

## MODUL 4

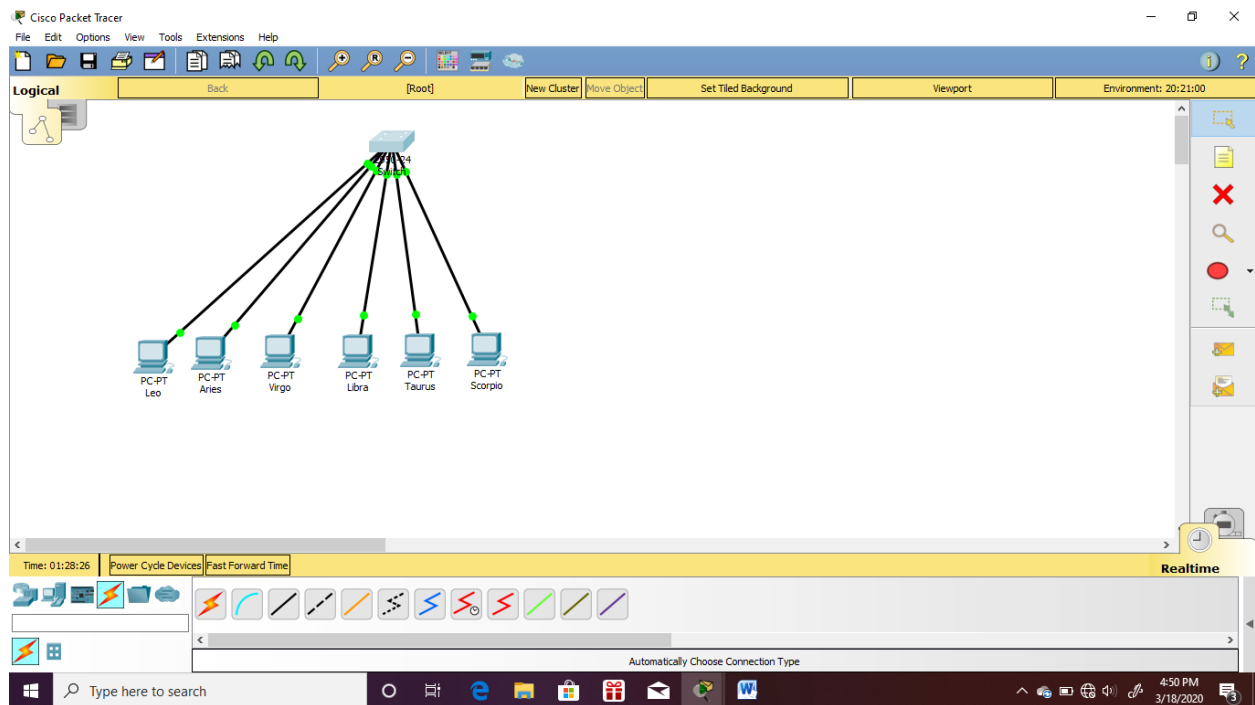
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### Kegiatan 1



## Konfigurasi switch

The screenshot shows the Cisco Packet Tracer interface. On the left, a network diagram displays a central switch connected to five PCs: Leo, Aries, Virgo, Libra, and Taurus. The main window shows the 'Switch' configuration window with the 'CLI' tab selected. The configuration commands entered are as follows:

```
Switch(config-if)#^Z
Switch#
%SYS-6-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)#vlan 30
Switch(config-vlan)#name sodiak3
Switch(config-vlan)#exit
Switch(config)#interface FastEthernet0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#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)#exit
```

The bottom status bar shows the time as 01:31:55 and the environment as 22:06:00.

The screenshot shows the same Cisco Packet Tracer interface. The 'Switch' configuration window now shows the completion of the configuration and the output of the 'show vlan brief' command:

```
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)#exit
Switch(config)#interface FastEthernet0/6
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#exit
Switch(config)#^Z
Switch#
% Invalid input detected at '^' marker.

Switch(config)#^Z
Switch#
%SYS-6-CONFIG_I: Configured from console by console

Switch#show vlan brief
```

VLAN Name	Status	Ports
1 default	active	Fa0/7, Fa0/8, Fa0/6, Fa0/10

The bottom status bar shows the time as 01:33:34 and the environment as 22:56:00.

