

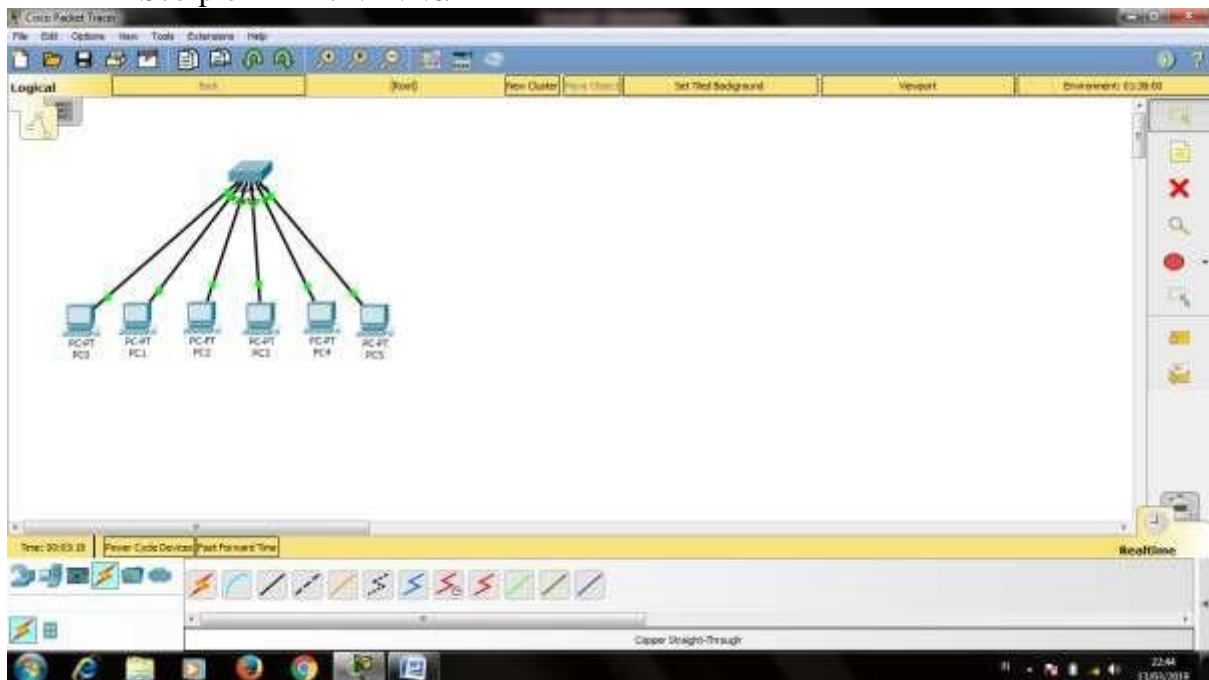
## MODUL 4

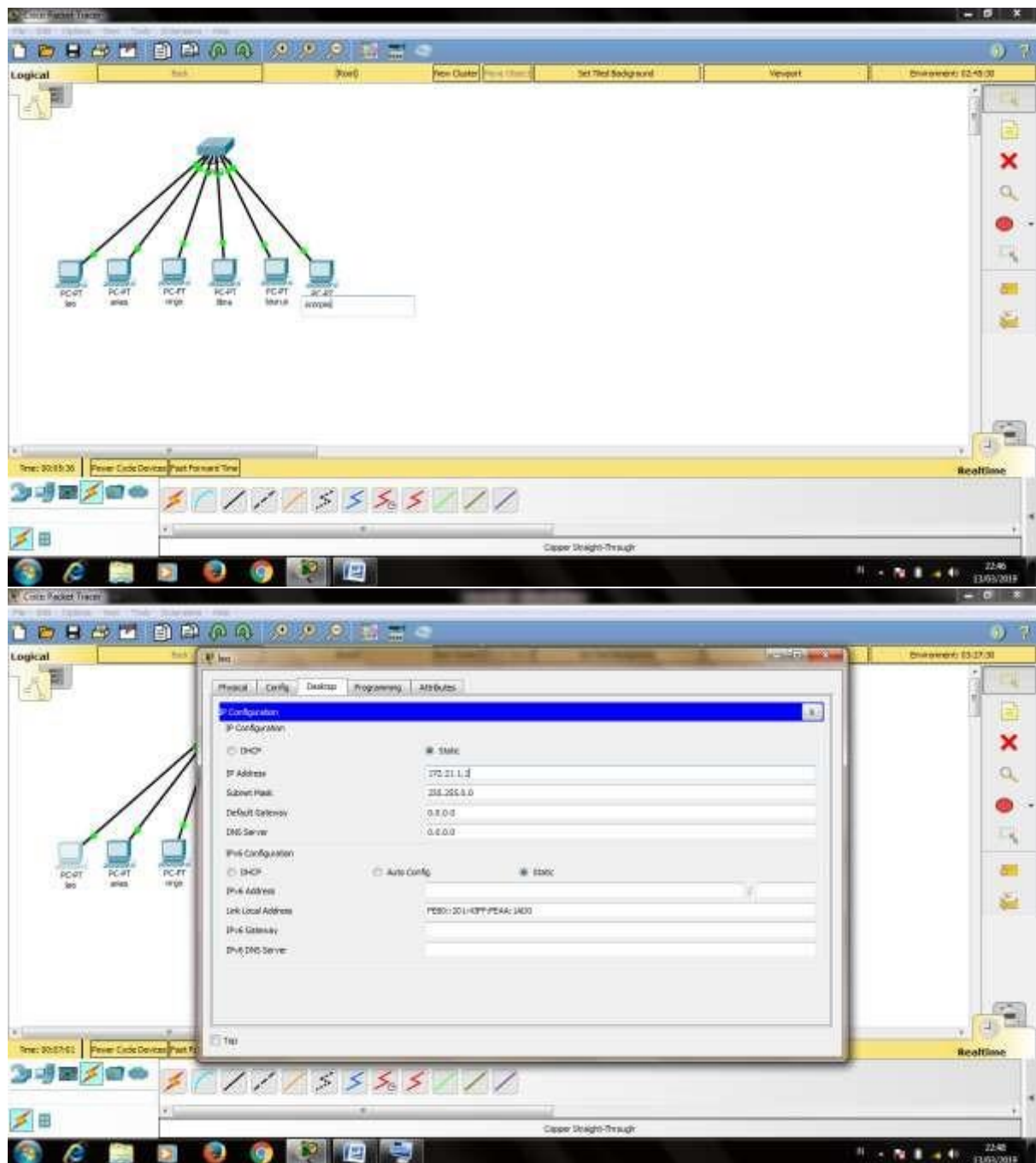
### Kegiatan 1. Topologi 1

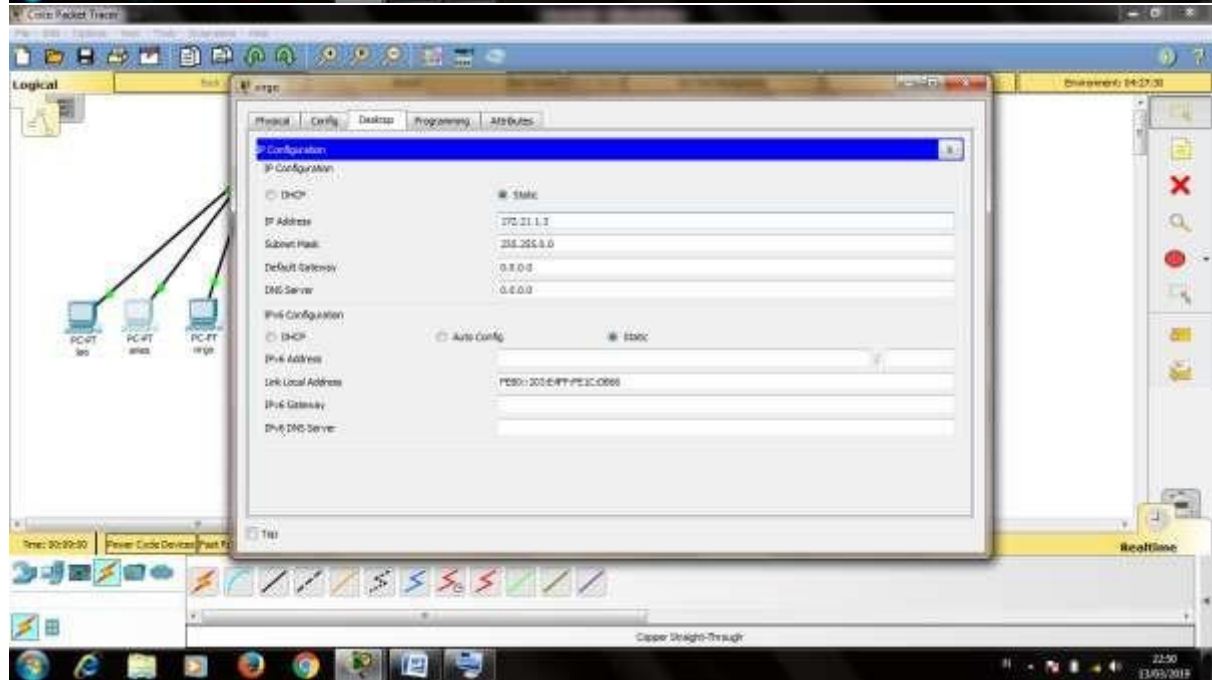
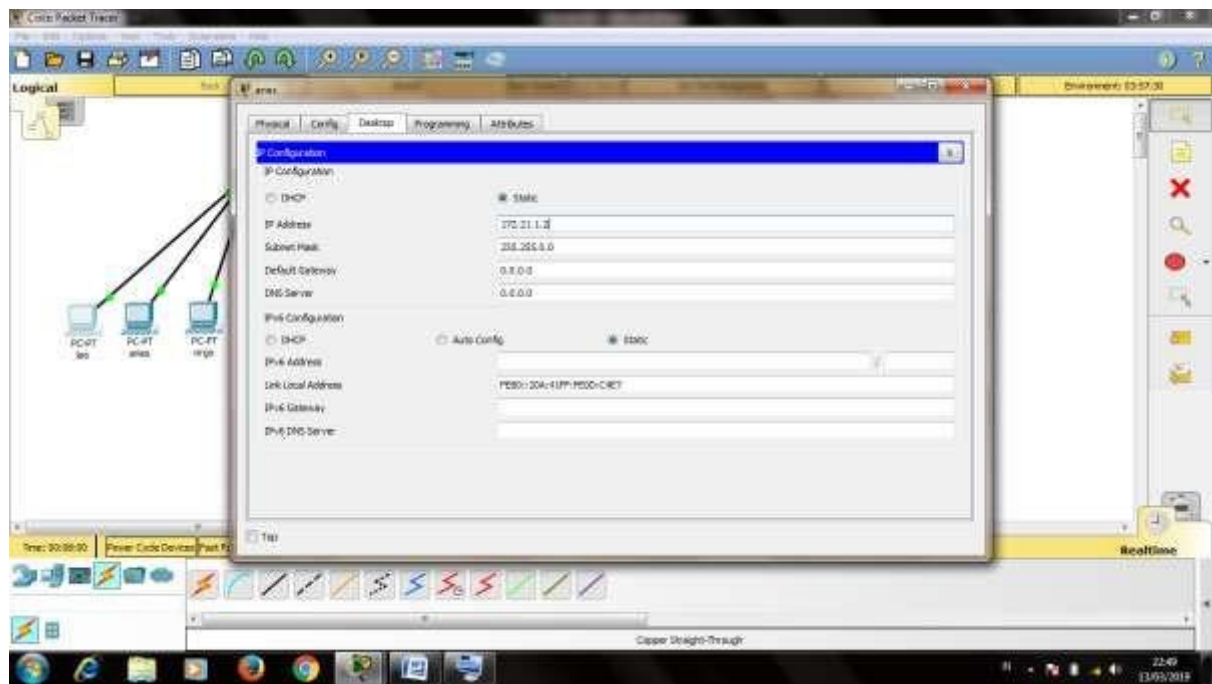
1. Menggunakan *packet tracer* buat topologi berikut ini dengan menggunakan switch. Memberi nama masing – masing perangkat dengan SW1 (switch), Leo (PC0), Aries (PC1), Virgo (PC2), Libra (PC3), Taurus (PC4), dan Scorpio (PC5).

