

# *Tugas Praktikum Jaringan komputer*

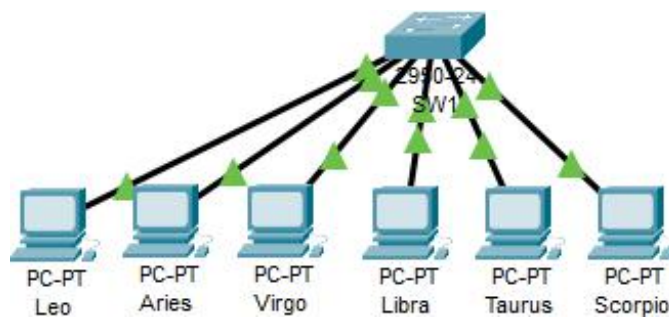
## *Modul 4*

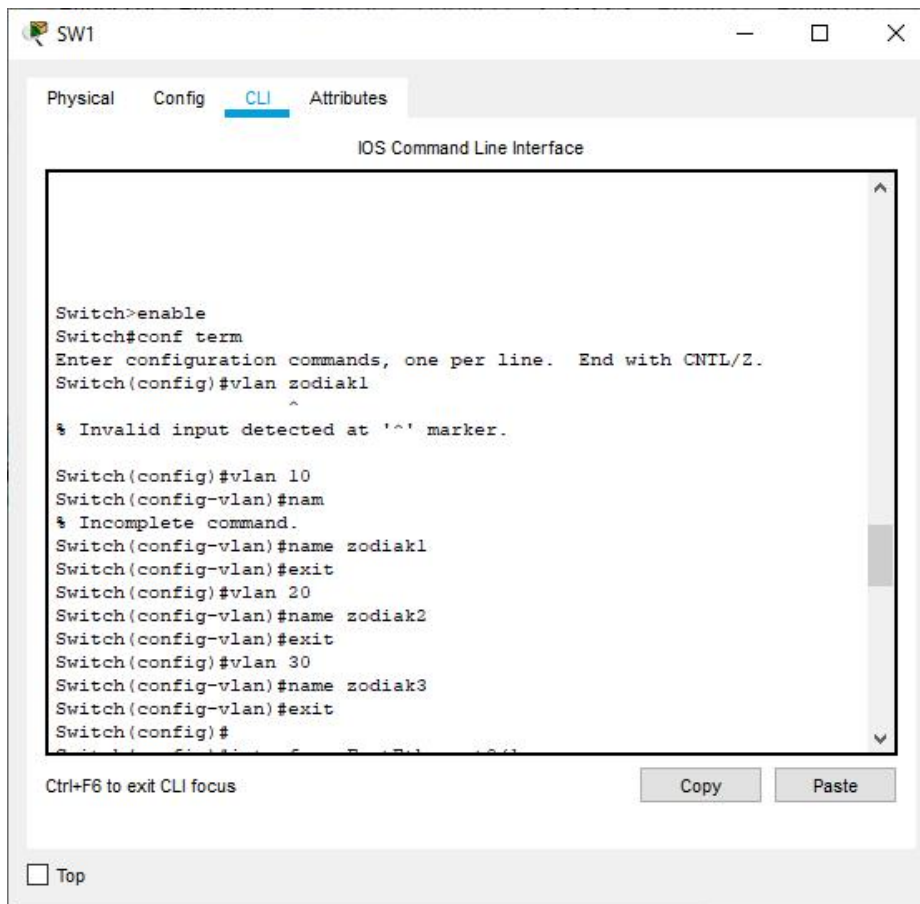
*Nama : Nanang dwi prasetyo*

*Nim : L200180157*

*Kelas : D*

### *1. Kegiatan 1. Topologi1*





SW1

Physical honfig ?LI Attributes

IOSCommandLineInterface

```
Swicch(conSig)#incothernet•3/1
Swicch(conSig-iS)#swizchporz mofe access
Switch(ccnSig-iS)#switchpcrt access vlan1•J

$ Invalid inpuc iececced ac " ' marker.

Switch(ccnSig-iE)#
Swicch$
$SYS-9-CJNFIG_I: ConSiguref 2rom console by console
'Z
Switch#
Swicch#conSigure cersñnal
inter ccnsigurationc cceonanfs, cne per line. ind with CNIL/Z.
Switch(ccnSig)ginterface Fast=thernet•3/1
Swicch conSig-iS)#
Switch(ccnSig-iS)#exit
Switch(ccnSig)#interSace FastZthernet•3./1
Switch(ccnSig-iE)gswitchpcrt mcde access
Swicch conSig-iS)#swizchporz access vlanlo

S Invalid inputdetectedat 'marker.

Switch(ccnSig-iS)#switchpcrt access vlan 13
Switch(ccnSig-iE)#
Switch(ccnSig-iE)#exit
```

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SW1

Physical honfig ?LI Attributes

IOSCommandLineInterface

```
Switch(ccnSig)#inter@ace Fast=thernet•3./4
Switch(ccnSig-iE)#switchpcrt access vlan 1•3