## Informasi vlan secara keseluruhan(show vlan brief)

The image shows the Cisco Packet Tracer interface. On the left, a network topology is visible with a central switch connected to five PCs: Leo, Aries, Virgo, Libra, and Taurus. On the right, a CLI window for the switch is open, displaying the output of the 'show vlan brief' command.

```
Switch#show vlan brief
```

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
10 zodiak1	active	Fa0/23, Fa0/24
20 zodiak2	active	Fa0/1, Fa0/4
30 zodiak3	active	Fa0/2, Fa0/5, 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 3  
VLAN id 3 not found in current VLAN database

## Informasi vlan 10, vlan 20, dan vlan 30

The image shows the Cisco Packet Tracer interface with the CLI window for the switch. The output displays detailed information for VLANs 10, 20, and 30.

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

VLAN Name	Status	Ports
10 zodiak1	active	Fa0/1, Fa0/4

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

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

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

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

**Tugas 6A:** Tabel informasi VLAN

No	Variabel	Nilai
1	Nomor VLAN	10
2	Nama VLAN	zodiak1
3	Port	Fa0/1, Fa0/4
4	Status	active

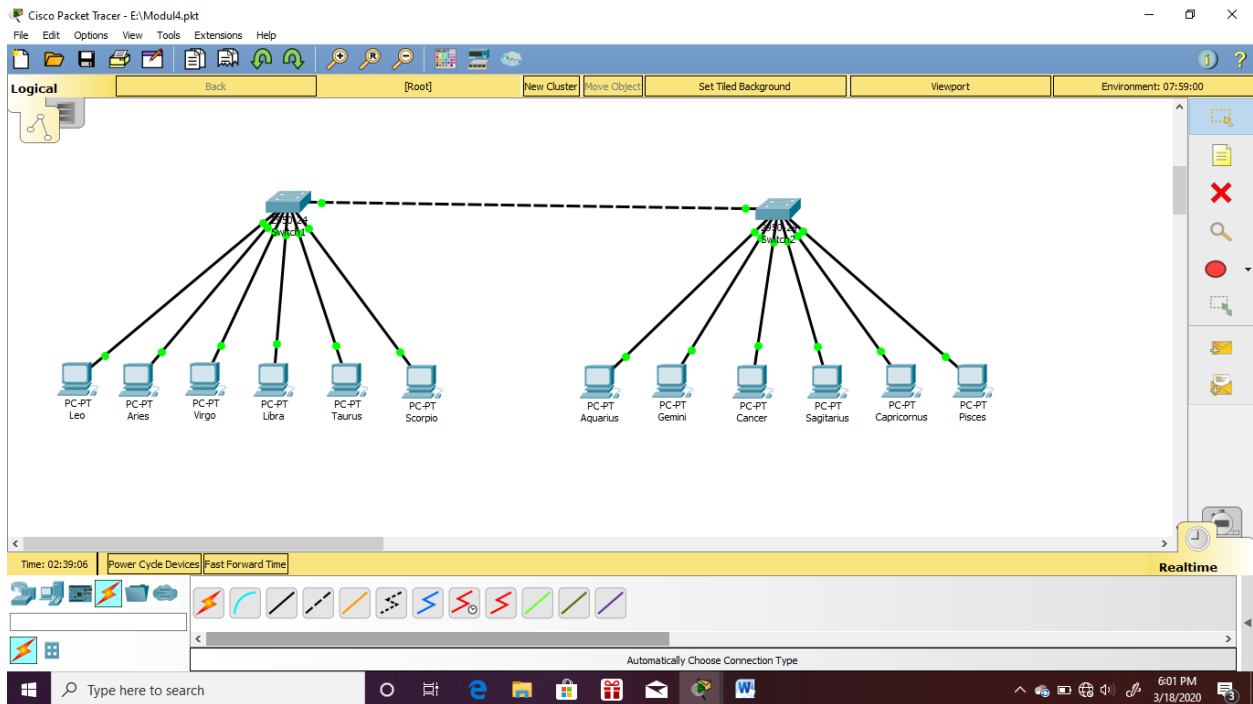
No	Variabel	Nilai
1	Nomor VLAN	20
2	Nama VLAN	zodiak2
3	Port	Fa0/2, Fa0/5
4	Status	active

No	Variabel	Nilai
1	Nomor VLAN	30
2	Nama VLAN	zodiak3
3	Port	Fa0/3, Fa0/6
4	Status	active