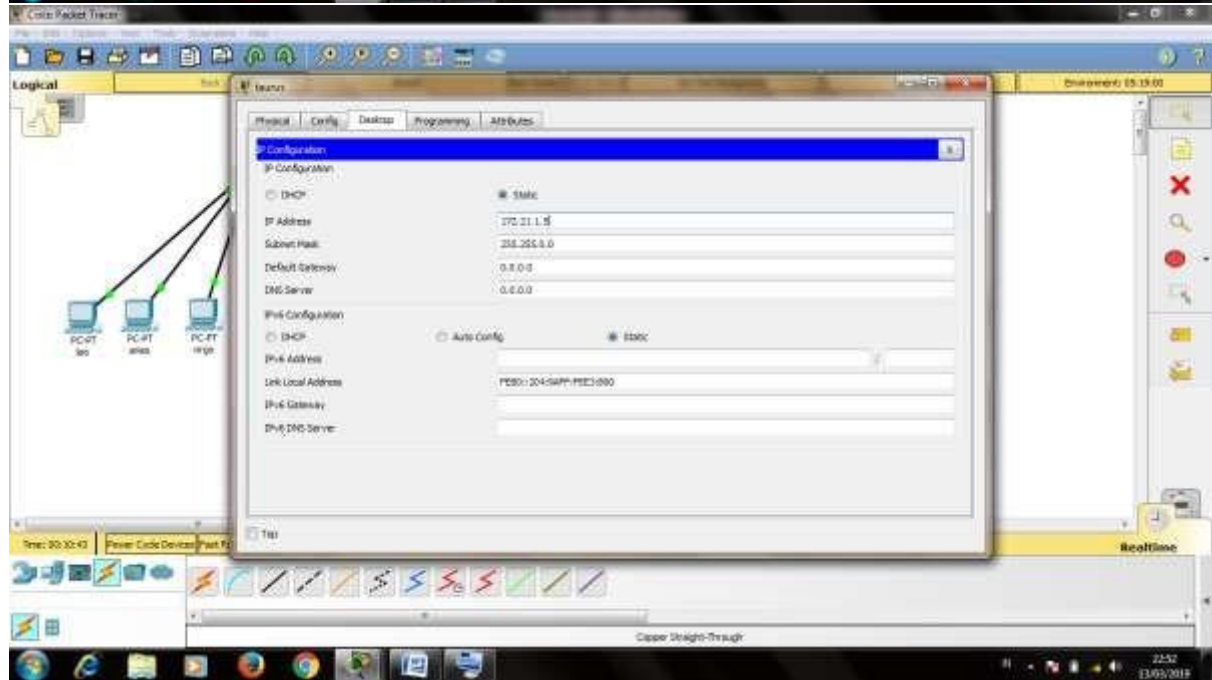
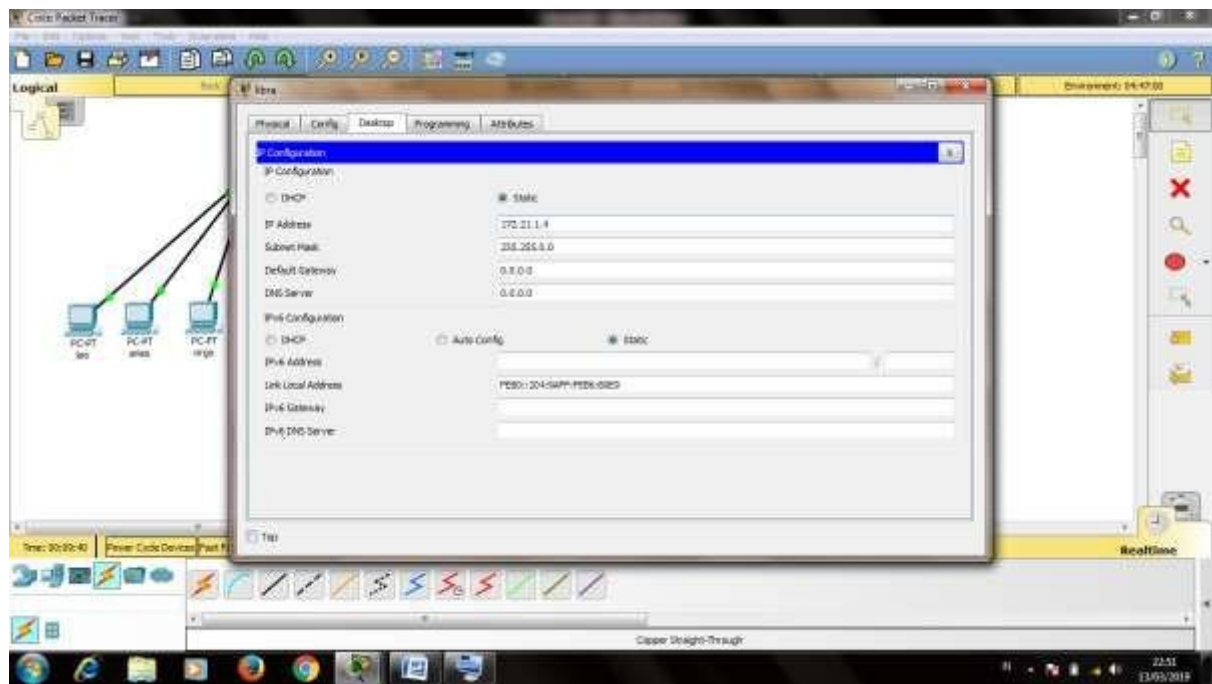
Konfigurasi masing – masing PC dengan nama dan alamat IP berikut ini :

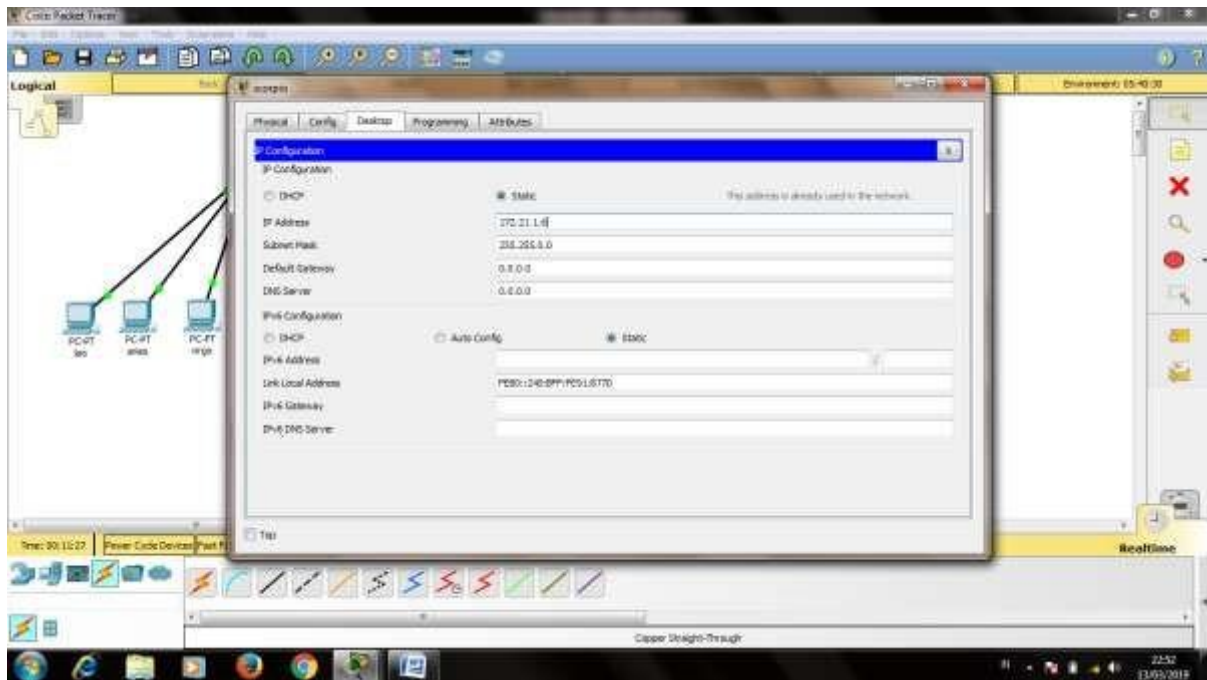
- Leo = 172.21.1.1/24
- Aries = 172.21.1.2/24
- Virgo = 172.21.1.3/24
- Libra = 172.21.1.4/24
- Taurus = 172.21.1.5/24
- Scorpio = 172.21.1.6/24