Switch(ccnSig-i*)gswitchpcrc mcde access
Swicch conSig-iS)#swizchporc access vlan 10
Swicch conSig-iS)#eniz
Switch(ccnSig)#interSace Fastithernet•1/m
Switch(ccnSig-iS)#switchpcrt mcde access
Switch(ccnSig-iS)#switchpcrt access vlan :L3
Switch(ccnSig-iE)ginter?ace Fast=thernet•3/6
Switch(ccnSig-iE)gswitchpcrt mcde access
Swicch conSig-iS)#swizchporc access vlan o0
Swicch conSig-iS)#eniz
Swicch(conSig)##inlerSace Fascicherne1'3./3

t Invalid input detected at ' ' marker.

Switch(ccnSig)#inter@ace Fast=thernet'3./3
Switch(conSig-i*)#switchporc mcde access
Swicch conSig-iS)#swizchporc access vlan 3'3
Swicch conSig-iS)#incothernet'3/f
Switch(ccnSig-iS)#switchpcrt mcde access
Switch(ccnSig-iS)#switchpcrt access vlan 3'3
Switch(ccniig-ii)#exit
Switch(ccnSig)#
```

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## Tugas 6A:

SW1

Physical Config **CLI** Attributes

IOS Command Line Interface

```
Switch#show vlan brief
```

VLAN Name	Status	Ports
1 default	active	Fa0/7, Fa0/8, Fa0/9, 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	

```
Switch#show vlan id 2
VLAN id 2 not found in current VLAN database
Switch#show vlan id 10
```