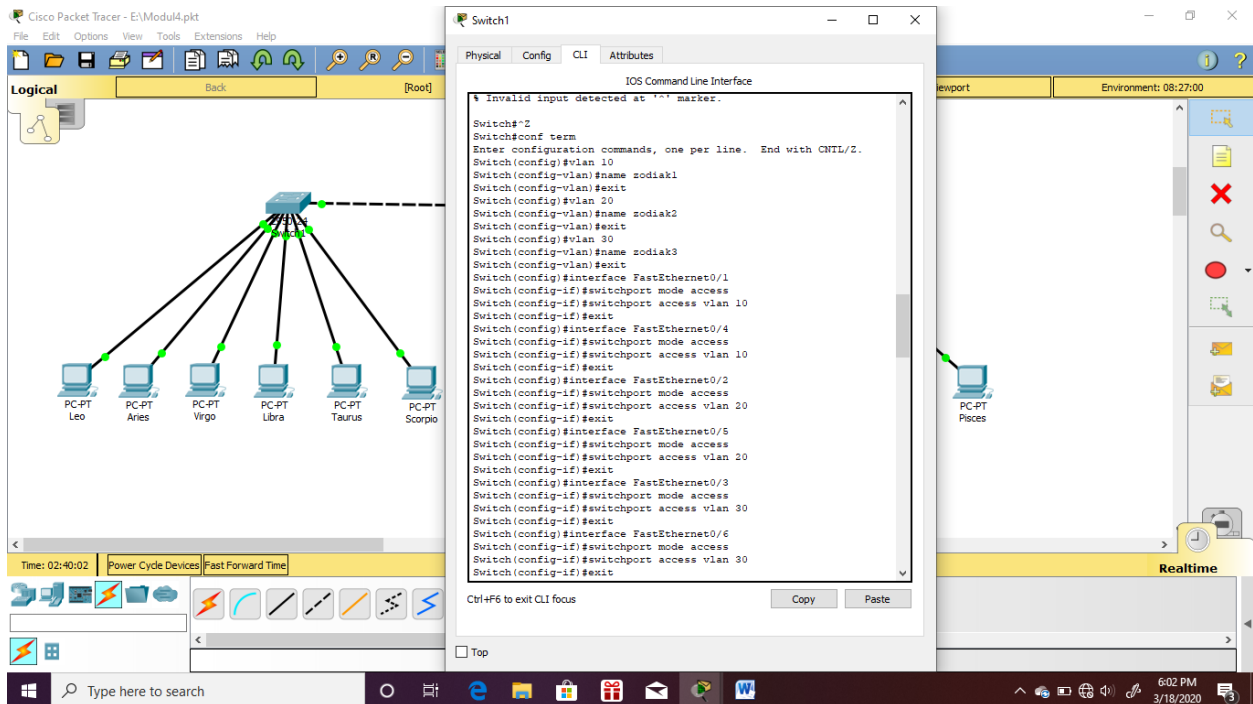
**Tugas 6B :** Penjelasan singkat

VLAN yang ada pada switch antara lain VLAN nomor 10 dengan nama zodiak1, VLAN nomor 20 dengan nama zodiak2, dan VLAN nomor 30 dengan nama zodiak3. Masing-masing VLAN ber-status active. VLAN 10 berisi port Fa0/1 (FastEthernet0/1) dan Fa0/4, VLAN 20 berisi port Fa0/2 dan Fa0/5, dan VLAN 30 berisi port Fa0/3 dan Fa0/6.

