

MODUL 4 PRAKTIKUM JARINGAN KOMPUTER

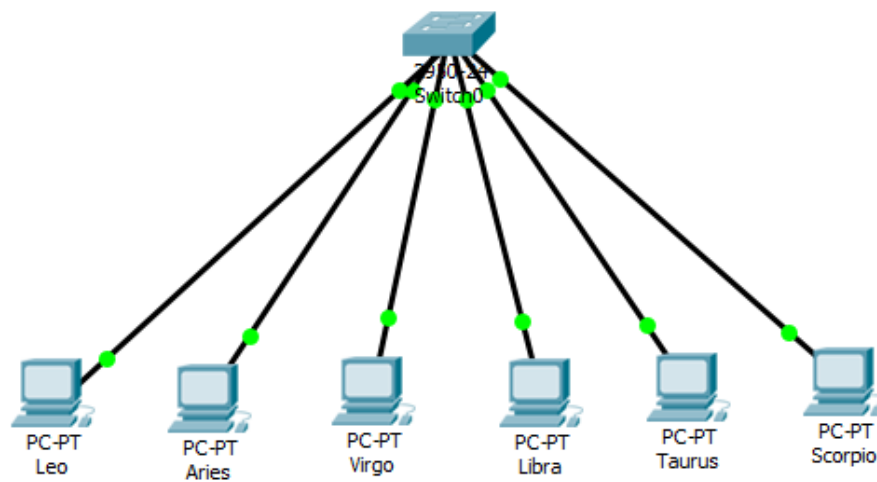
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Kelas : D

