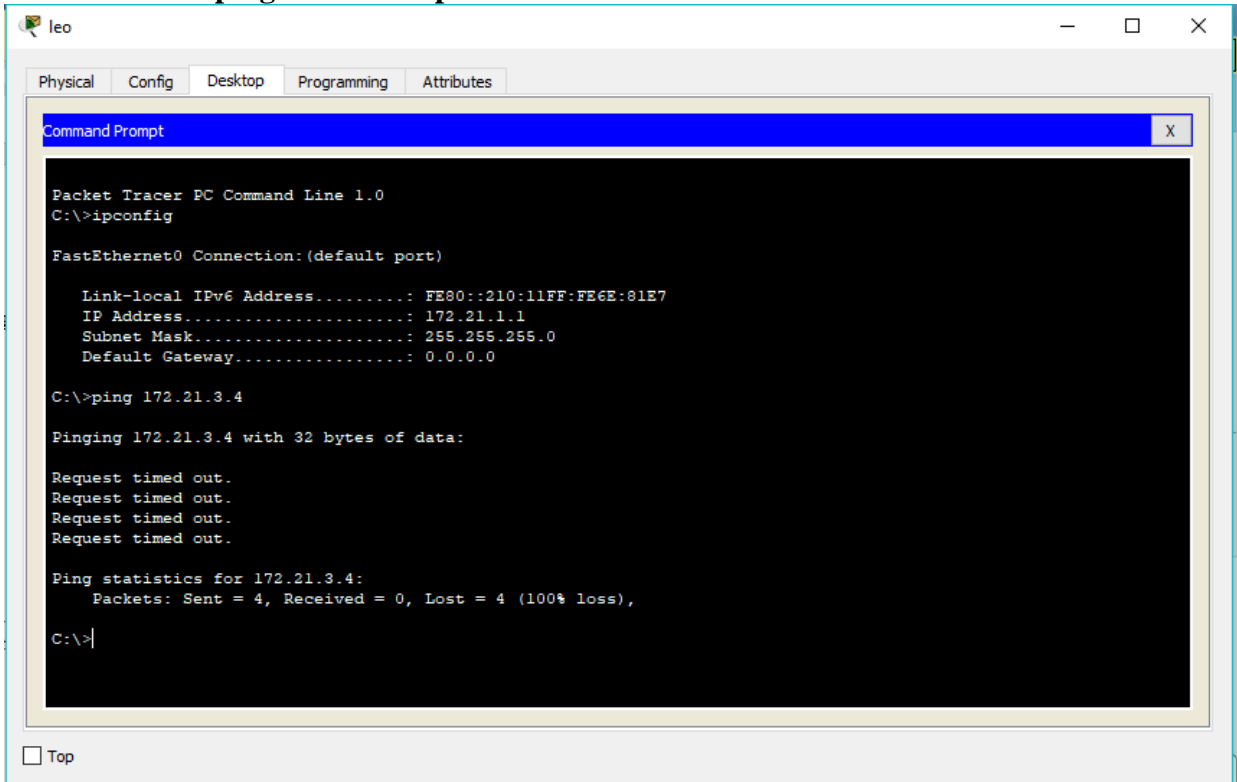
VLAN	Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode	Trans1	Trans2
1	enet	100001	1500	-	-	-	-	-	0	0
10	enet	100010	1500	-	-	-	-	-	0	0
20	enet	100020	1500	-	-	-	-	-	0	0
30	enet	100030	1500	-	-	-	-	-	0	0

```
--More--
```

Ctrl+F6 to exit CLI focus

**Tugas 7A: Untuk port 0/24 pada switch 0 sudah disetting untuk trunk dan berhasil. Sehingga port 0/24 tidak tersedia untuk vlan.**