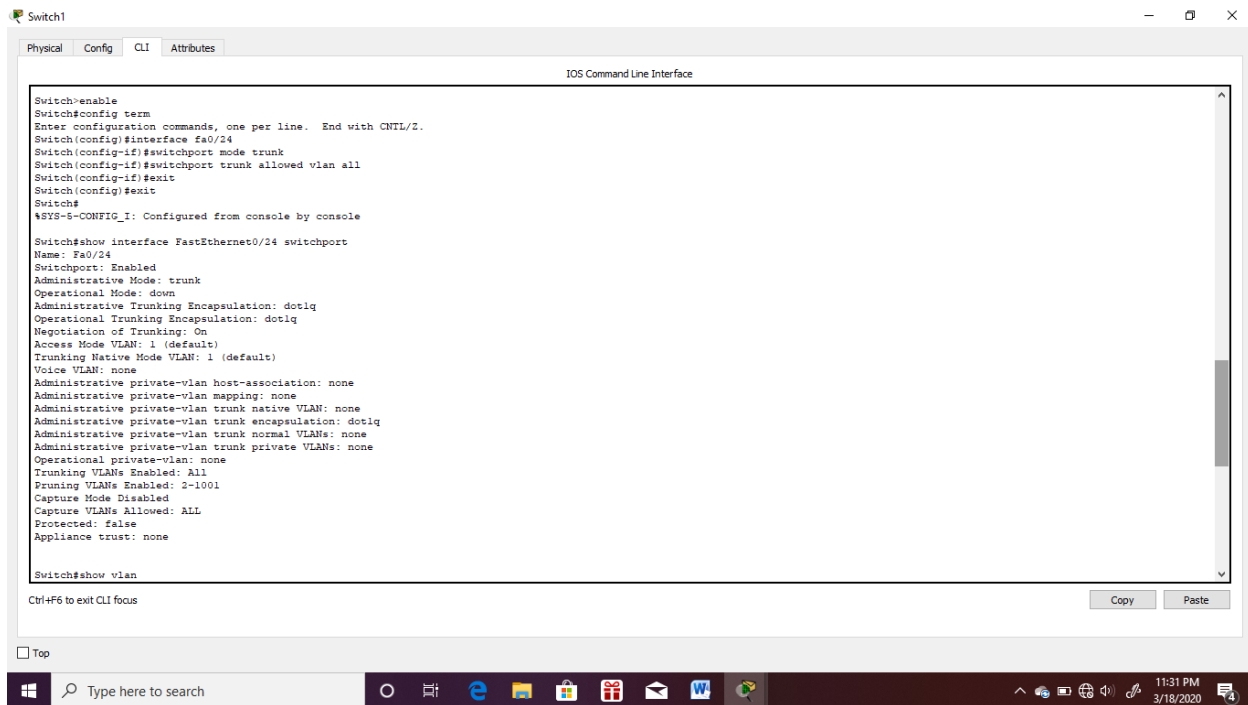
## Kegiatan 2



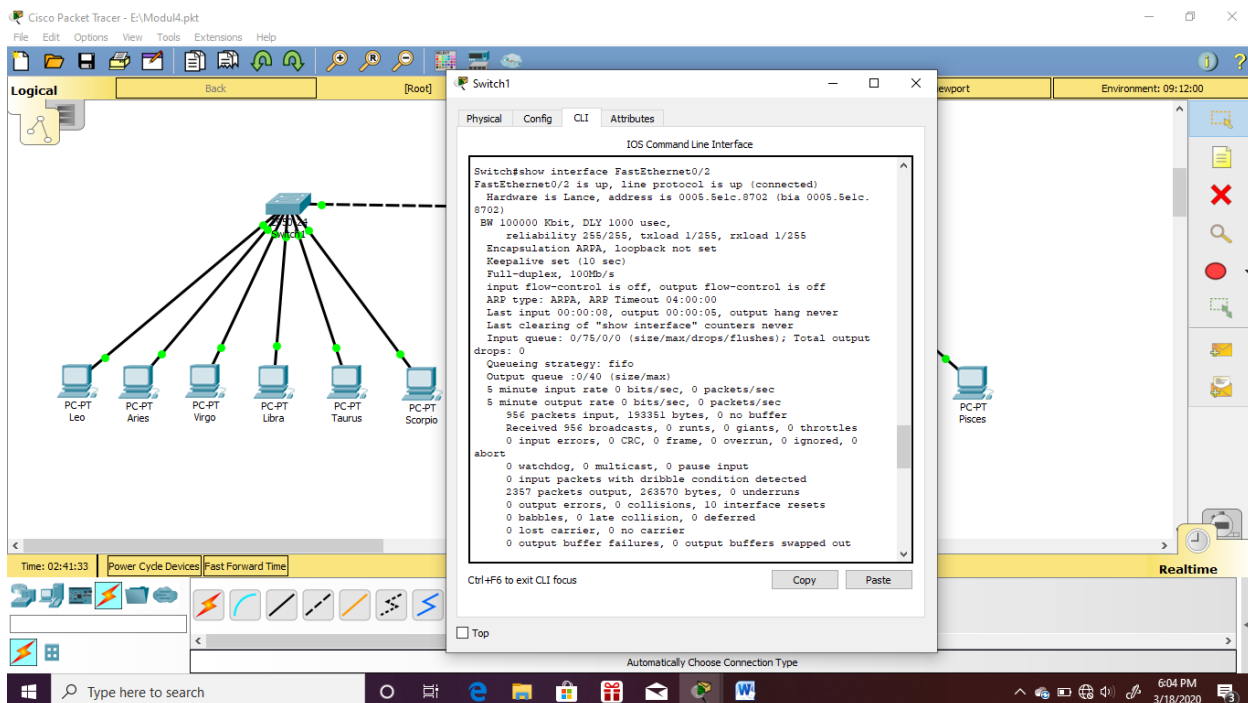