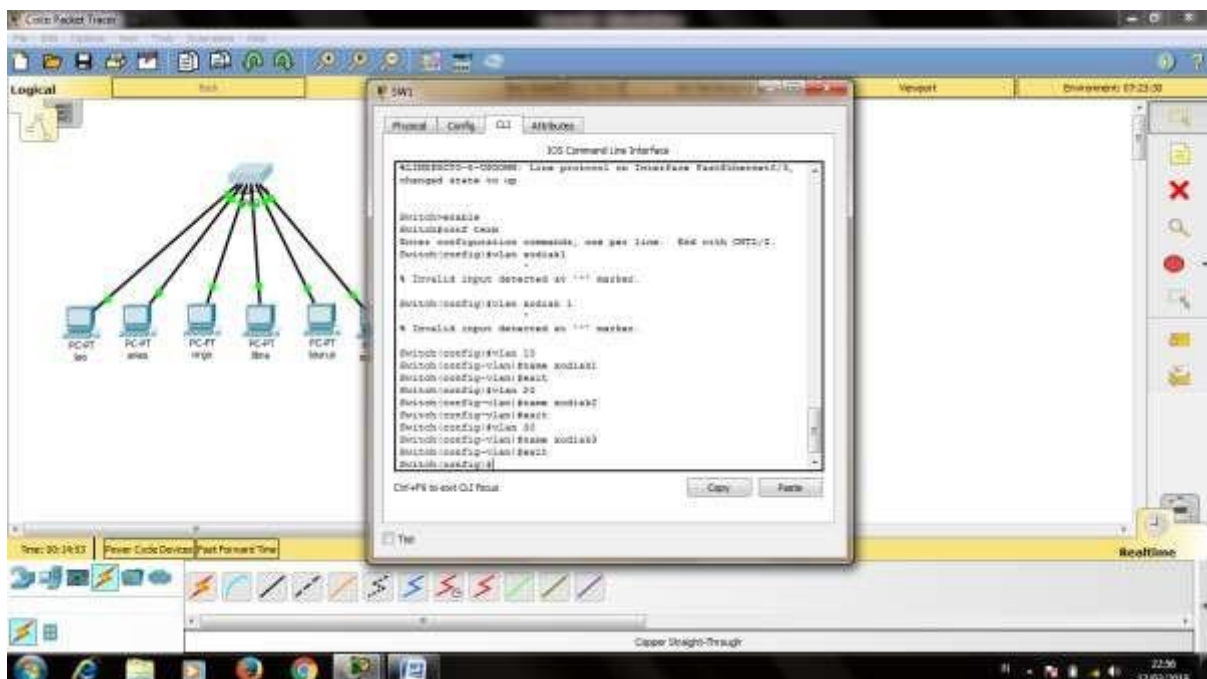




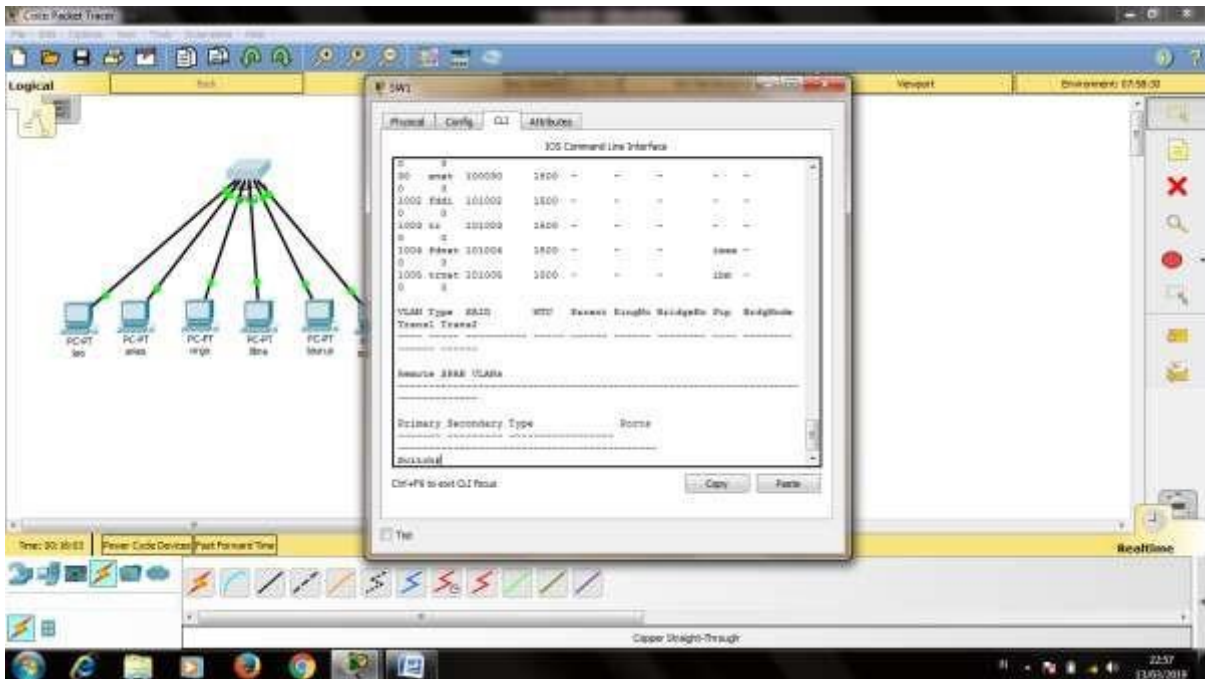
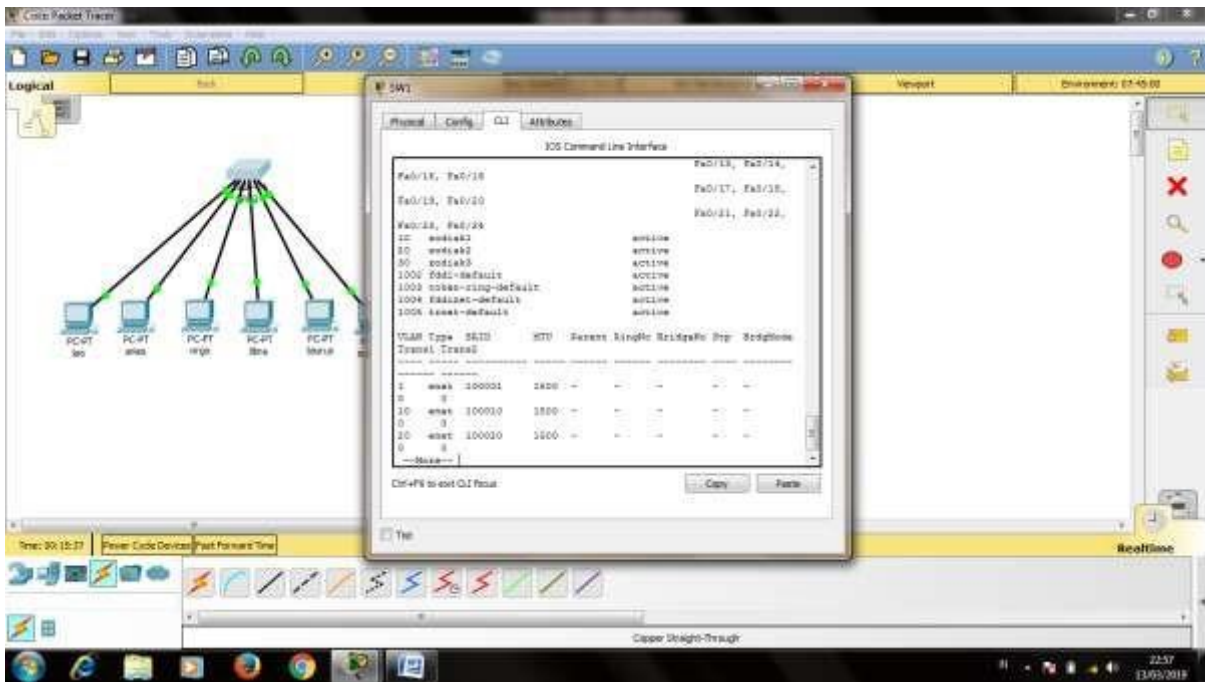




2. Konfigurasi Pada switch dengan *mode user* atau *mode privileged*, buat 3 VLAN dengan nama zodiak1, zodiak2, dan zodiak3. Dengan cara klik pada switch 2 kali kemudian pilih CLI.







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- The screenshot displays