Ctrl+F6 to exit CLI focus

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SW1

Physical Config **CLI** Attributes

IOS Command Line Interface

```
VLAN id 2 not found in current VLAN database
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

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

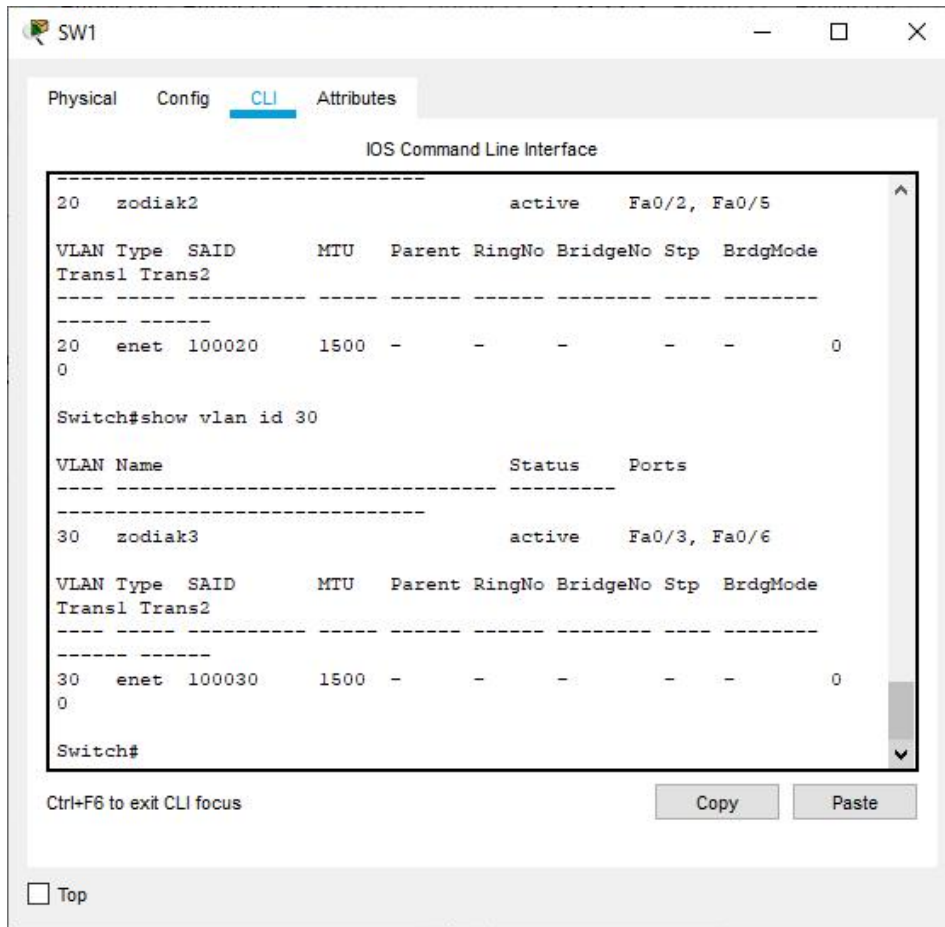
VLAN Name	Status	Ports
20 zodiak2	active	Fa0/2, Fa0/5

VLAN Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BrdgMode
Trans1	Trans2						

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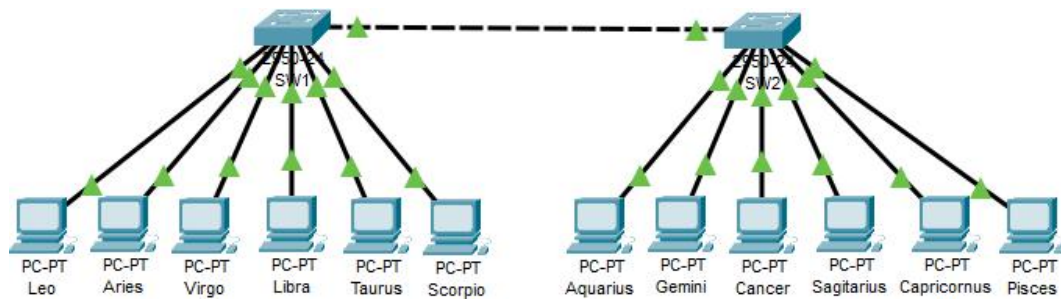


No	Variable	Nilai
1.	Nomor VLAN	10
2.	Nama VLAN	zodiak1
3.	Port	Fa0/1, Fa0/4
4.	Status	active
No	Variable	Nilai
1.	Nomor VLAN	20
2.	Nama VLAN	zodiak2
3.	Port	Fa0/1, Fa0/4
4.	Status	active
No	Variable	Nilai
1.	Nomor VLAN	30
2.	Nama VLAN	zodiak3
3.	Port	Fa0/1, Fa0/4
4.	Status	active

#### Tugas 6B:

Untuk vlan yang ber-id kan 10, 20, dan 30 memiliki nama VLAN, port yang terhubung dan juga status dari VLAN aktif. Sedangkan untuk VLAN ber id 2,3,4 tidak memiliki nama VLAN, port yang terhubung, dan status.

## 2. Kegiatan 2. Topologi2



SW1

Physical Config CLI Attributes

IOS Command Line Interface

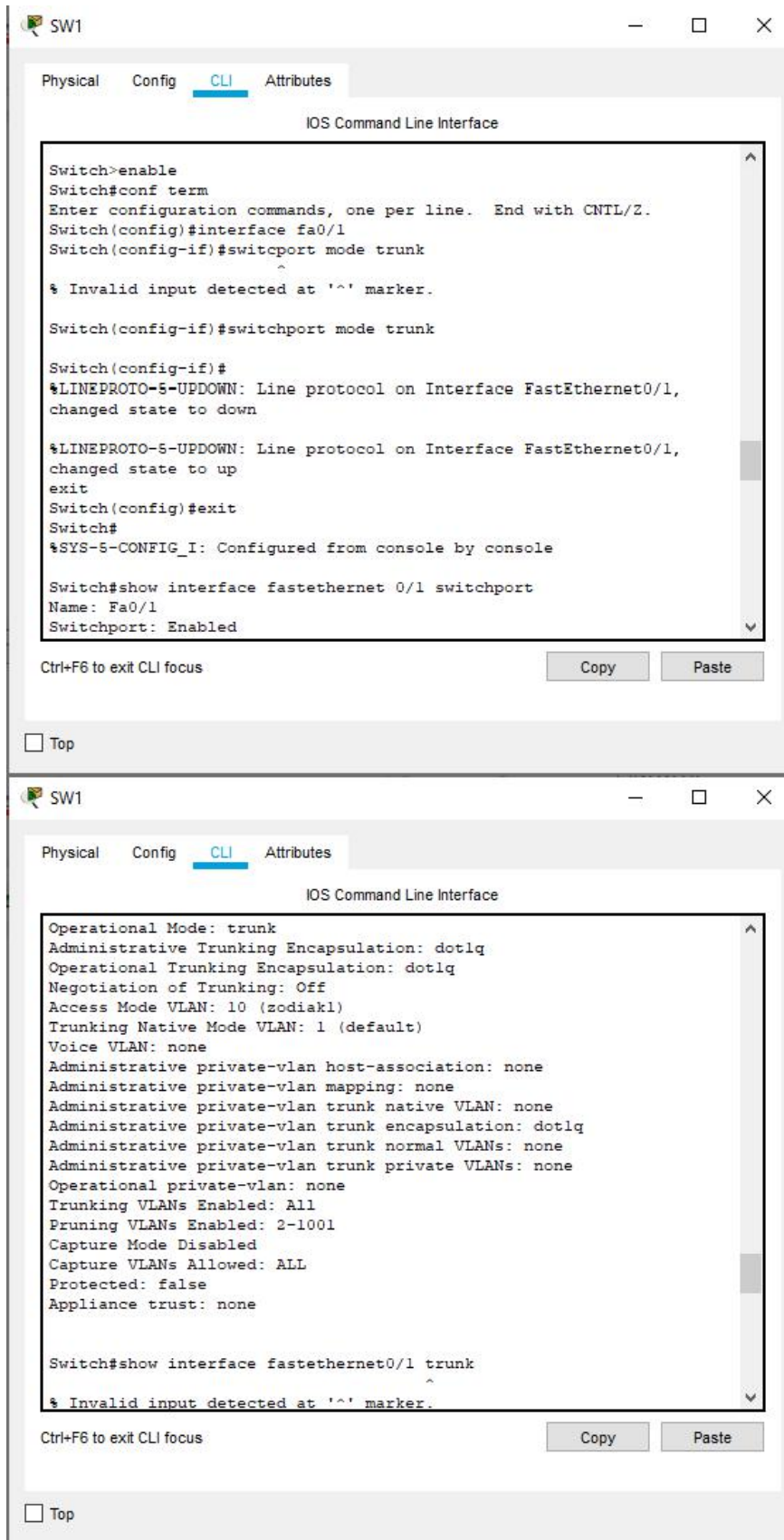
```
Switch(config)#interface FastEthernet0/1
Switch(config-if)#
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#interface FastEthernet0/4
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#interface FastEthernet0/5
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
Switch(config)#interface FastEthernet0/3
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#interface FastEthernet0/6
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#exit
Switch(config)#interface fa0/24
```

Ctrl+F6 to exit CLI focus

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## Tugas 7A:



The image shows two screenshots of a network switch's Command Line Interface (CLI) for device SW1. The top screenshot shows the configuration of interface fa0/1 as a trunk port. The bottom screenshot shows the operational mode of the trunk port.

**Top Screenshot: Configuration Session**

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)#interface fa0/1
Switch(config-if)#switchport mode trunk
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 FastEthernet0/1,
changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1,
changed state to up
exit
Switch(config)#exit
Switch#
%SYS-5-CONFIG_I: Configured from console by console

Switch#show interface fastethernet 0/1 switchport
Name: Fa0/1
Switchport: Enabled
```