## Konfigurasi Switch1

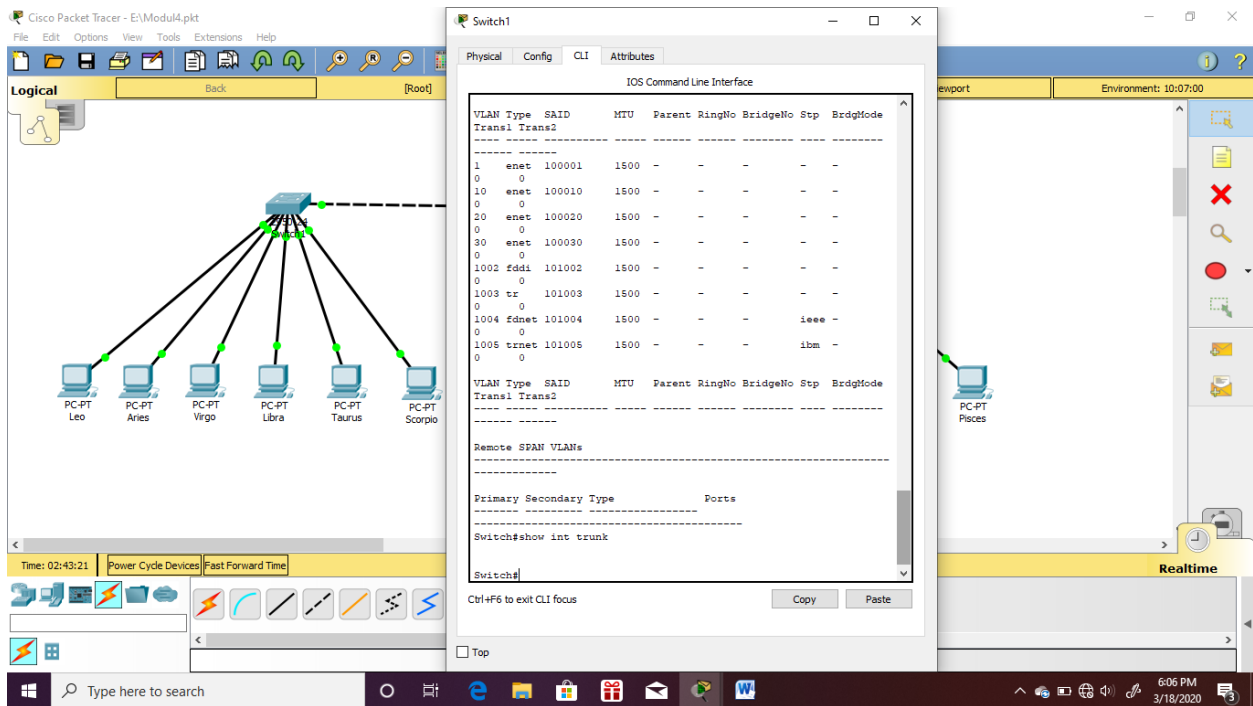
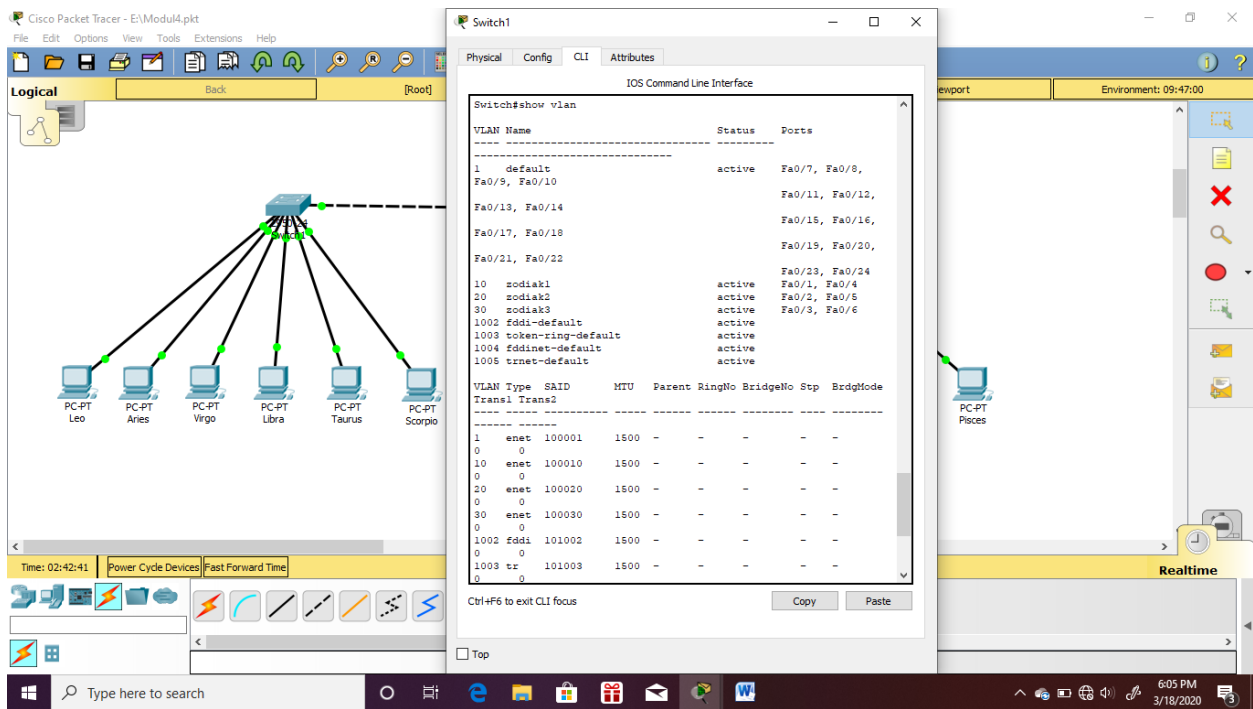