## 6. Melakukan ping dari leo ke pisces



The screenshot shows a Packet Tracer PC Command Line window for a device named 'leo'. The window has tabs for Physical, Config, Desktop, Programming, and Attributes. The Desktop tab is active, displaying a Command Prompt window. The Command Prompt shows the output of the 'ipconfig' command, indicating the device's network configuration. It then shows the output of a 'ping 172.21.3.4' command, which results in four 'Request timed out' messages and a 100% loss of packets.

```
leo
Physical Config Desktop Programming Attributes
Command Prompt
Packet Tracer PC Command Line 1.0
C:\>ipconfig

FastEthernet0 Connection: (default port)

    Link-local IPv6 Address . . . . . : FE80::210:11FF:FE6E:81E7
    IP Address. . . . . : 172.21.1.1
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 0.0.0.0

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:\>
```

☐ Top



**Tugas 8A: Hasilnya adalah Request Time Out karena berada pada jaringan yang berbeda dan pada switch 1 belum disetting trunk**

## 7. Melakukan konfigurasi trunk pada switch 1

```
Switch(config-if)#exit
Switch(config)#interface fa 0/24
Switch(config-if)#switchport mode trunk
Switch(config-if)#exit
Switch(config)#
```

**Tugas 10A: Hasilnya Yang harusnya int fa 0/24 masih tersedia sebagai vlan.**

```
Switch#show vlan
VLAN Name                Status    Ports
-----
1    default                active    Fa0/1, 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
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    1000001      1500  -     -     -     -   -         0       0
1002 fddi    1010002      1500  -     -     -     -   -         0       0
1003 tr      1010003      1500  -     -     -     -   -         0       0
1004 fdnet  1010004      1500  -     -     -     ieee -         0       0
1005 trnet  1010005      1500  -     -     -     ibm  -         0       0

VLAN Type  SAID          MTU   Parent RingNo BridgeNo Stp  BrdgMode Trans1 Trans2
-----
Remote SPAN VLANs
-----
```

Ctrl+F6 to exit CLI focus

## 8. Konfigurasi vlan

### I. zodiak1: aquarius (port 0/1) dan gemini (port 0/2)

```
Switch(config)#
Switch(config)#interface FastEthernet0/1
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 10
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/2
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 10
Switch(config-if)#
Switch(config-if)#exit
```

## II. zodiak2: cancer (port 0/3) dan sagitarius (port 0/4)

```
Switch(config)#interface FastEthernet0/3
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 20
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/4
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 20
Switch(config-if)#
```

