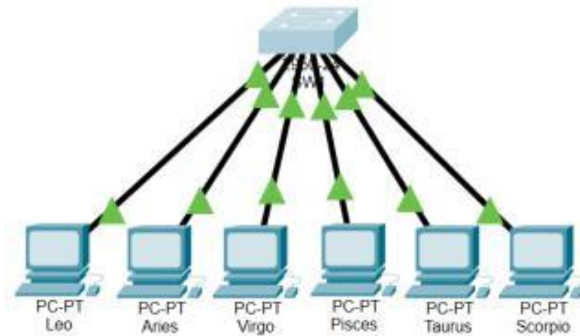


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Kelas : D

Modul 4

Kegiatan 1. Topologi 1



Konfigurasi IP Address

Leo

Physical Config Desktop Programming Attributes

IP Configuration

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IP Address: 172.21.1.1

Subnet Mask: 255.255.0.0

Default Gateway: 0.0.0.0

DNS Server: 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address: /

Link Local Address: FE80::260:5CFF:FE75:C525

IPv6 Gateway:

IPv6 DNS Server:

802.1X

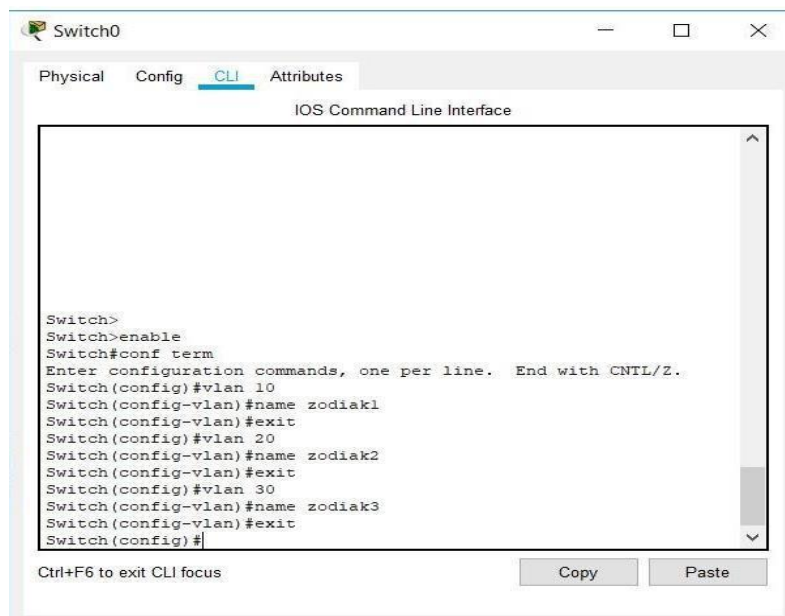
☐ Use 802.1X Security

Authentication: MD5

Username:

Password:

Konfigurasi pada switch dengan mode user atau mode privileged, buat 3 VLAN dengan name zodiak1, zodiak2, zodiak3.



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

Switch>
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)#
```

Ctrl+F6 to exit CLI focus

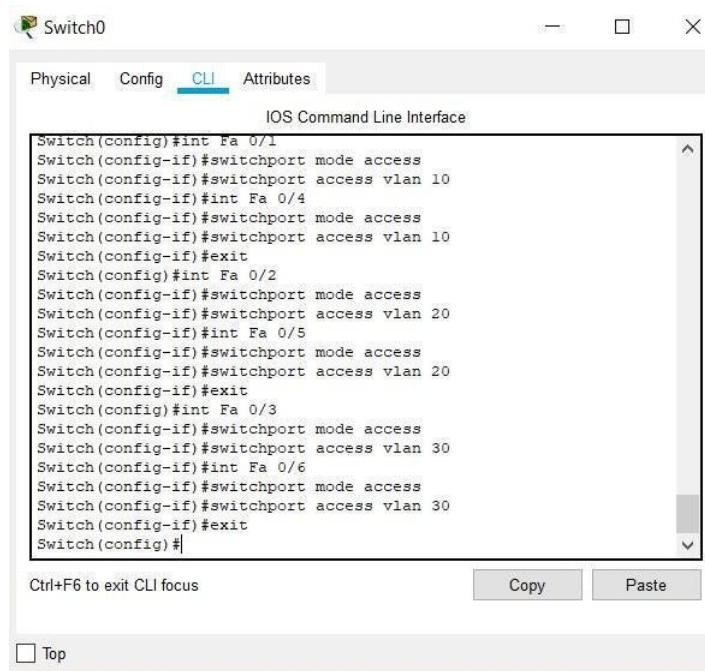
Copy Paste

Pada mode configuration, konfigurasi port-port switch ke dalam VLAN zodiak1, zodiak2, zodiak3 dengan anggota sebagai berikut :

zodiak1 = Leo dan Pisces

zodiak2 = Aries dan Taurus

zodiak3 = Virgo dan Scorpio



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

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)#
```