## Konfigurasi VLAN trunking Switch1



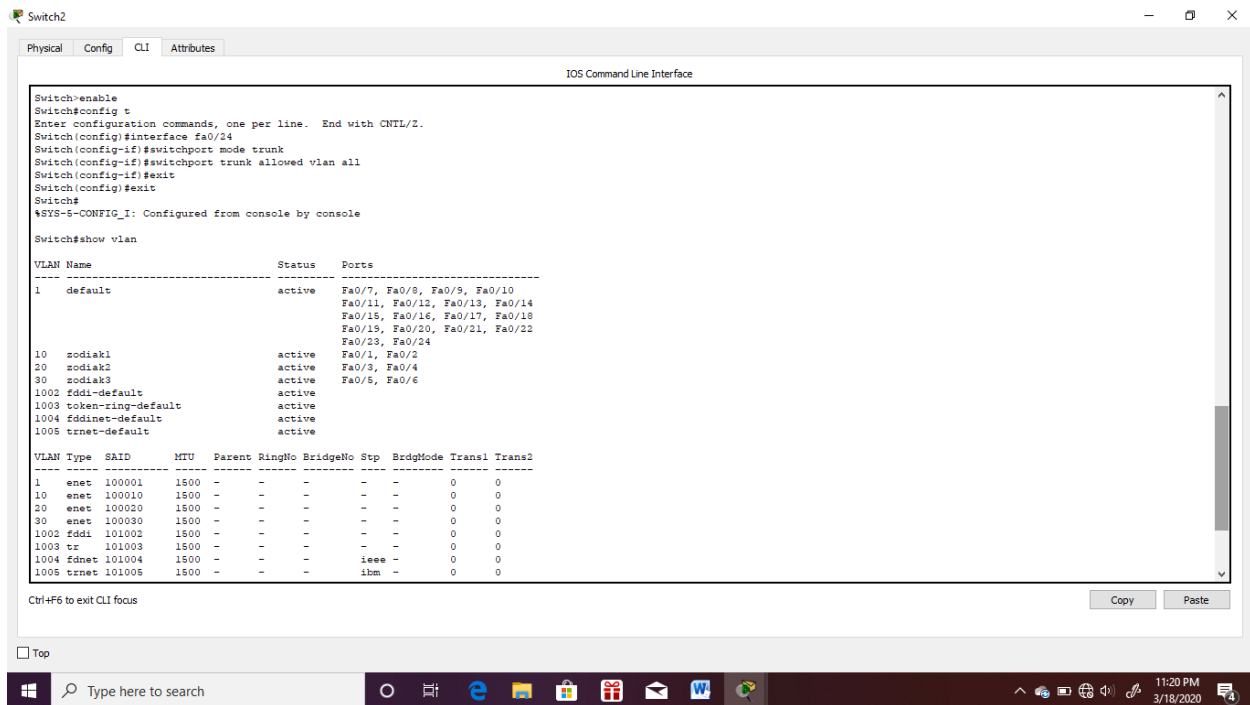
## Melihat konfigurasi trunking





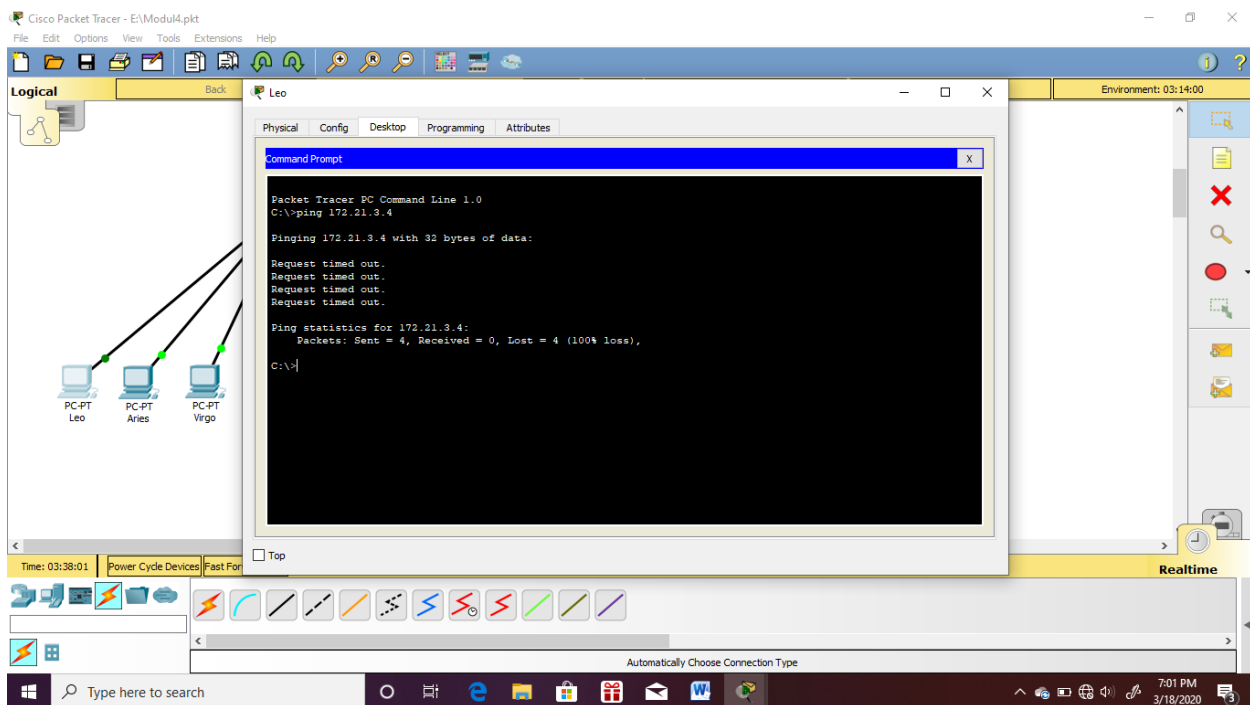
## Tugas 7A: Penjelasan hasil Trunking

Trunking sendiri digunakan untuk menyediakan akses jaringan bagi banyak klien dengan berbagi satu set garis dimana disini yang berperan sebagai jalur utama fa0/24.



## Tugas 8A:

Pinging PC Leo ke PC Pisces



Hasil pingging menunjukkan 'request timed out' karena vlan pada Leo dan vlan pada Pisces berbeda atau koneksi network nya berbeda maka tidak akan bisa terhubung.



## Konfigurasi Switch 2 & show vlan

The screenshot displays the Packet Tracer interface with a switch configuration window open. The switch is named 'Switch2' and is connected to six PCs: Aquarius, Gemini, Cancer, Sagittarius, Capricornus, and Pisces. The configuration window shows the following commands and output:

```
Switch2>conf t
Switch2(config)#vlan 10
Switch2(config-vlan)#name zodiak1
Switch2(config-vlan)#exit
Switch2(config)#vlan 20
Switch2(config-vlan)#name zodiak2
Switch2(config-vlan)#exit
Switch2(config)#vlan 30
Switch2(config-vlan)#name zodiak3
Switch2(config-vlan)#exit
Switch2(config)#exit
Switch2#
%SYS-5-CONFIG_I: Configured from console by console
Switch2#show vlan
```

VLAN Name	Status	Ports
1 default	active	Fa0/1, Fa0/2, Fa0/3, Fa0/4
10 zodiak1	active	Fa0/5, Fa0/6, Fa0/7, Fa0/8
20 zodiak2	active	Fa0/9, Fa0/10, Fa0/11, Fa0/12
30 zodiak3	active	Fa0/13, Fa0/14, Fa0/15, Fa0/16
1002 fddi-default	active	Fa0/17, Fa0/18, Fa0/19, Fa0/20
1003 token-ring-default	active	Fa0/21, Fa0/22, Fa0/23, Fa0/24
1004 fddinet-default	active	
1005 trnet-default	active	