Ctrl+F6 to exit CLI focus Copy Paste

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**Bottom Screenshot: Operational Mode**

Physical Config **CLI** Attributes

IOS Command Line Interface

```
Operational Mode: trunk
Administrative Trunking Encapsulation: dot1q
Operational Trunking Encapsulation: dot1q
Negotiation of Trunking: Off
Access Mode VLAN: 10 (zodiak1)
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#show interface fastethernet0/1 trunk
Switch#
% Invalid input detected at '^' marker.
```

Ctrl+F6 to exit CLI focus Copy Paste

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## IOSCommandLineInterface

```
Switch#shcw vlan

VLAN Name                Status    Ports

1    default                active    Fa0/7, Fa0/8, Fa0/9,
Fa3./1'3                Fa3./11,Fa3./1S;,
Fa3./13,Fa3./J/14
Fa3./1z,Fa3./Jj18
Fa3./21,Fa3./==
1'3  zc:Jiak1              active    Fa'J/3,Fa'3/4
='3  zc:Jiak=              active    FaO/4
3'3  zcdial:3              active    Fa3Jx, Fa3J9
1'33= *idi-default        active    Fa3J/3, Fa3J/?
1'33zoDen-ring-de*aulc    active
1'334 Sidinet-default     active
1'33?trnet-default        active

VLAN lype ShI3           tIU   la z ens ll ngNc Bz1 4gelfc Szp      Bz JgNc4e
Transl Iranso
```

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## IOSCommandLineInterface

```
3'3  enel13J'33'3        1500      0
1002 fddi 101002         1500      0

1'334Sdnet131'304        1500      ieee      0
1'33ozrnecl31'3J9        1500      ibm        0

VLAN lype ShI3           MTU   Parent RingNo BridgeNo Stp  BrdgMode
Transl Irans=

nemcte SPAN VLANs

Primary Secondary lype      Ports

Swizch#
```