Ctrl+F6 to exit CLI focus

Copy Paste

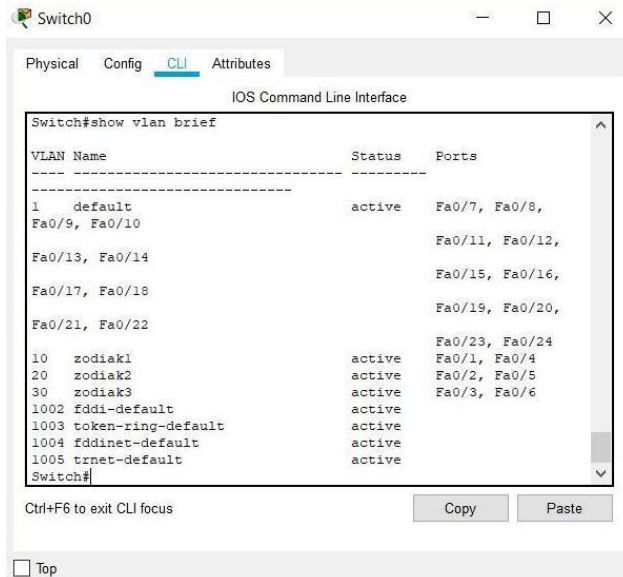
☐ Top

Pada mode user atau mode privileged, lihat konfigurasi VLAN yang telah dibuat. Langkah untuk melihat konfigurasi :