the Cisco Packet Tracer software interface. On the left, a network diagram shows a central switch connected to five PCs labeled PC-01 through PC-05. The top of the window features a toolbar with various icons for network components and a menu bar. The main workspace is divided into two panes: 'Logical' on the left and 'Physical' on the right. The 'Physical' pane is active, showing a configuration window for a switch named 'SW1'. The window has tabs for 'Physical', 'Config', 'CLI', and 'Attributes'. The 'CLI' tab is selected, displaying a command-line interface for the switch. The commands entered are as follows:
- ```

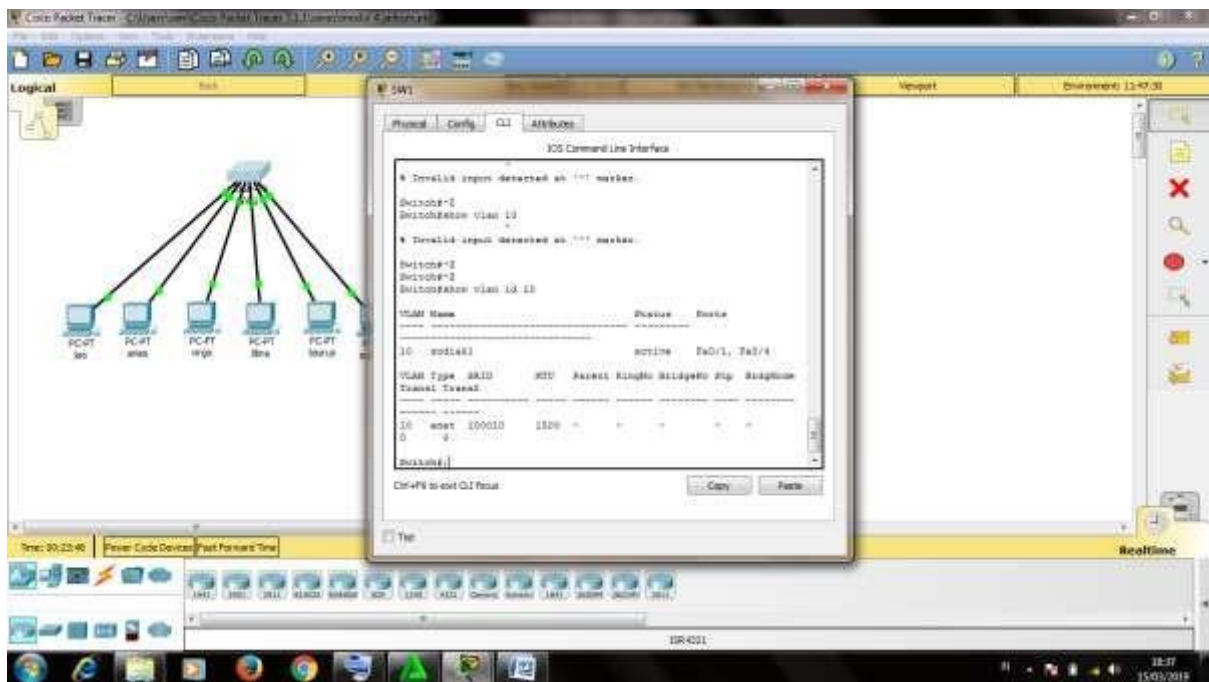
Switch>enable
Switch#configure terminal
Switch(config)#hostname SW1
Switch(config)#interface fastEthernet 0/24
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface fastEthernet 0/25
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface fastEthernet 0/26
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface fastEthernet 0/27
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface fastEthernet 0/28
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface fastEthernet 0/29
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface fastEthernet 0/30
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#interface fastEthernet 0/31
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#exit
Switch#
  
```
- At the bottom of the CLI window, there is a 'Copy' button and a 'Paste' button. The status bar at the bottom of the window indicates 'Time: 00:00:00' and 'Power: 0.00 Watts'.