---

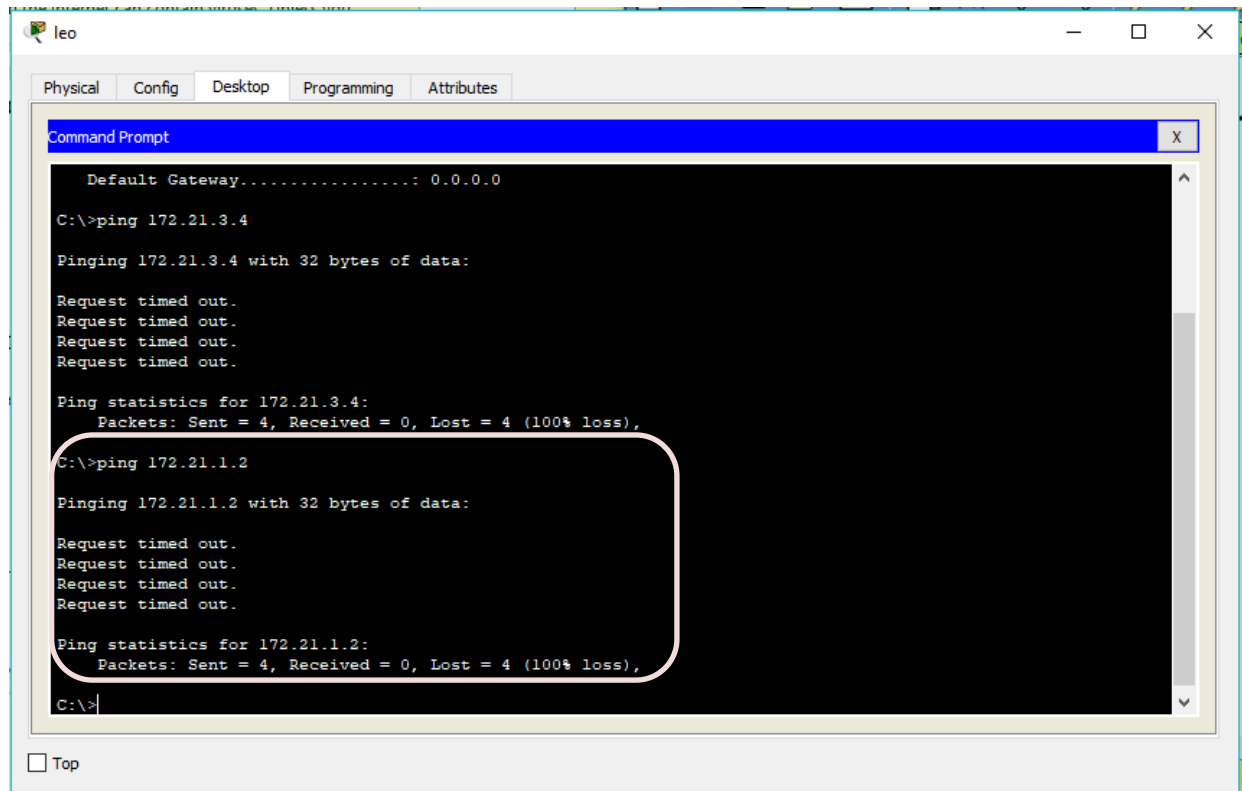
## III. zodiak 1: capricornus (port 0/5) dan pisces (port 0/6)

```
Switch(config)#interface FastEthernet0/5
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 30
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/6
Switch(config-if)#
Switch(config-if)#
Switch(config-if)#switchport access vlan 30
Switch(config-if)#
```