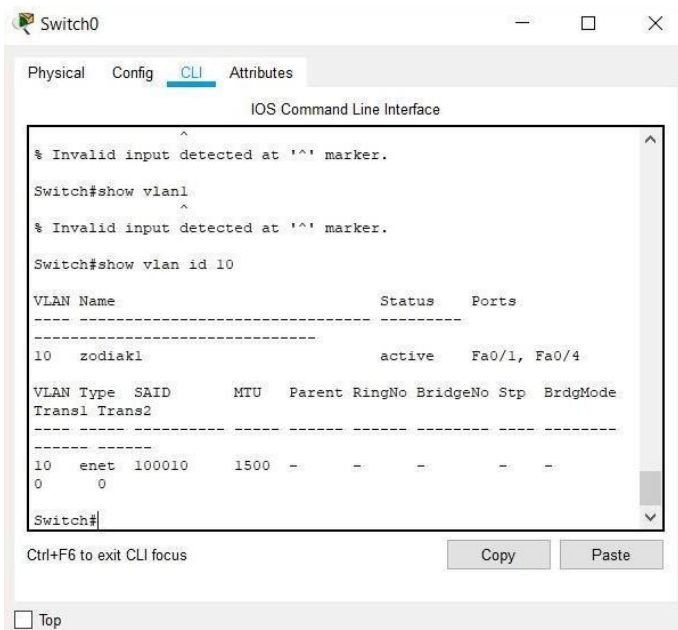
Tekan enter

Masuk mode privileged

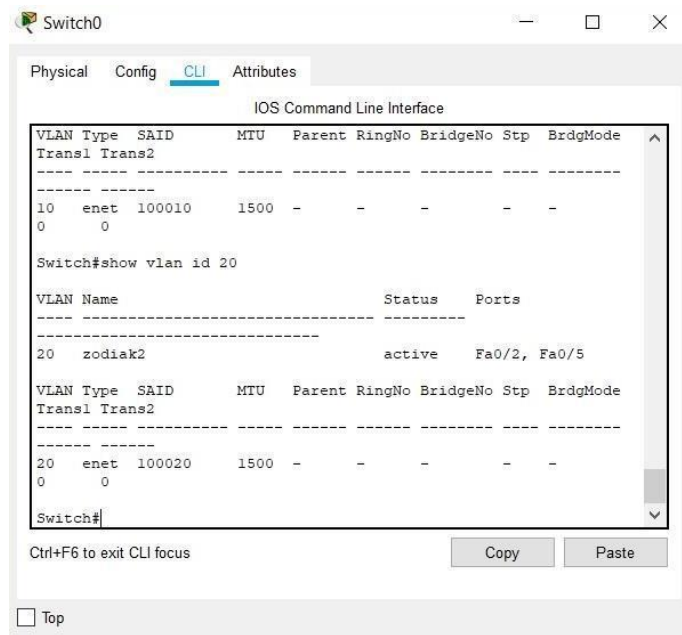
Ketik show vlan brief (informasi vlan keseluruhan)



Ketik show vlan id 10 (informasi vlan 10)



Ketik show vlan id 20 (informasi vlan 20)



The screenshot shows a network switch interface with tabs for Physical, Config, CLI, and Attributes. The CLI tab is active, displaying the output of the command 'show vlan id 20'. The output includes a table of VLAN details and a summary of the VLAN configuration.

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

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
20	enet	100020	1500	-	-	-	-	-

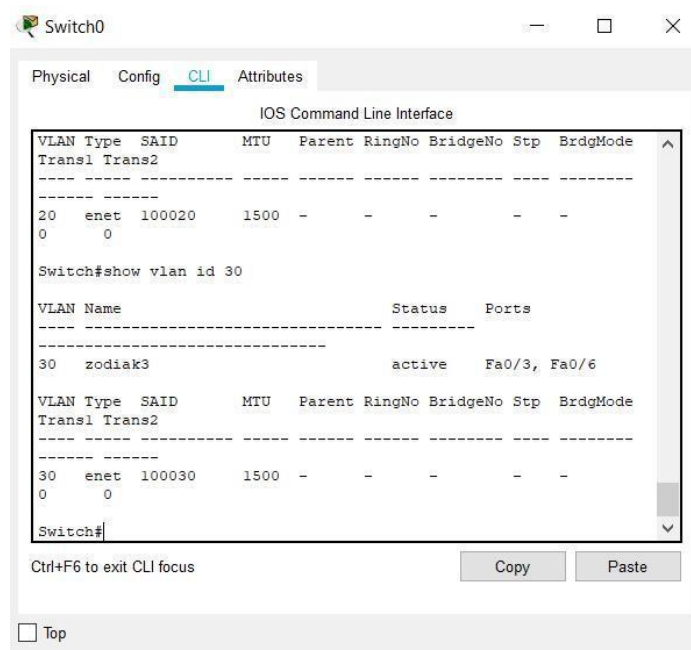
Switch#

Ctrl+F6 to exit CLI focus

Copy Paste

Top

Ketik show vlan id 30 (informasi vlan 30)



The screenshot shows a network switch interface with tabs for Physical, Config, CLI, and Attributes. The CLI tab is active, displaying the output of the command 'show vlan id 30'. The output includes a table of VLAN details and a summary of the VLAN configuration.

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

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
30	enet	100030	1500	-	-	-	-	-

Switch#

Ctrl+F6 to exit CLI focus

Copy Paste

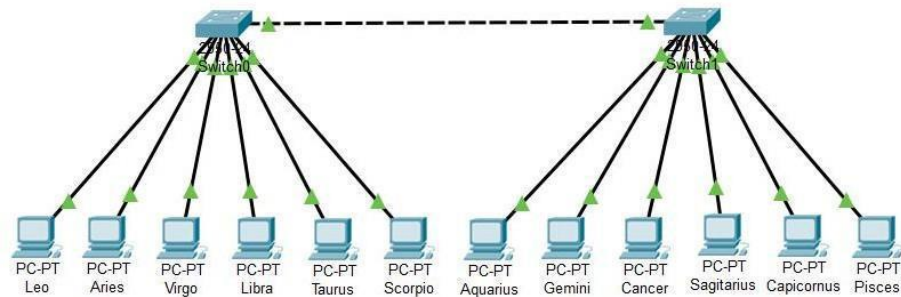
Top

Tugas 6A :