Modul : 4

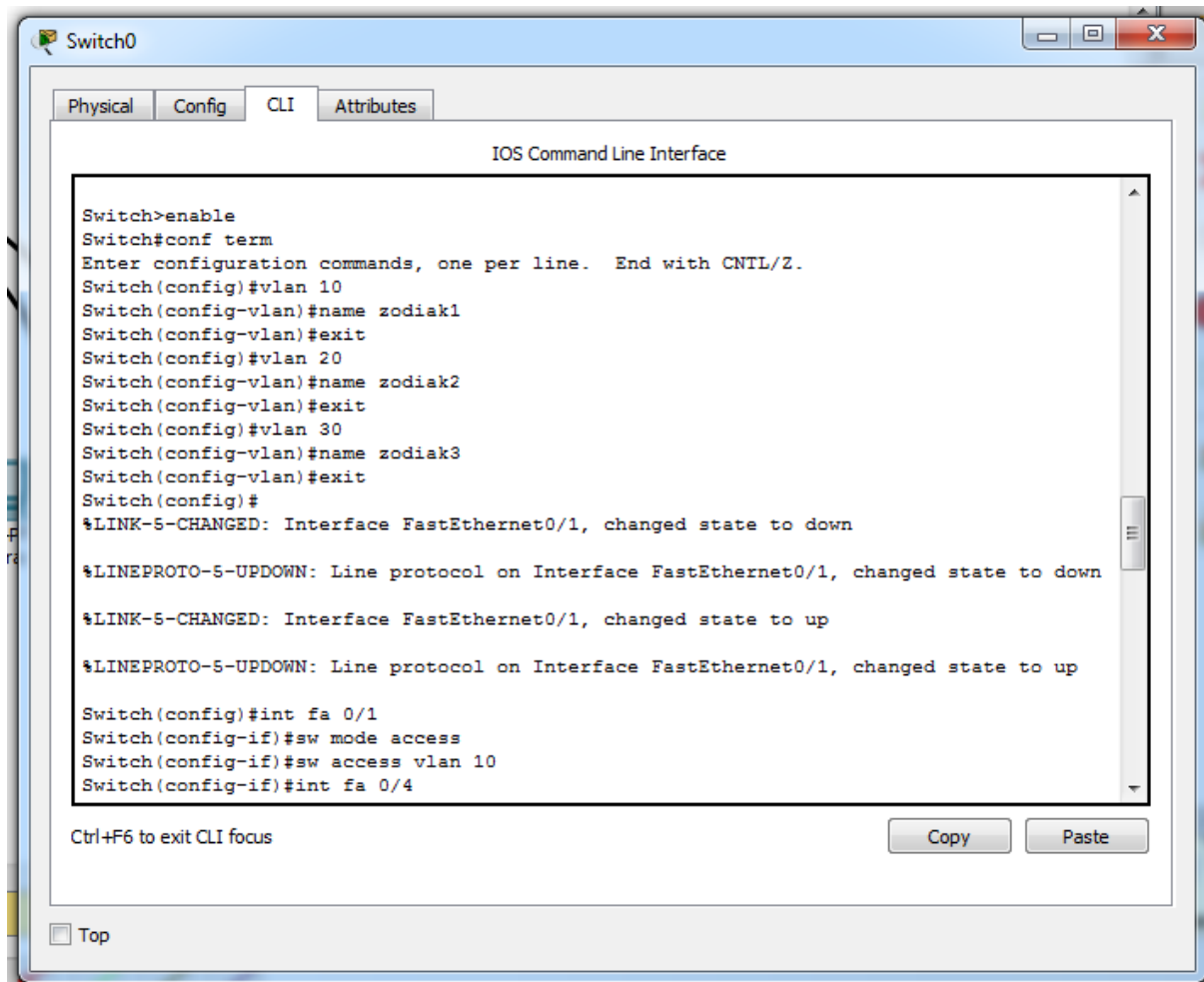
Kegiatan 1. Topologi



Konfigurasi alamat IP:

- Leo : 172.21.1.1/24
- Aries : 172.21.1.2/24
- Virgo : 172.21.1.3/24
- Libra : 172.21.1.4/24
- Taurus : 172.21.1.5/24
- Virgo : 172.21.1.6/24

Konfigurasi pada switch dengan mode user atau mode privileged, membuat 3 VLAN dengan nama zodiak1, zodiak2, zodiak3:



Konfigurasi port-port switch ke dalam VLAN zodiak1, zodiak2, zodiak3 dengan anggota sebagai berikut:

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

```

Switch(config)#int fa 0/2
Switch(config-if)#sw mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#int fa 0/2
Switch(config-if)#sw mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#int fa 0/5
Switch(config-if)#sw mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#int fa 0/3
Switch(config-if)#sw mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#int fa 0/6
Switch(config-if)#sw mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#int fa 0/4
Switch(config-if)#sw mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#int fa 0/7
Switch(config-if)#sw mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#exit
Switch(config)#exit

```

Melihat konfigurasi VLAN yang telah dibuat:

```
show vlan brief
```

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	Fa0/2, Fa0/5
20 zodiak2	active	Fa0/3, Fa0/6
30 zodiak3	active	Fa0/4, Fa0/7
1002 fddi-default	active	
1003 token-ring-default	active	
1004 fddinet-default	active	
1005 trnet-default	active	

Switch#

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							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							0