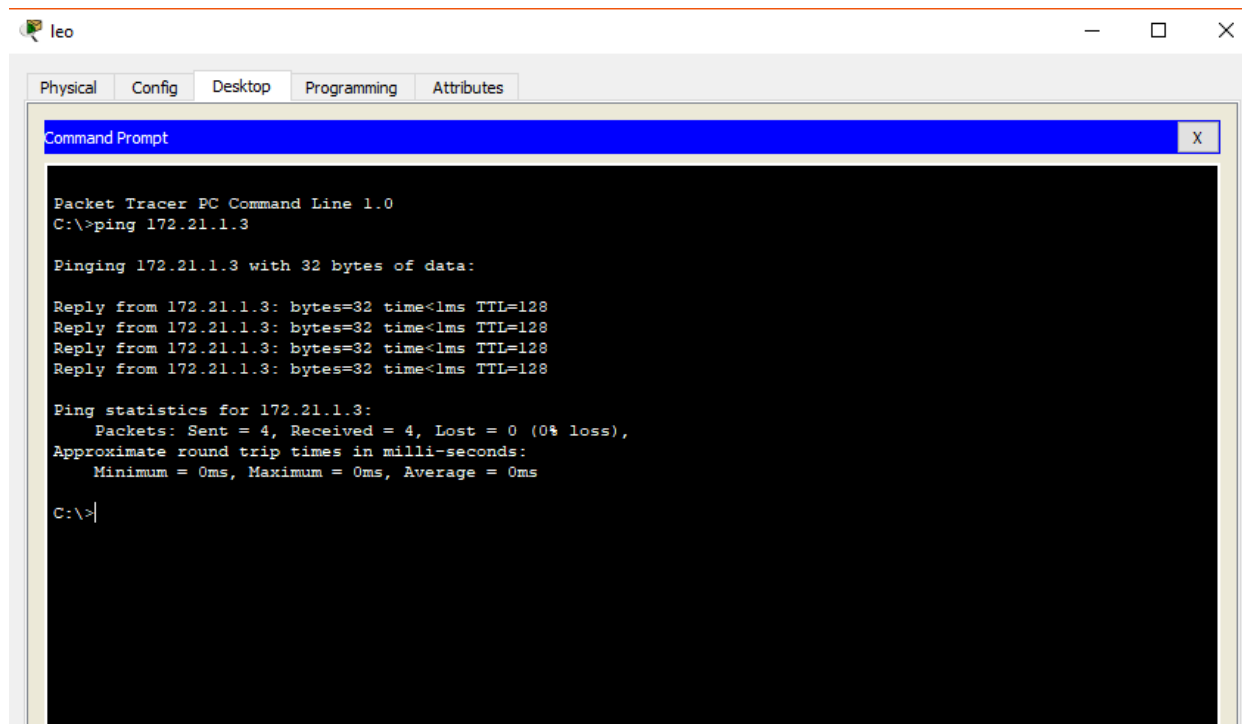
---

## 9. Melakukan ping

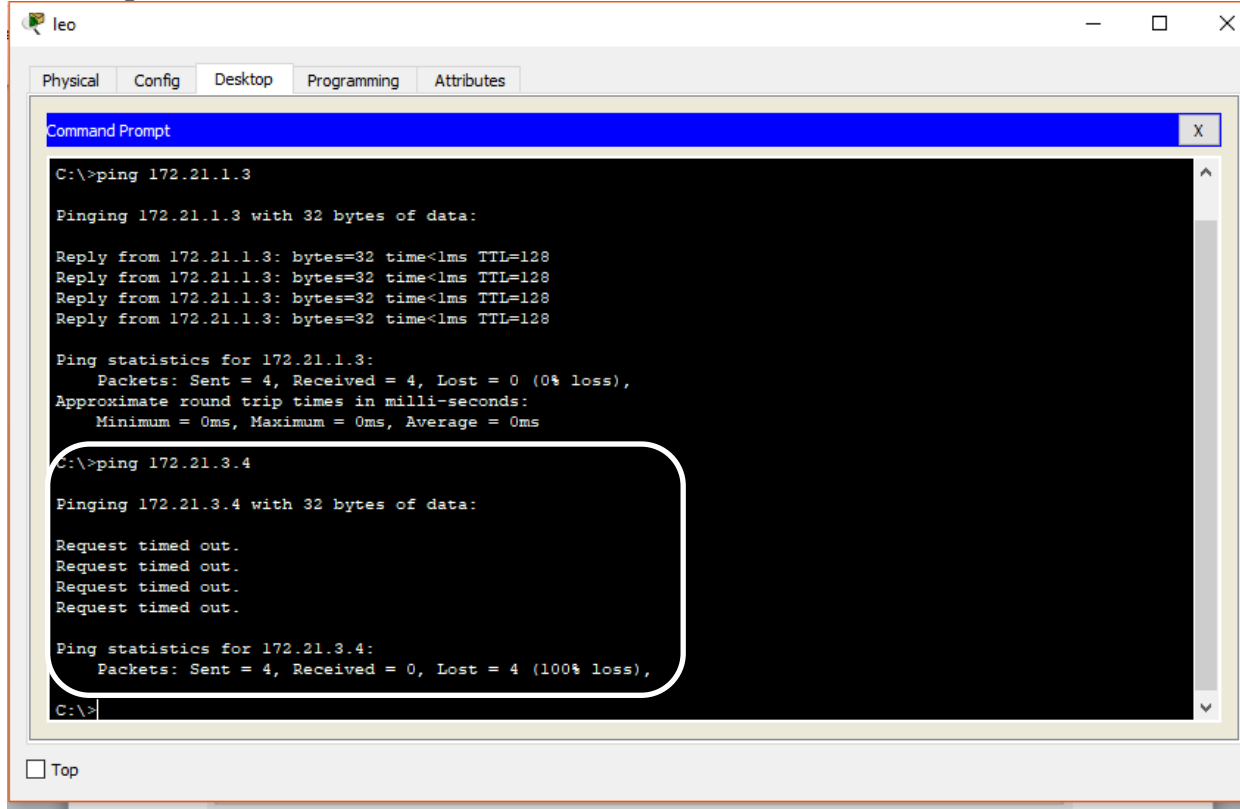
### I. leo ke aries



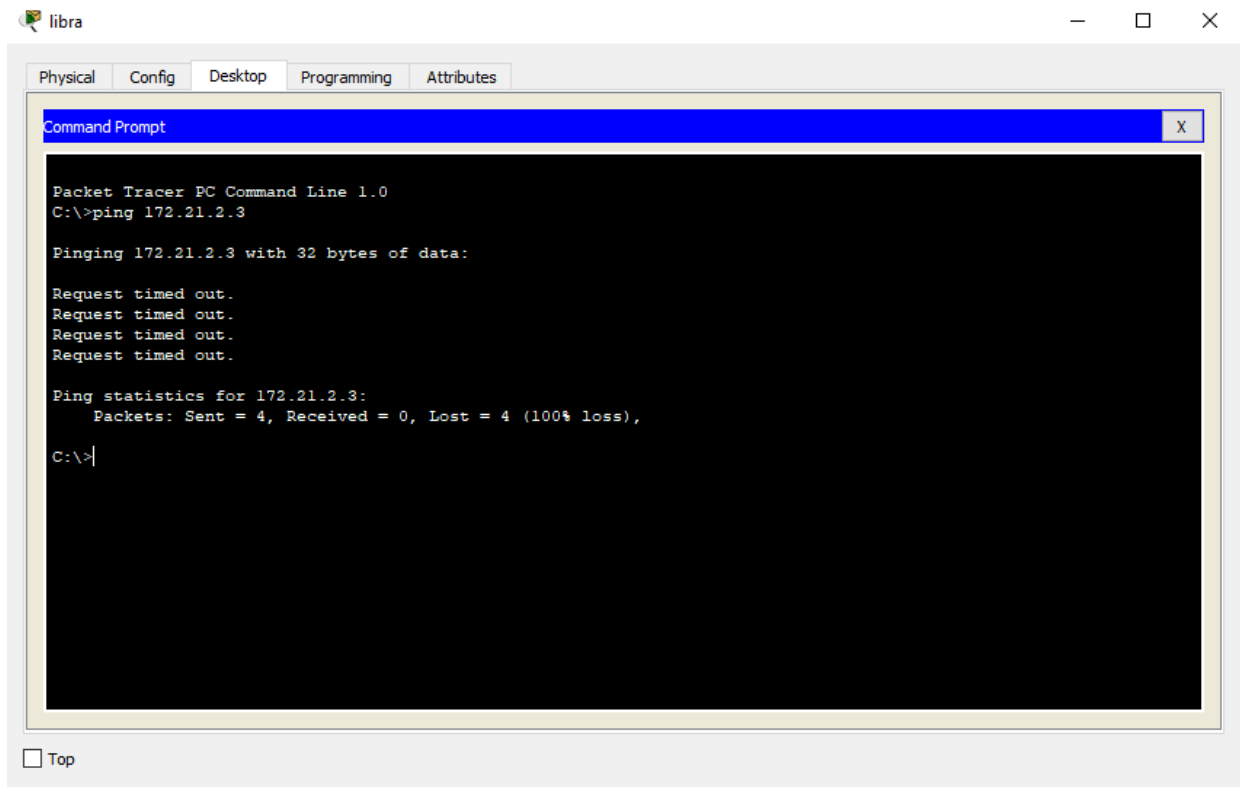
### II. leo ke aquarius



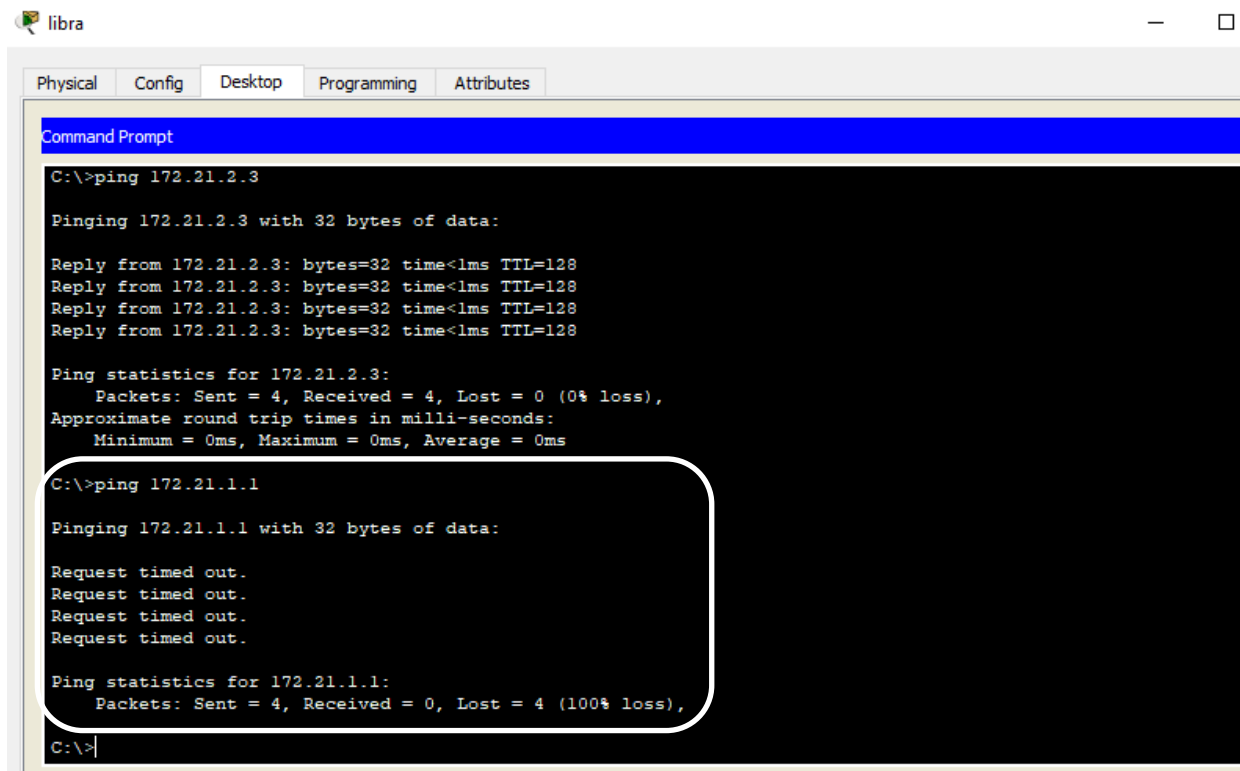
### III. leo ke pisces



### IV. libra ke cancer



## V. libra ke leo



```
libra

Physical Config Desktop Programming Attributes

Command Prompt

C:\>ping 172.21.2.3

Pinging 172.21.2.3 with 32 bytes of data:

Reply from 172.21.2.3: bytes=32 time<1ms TTL=128
Reply from 172.21.2.3: bytes=32 time<1ms TTL=128
Reply from 172.21.2.3: bytes=32 time<1ms TTL=128
Reply from 172.21.2.3: bytes=32 time<1ms TTL=128

Ping statistics for 172.21.2.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 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:\>
```

### Tugas 12A:

Hasilnya bisa menjadi Reply jika PC berada pada jaringan dan vlan yang sama. Jika hanya sama dari salah satu vlan atau jaringan maka hasilnya akan Request Time Out.