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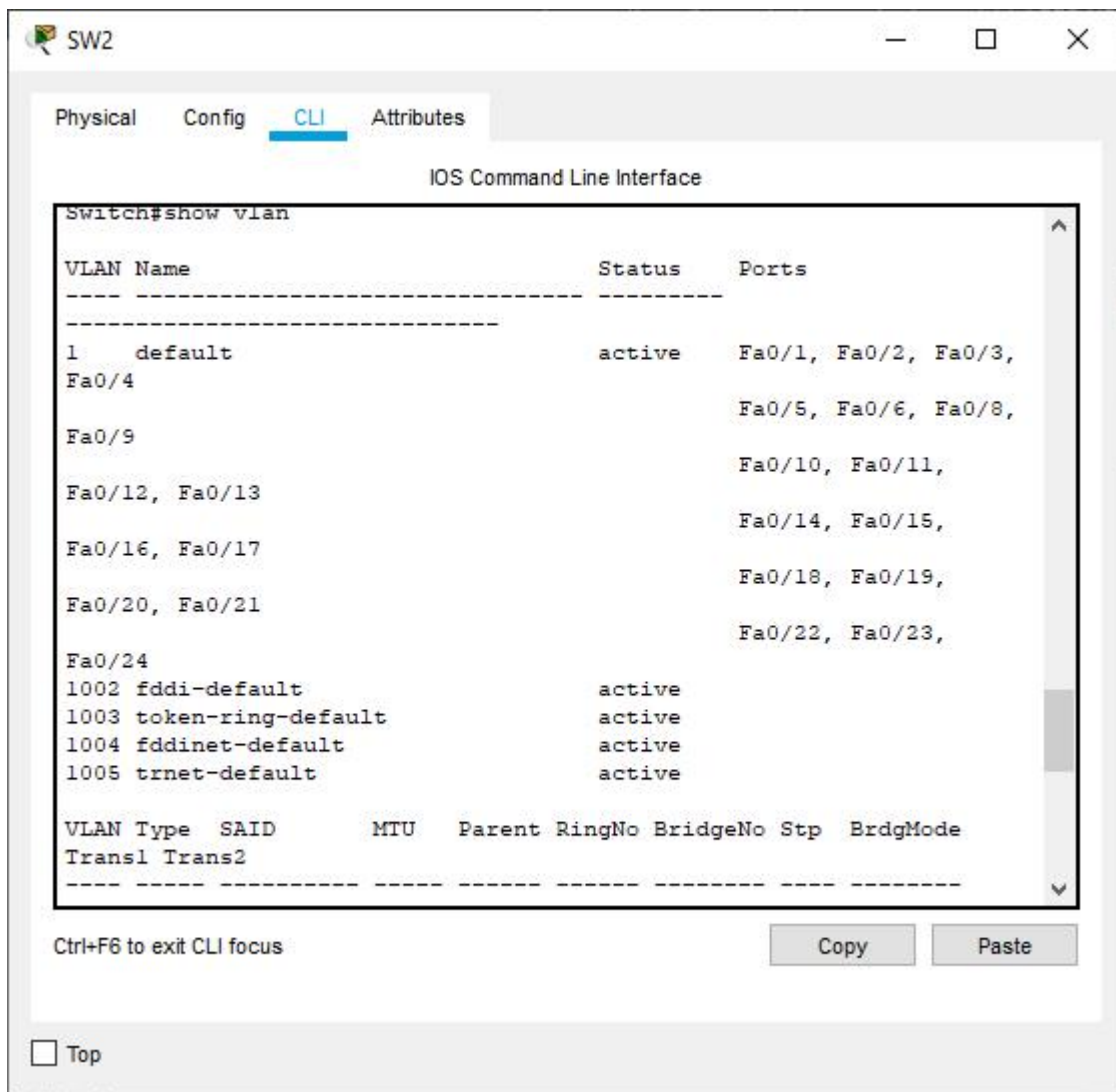
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### Tugas 8A:

Mengapa PC pisces yang berada di switch 2 bisa menerima status “reply” dari PC leo yang berada di switch 1. Karena switch 1 telah memiliki trunking yang bisa mengabungkan trafik VLANnya dengan VLAN di switch lain.