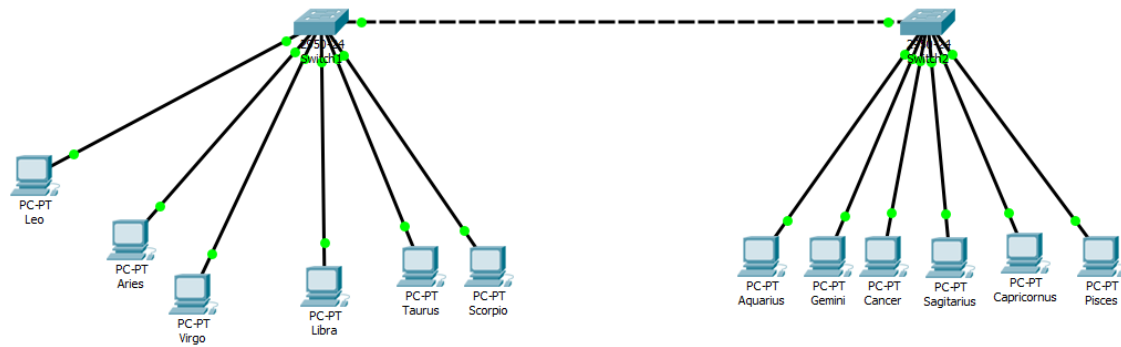
Switch#show vlan id 30

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							0

Switch#