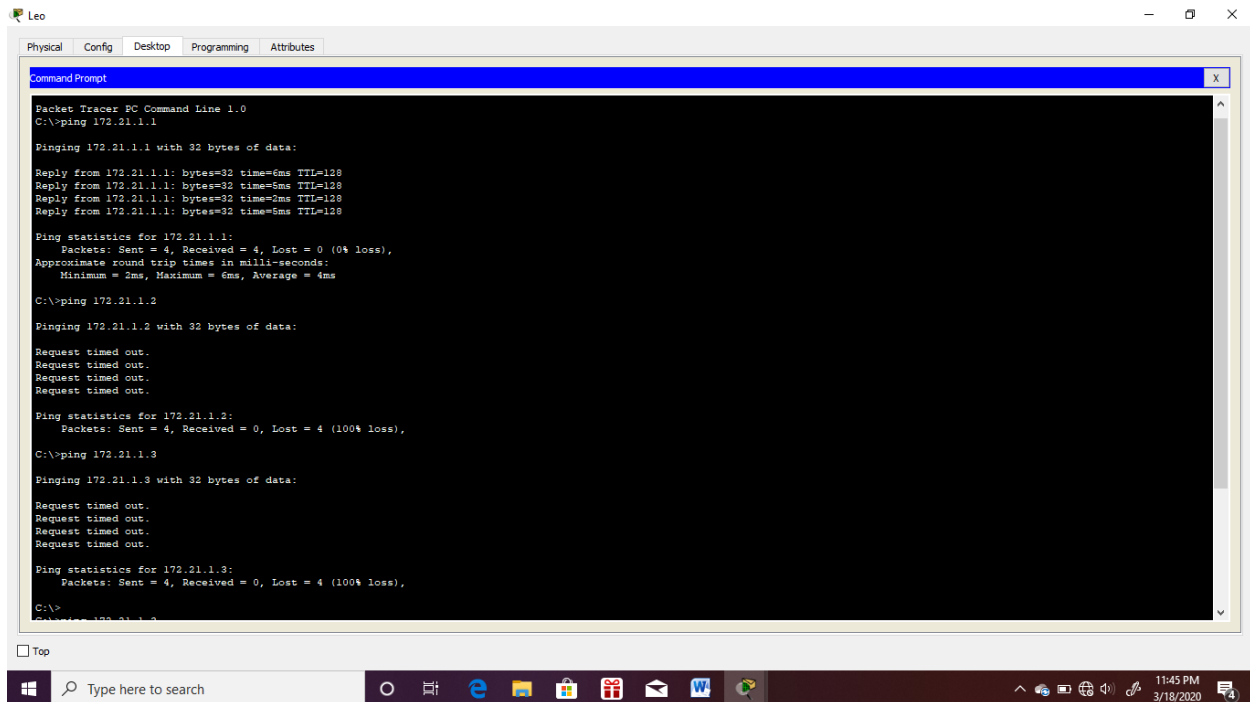
## Konfigurasi port-port switch ke dalam VLAN

The screenshot displays the Packet Tracer interface with a switch configuration window open. The switch is named 'Switch2' and is connected to six PCs: Aquarius, Gemini, Cancer, Sagittarius, Capricornus, and Pisces. The configuration window shows the following commands and output:

```
Switch2>show vlan
```

VLAN Name	Status	Ports
1 default	active	Fa0/7, Fa0/8, Fa0/9, Fa0/10
10 zodiak1	active	Fa0/11, Fa0/12, Fa0/13, Fa0/14
20 zodiak2	active	Fa0/15, Fa0/16, Fa0/17, Fa0/18
30 zodiak3	active	Fa0/19, Fa0/20, Fa0/21, Fa0/22
1002 fddi-default	active	Fa0/23, Fa0/24
1003 token-ring-default	active	Fa0/1, Fa0/2
1004 fddinet-default	active	Fa0/3, Fa0/4
1005 trnet-default	active	Fa0/5, Fa0/6

**Tugas 12A :** ping yang dilakukan dengan vlan berbeda dan switch berbeda tidak dapat terhubung walaupun dibantu dengan trunking (Leo ke Aries, Leo ke Pisces, Libra ke Cancer dan Libra ke Leo)



```
Packet Tracer PC Command Line 1.0
C:\>ping 172.21.1.1

Pinging 172.21.1.1 with 32 bytes of data:

Reply from 172.21.1.1: bytes=32 time=6ms TTL=128
Reply from 172.21.1.1: bytes=32 time=5ms TTL=128
Reply from 172.21.1.1: bytes=32 time=2ms TTL=128
Reply from 172.21.1.1: bytes=32 time=5ms TTL=128

Ping statistics for 172.21.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 2ms, Maximum = 6ms, Average = 4ms

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:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 172.21.1.3:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```