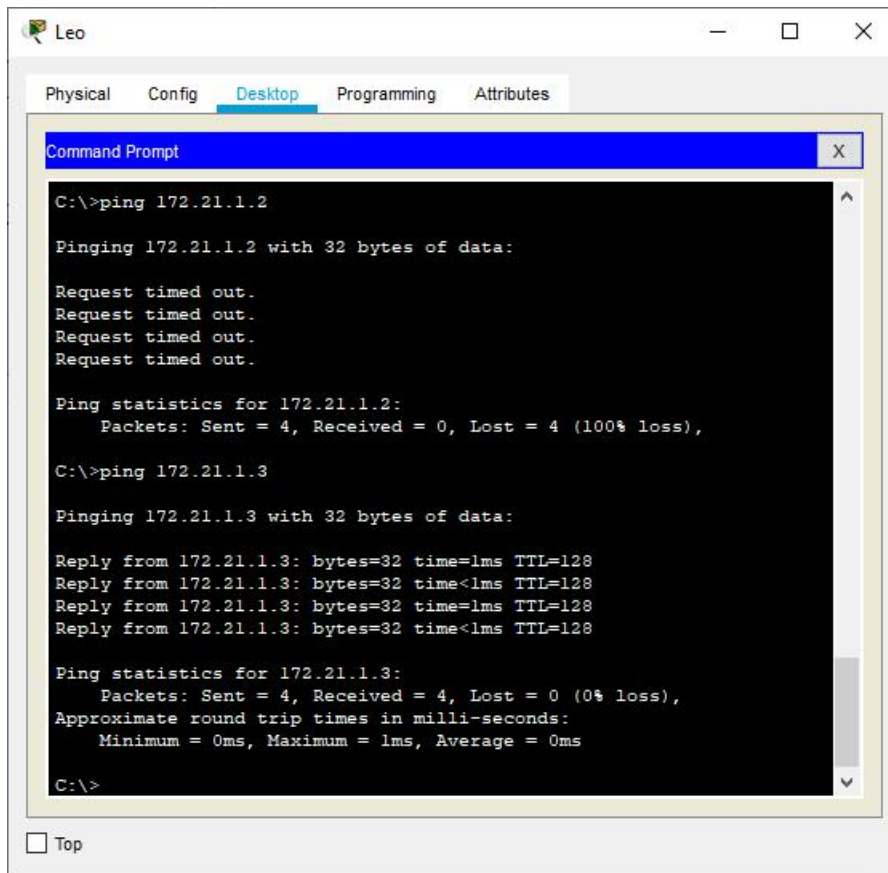


### Tugas 10A:

Port pada fastethernet 0/7 trunking dengan switch 1

## Tugas 12A:

PC Leo ke PC Aries dan PC Leo ke PC Aquarius



The screenshot shows a window titled "Leo" 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 172.21.1.2`, which results in four "Request timed out." messages and a 100% loss of packets. The second command is `C:\>ping 172.21.1.3`, which results in four successful replies from 172.21.1.3 with 0ms round trip times and 0% loss of packets.

```
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

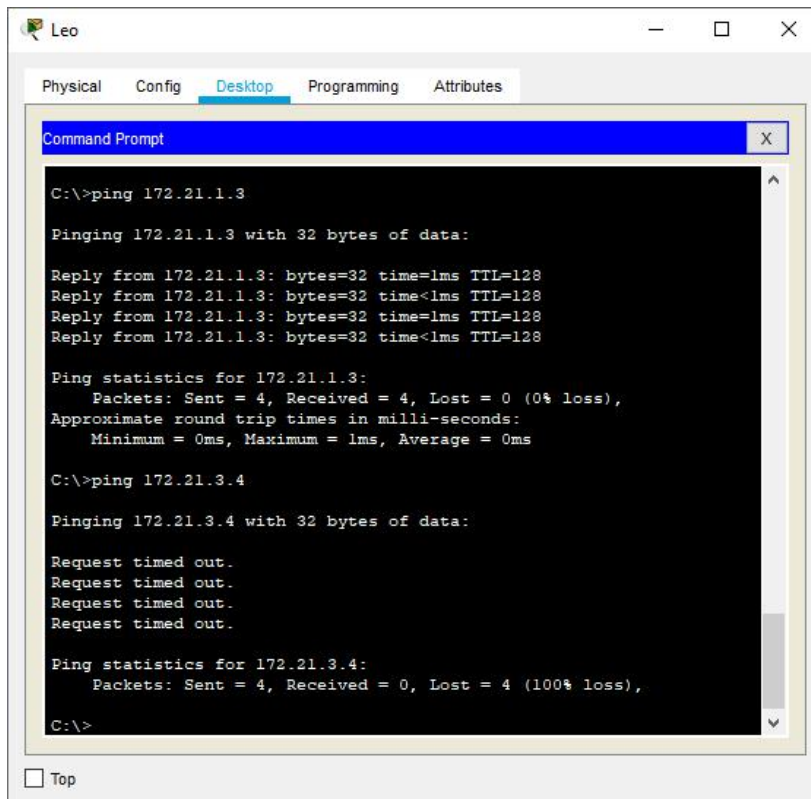
Pinging 172.21.1.3 with 32 bytes of data:

Reply from 172.21.1.3: bytes=32 time=1ms TTL=128
Reply from 172.21.1.3: bytes=32 time<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 = 1ms, Average = 0ms

C:\>
```