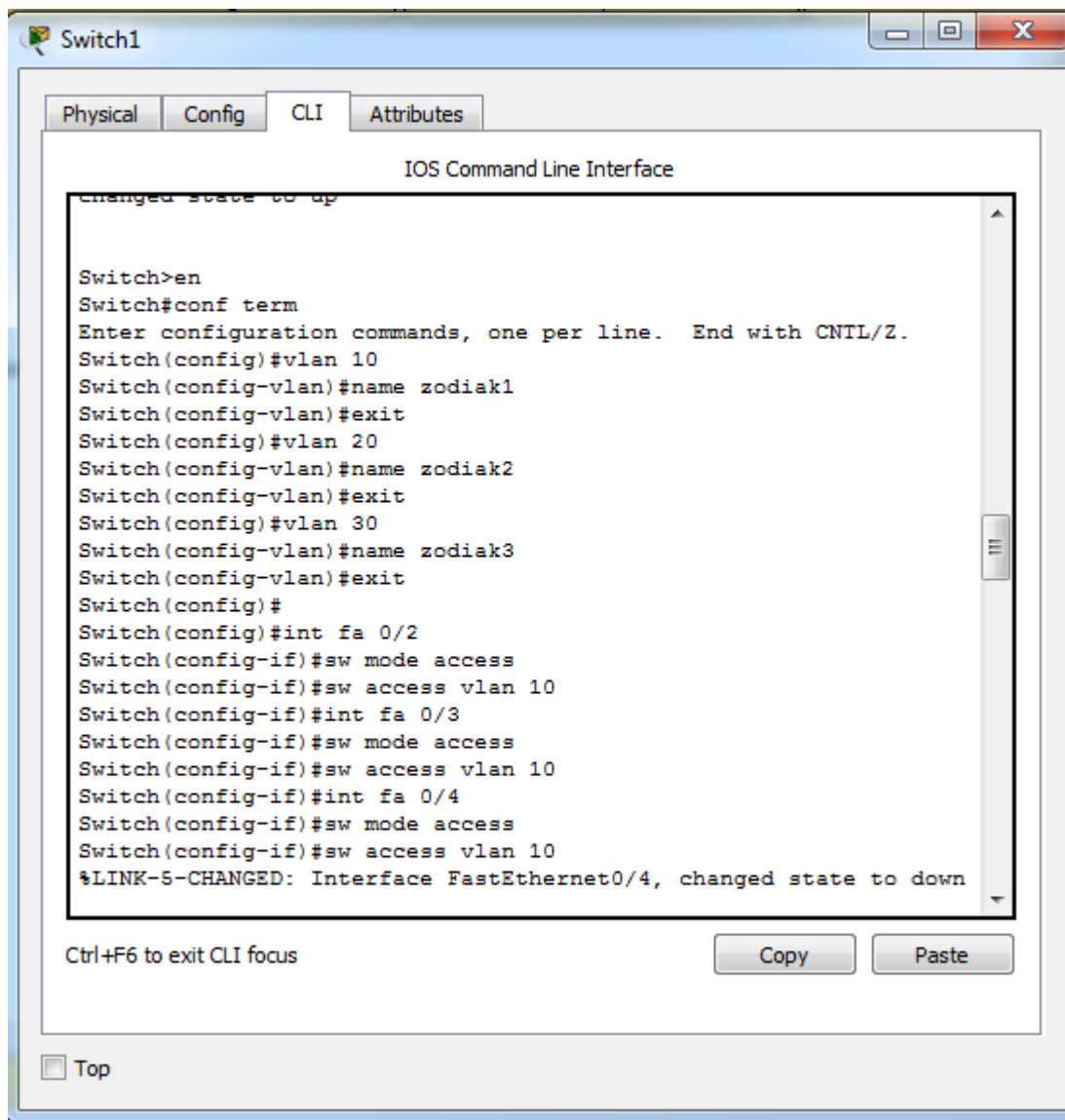
Kegiatan 2. Topologi 2



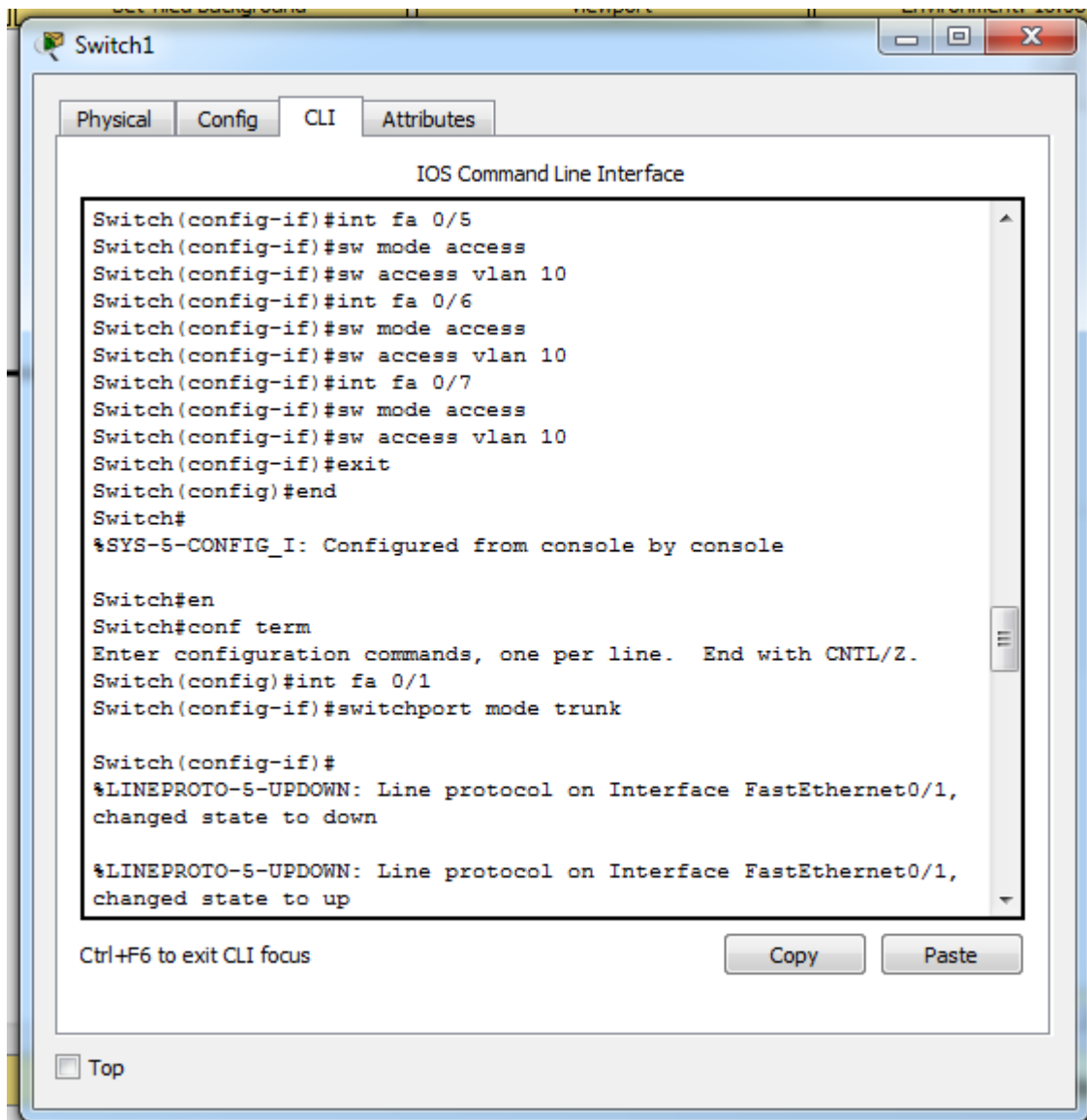
Konfigurasi alamat IP masing-masing PC:

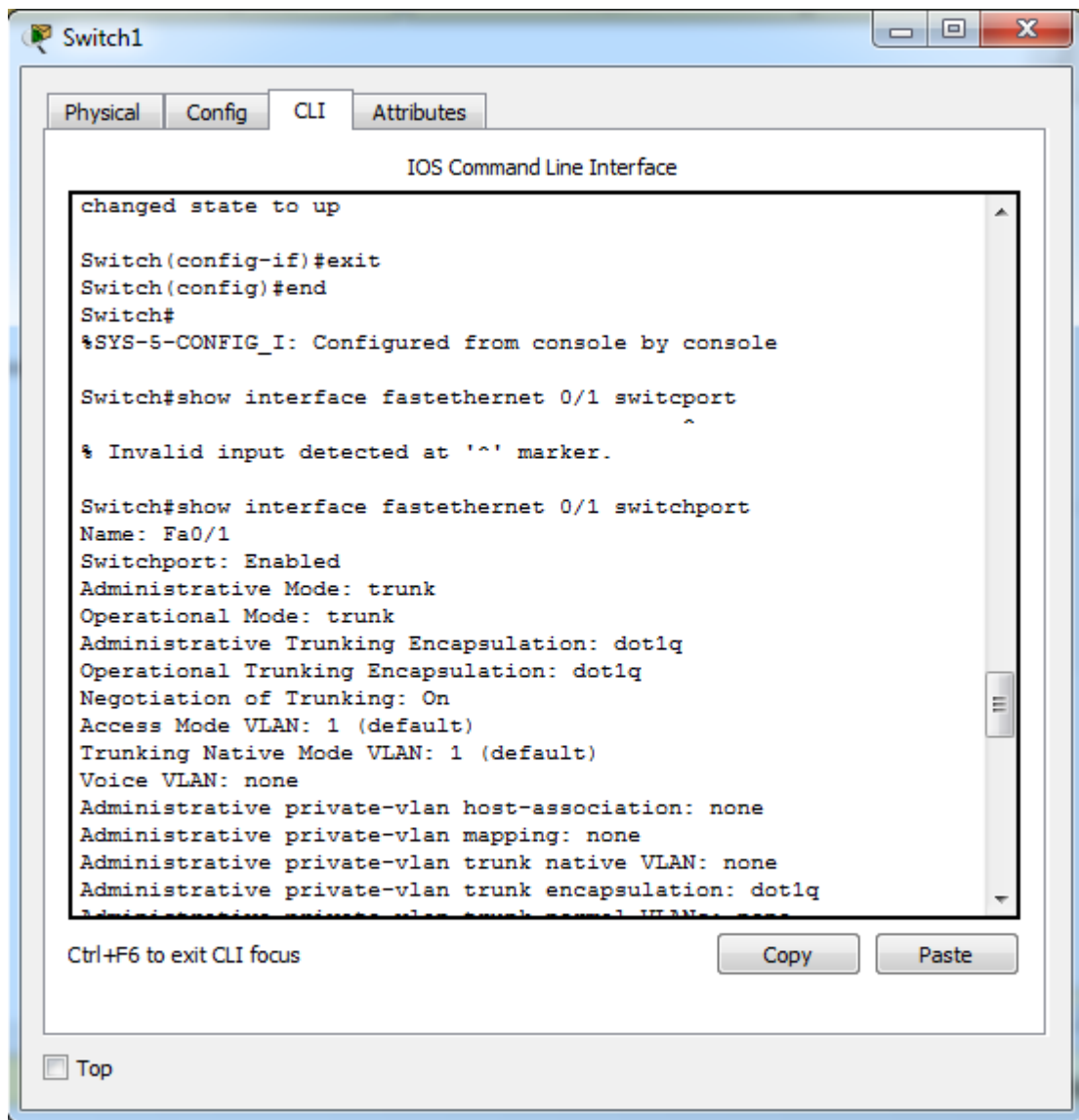
- Leo : 172.21.1.1/24
- Aries : 172.21.1.3/24
- Virgo : 172.21.2.1/24
- Libra : 172.21.2.2/24
- Taurus : 172.21.3.1/24
- Scorpio : 172.21.3.2/24
- Aquarius : 172.21.1.3/24
- Gemini : 172.21.1.4/24
- Cancer : 172.21.2.3/24
- Sagittarius : 172.21.2.4/24
- Capricornus : 172.21.3.3/24
- Pisces : 172.21.3.4/24

Konfigurasi pada switch dengan mode user atau mode privileged, membuat 3 VLAN dengan nama zodiak1, zodiak2, zodiak3 dan Konfigurasikan port-port switch ke dalam VLAN zodiak1, zodiak2, zodiak3:

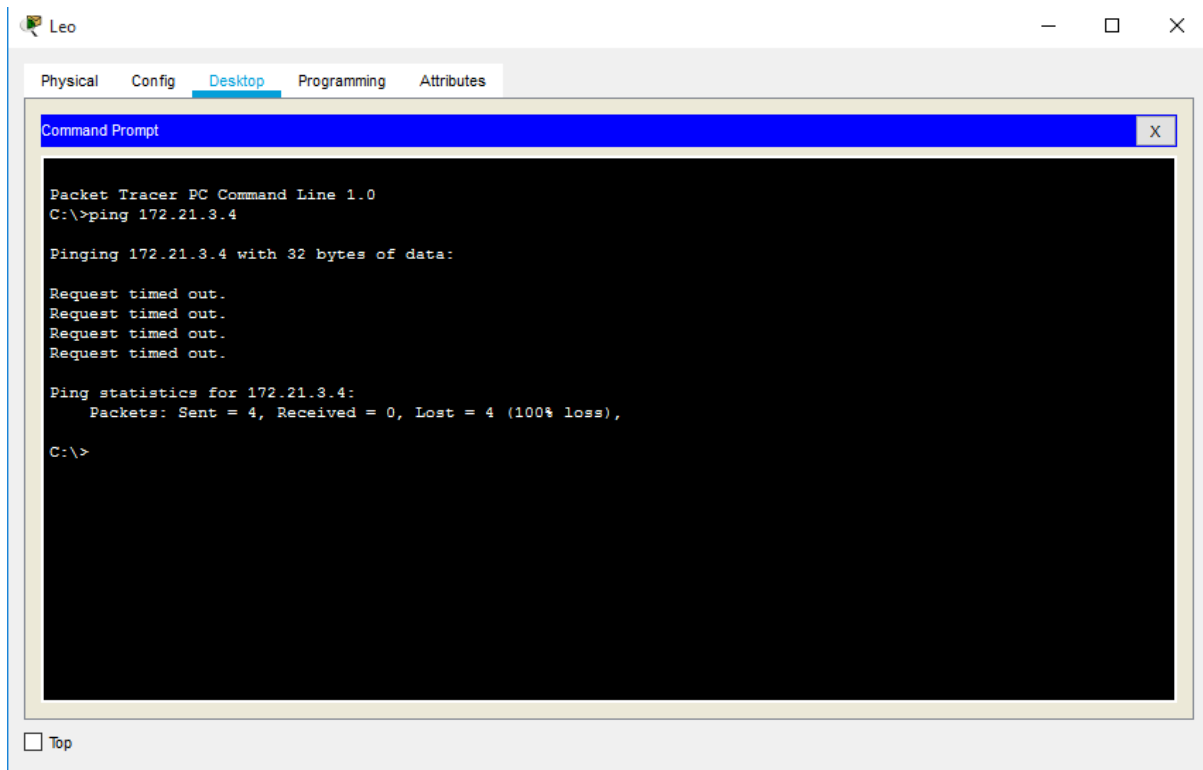


Konfigurasi VLAN trunking pada switch 1:





Melakukan ping dari PC Leo ke PC Pisces:



Konfigurasi VLAN trunking pada switch 2:

```

Switch>en
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)#exit
Switch(config)#

```

Melihat Konfigurasi VLAN pada switch 2:

```
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
Trans1	Trans2						

VLAN	Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode
Trans1	Trans2							
1	enet	100001	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								
--More--								

Konfigurasi port-port switch ke dalam VLAN zodiak1, zodiak2, zodiak3 dengan anggota sebagai berikut:

- zodiak1 : Aquarius dan Gemini
- zodiak2 : Cancer dan Sagitarius
- zodiak3 : Capricornus dan Pisces

```
Switch(config)#interface FastEthernet 0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan10
^
% Invalid input detected at '^' marker.

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)#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)#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
```

Melihat konfigurasi VLAN pada switch 2:

```
Switch#show vlan brief
```

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	Fa0/2, Fa0/3
20 zodiak2	active	Fa0/4, Fa0/5
30 zodiak3	active	Fa0/6, Fa0/7
1002 fddi-default	active	
1003 token-ring-default	active	
1004 fddinet-default	active	
1005 trnet-default	active	

```
Switch#
```

Ping antar PC:

Ping dari PC Leo ke PC Aries

```
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),
```

Ping PC Leo ke PC 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=12ms 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 = 12ms, Average = 3ms
```