No	Variabel	Nilai		
		vlan id 10	vlan id 20	vlan id 30
1	Nomor VLAN	10	20	30
2	Nama VLAN	zodiak1	zodiak2	zodiak3
3	Port	Fa0/1, Fa0/4	Fa0/2, Fa05	Fa0/3, Fa0/6
4	Status	active	active	Active

Kegiatan 2. Topologi 2

1. Menggunakan cisco packet tracer buat topologi berikut :



2. Konfigurasi VLAN trunking pada switch 1.

```
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)#int Fa 0/6
Switch(config-if)#switchport mode trunk

% Invalid input detected at '^' marker.

Switch(config-if)#switchport mode trunk

Switch(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/6,
changed state to down

Switch(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/6,
changed state to up

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

Switch#show int Fa 0/6 switchport
Name: Fa0/6
```

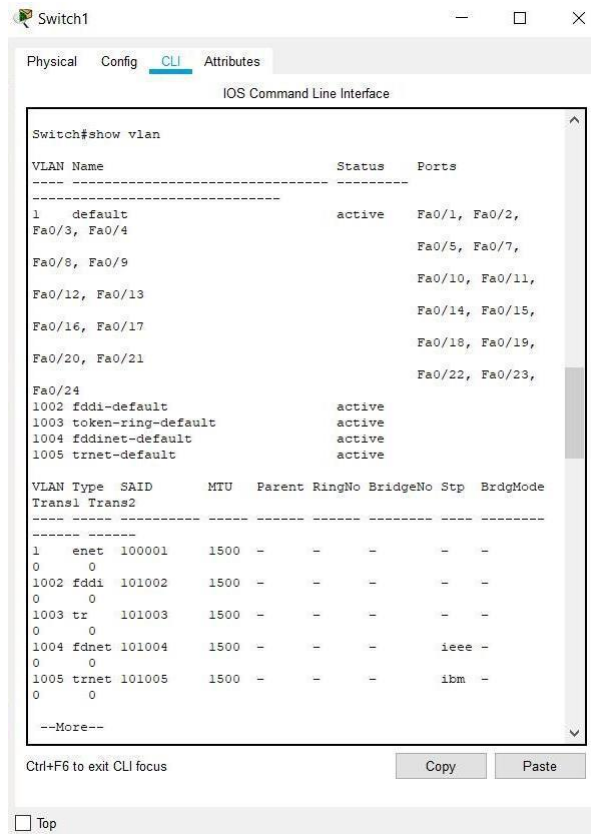
Melihat konfigurasi :

Ketik show int Fa 0/6 switchport

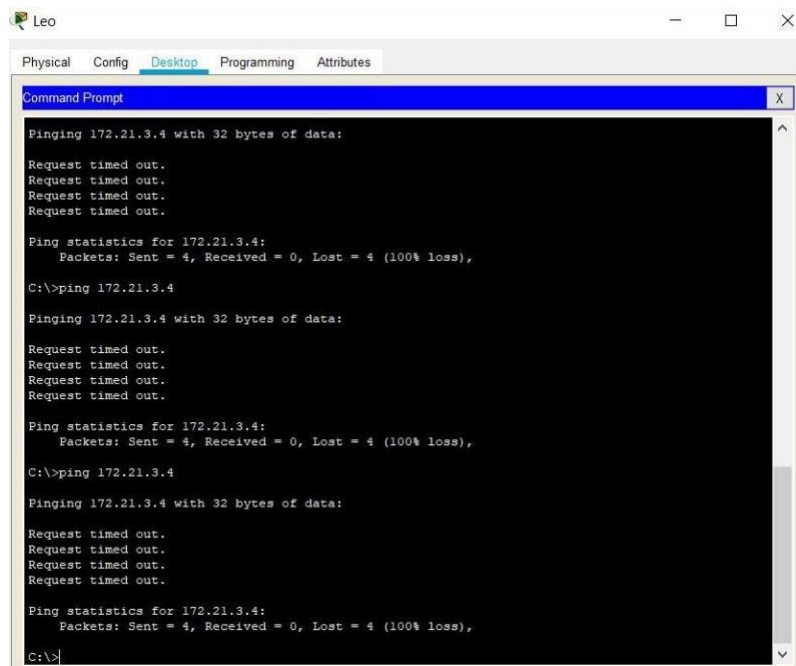
```
Switch1
Physical Config CLI Attributes
IOS Command Line Interface

Switch#show int Fa 0/6 switchport
Name: Fa0/6
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
```