PC Leo ke PC Pisces



The screenshot shows a window titled "Leo" 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 172.21.1.3`, which results in four successful replies from 172.21.1.3 with 1ms round trip times and 0% loss of packets. The second command is `C:\>ping 172.21.3.4`, which results in four "Request timed out." messages and a 100% loss of packets.

```
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<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 = 1ms, Average = 0ms

C:\>ping 172.21.3.4

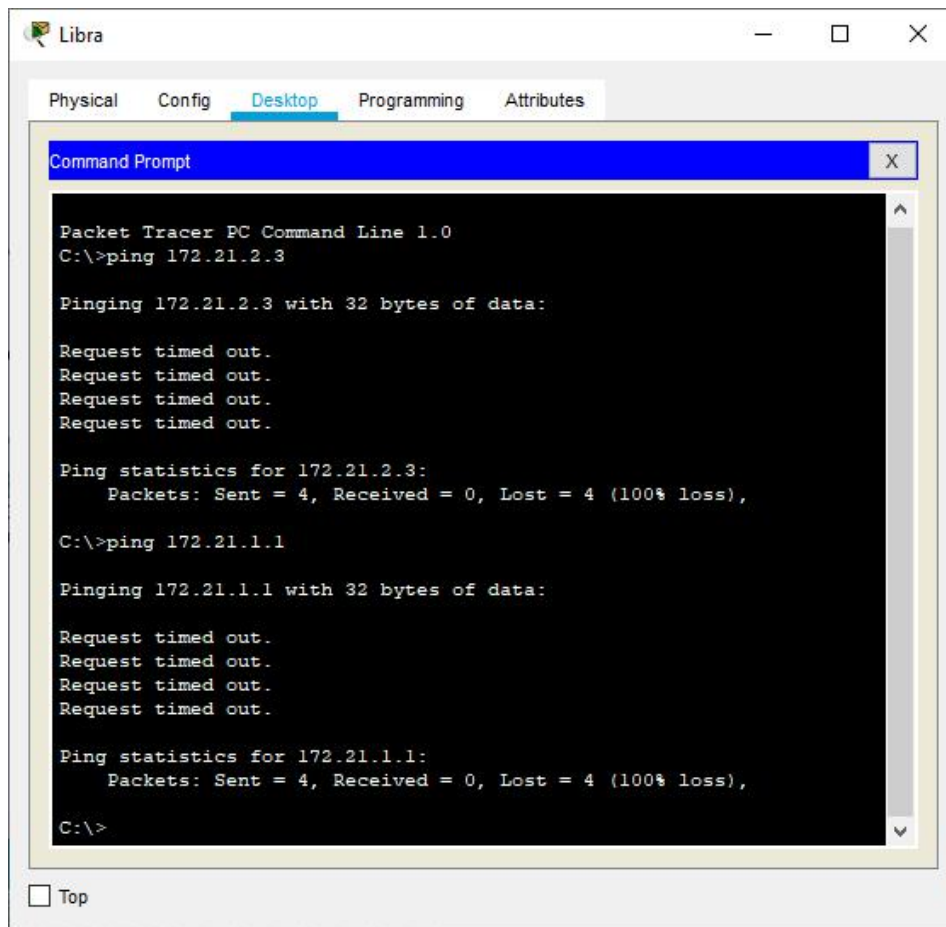
Pinging 172.21.3.4 with 32 bytes of data:

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:\>
```

*PC Libra ke PC Cancer dan PC Libra ke PC Leo*



*PC Leo dapat berkomunikasi dengan PC Aries karena mempunyai VLAN yang sama, meski berbeda switch, tapi untuk ke PC Aquarius gagal karena memiliki VLAN yang berbeda.*