Ketik show vlan



3. Lakukan PC Leo ke PC Pisces



4. Konfigurasi VLAN trunking pada switch 2

Physical Config **CLI** Attributes

IOS Command Line Interface

```
%SPANTREE-2-RECV_PVID_ERR: Received 802.1Q BPDU on non trunk
FastEthernet0/7 VLAN1.

%SPANTREE-2-BLOCK_PVID_LOCAL: Blocking FastEthernet0/7 on VLAN0001.
Inconsistent port type.

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/7,
changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/7,
changed state to up

Switch>
Switch>enable
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#int fa 0/7
Switch(config-if)#switchport mode trunk
Switch(config-if)#exit
Switch(config)#
Switch(config)#exit
Switch#
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

5. Melihat hasil konfigurasi trunking pada switch 2

Switch2

Physical Config **CLI** Attributes

IOS Command Line Interface

```
Switch#
Switch#show vlan

VLAN Name                Status    Ports
-----
1    default                active    Fa0/1, Fa0/2, Fa0/3,
Fa0/4                      Fa0/5, Fa0/6, 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
-----
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

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


Uji coba ping

PC Leo ke PC Aquarius

```
C:\>ping 172.21.1.3

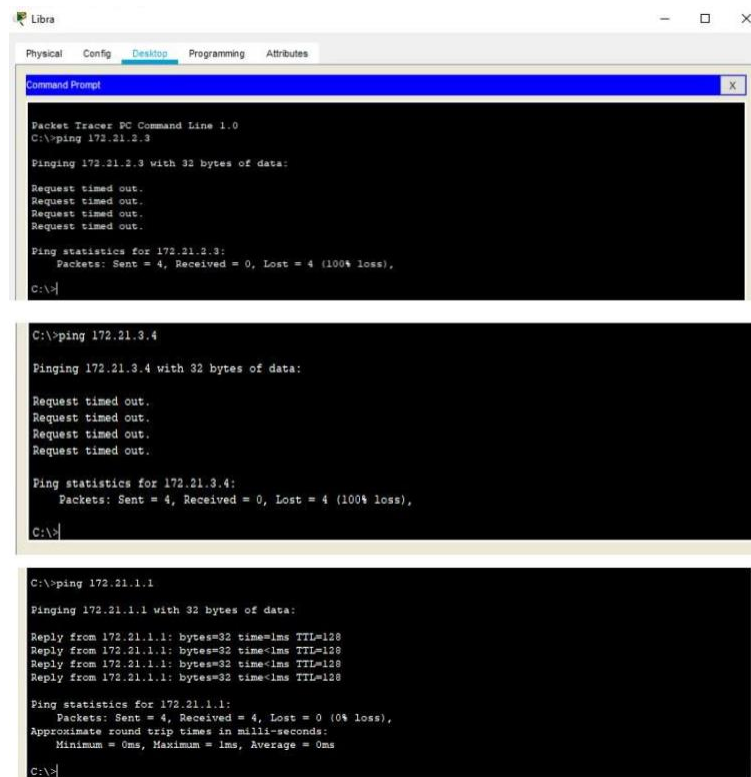
Pinging 172.21.1.3 with 32 bytes of data:

Reply from 172.21.1.3: bytes=32 time=118ms 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 = 118ms, Average = 25ms

C:\>
```

PC Libra ke PC Cancer, PC Pisces, PC Leo



PC yang mempunyai vlan sama (sama – sama vlan 10, dst) akan bisa berkomunikasi meskipun switchnya berbeda, tetapi jika vlan nya tidak sama maka tidak akan bisa berkomunikasi.