- 
- The screenshot displays the Cisco Packet Tracer interface. On the left, a network diagram shows a central switch connected to five PCs labeled 'PC-PT 300', 'PC-PT 301', 'PC-PT 302', 'PC-PT 303', and 'PC-PT 304'. The switch is labeled 'S-W1'. A configuration window for 'S-W1' is open, showing the 'Config' tab. The window title is 'S-W1' and the subtitle is 'S-W1 Command Line Interface'. The configuration text is as follows:
- ```

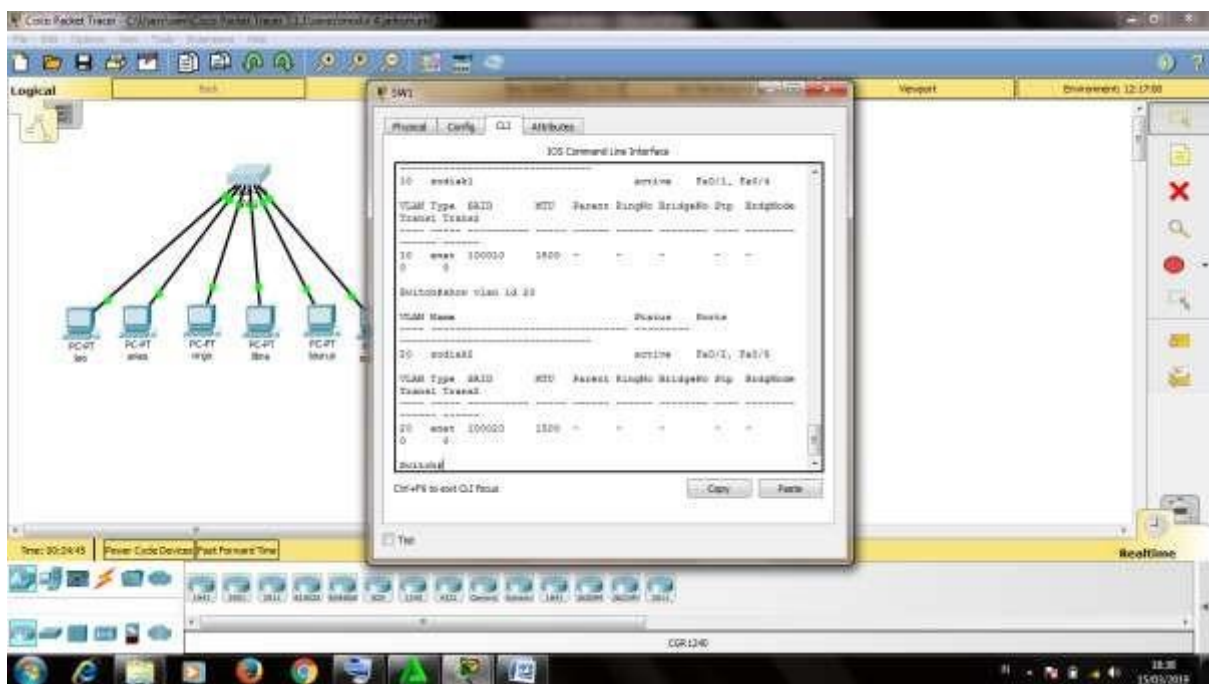
Switch
VLANs
VLAN 1: Configured from console by console
Description: vlan 1
VLAN Name      Status      Ports
-----
1 default      active      Fa0/7, Fa0/8, Fa0/9,
Fa0/10, Fa0/11, Fa0/12, Fa0/13,
Fa0/14, Fa0/15, Fa0/16, Fa0/17,
Fa0/18, Fa0/19, Fa0/20,
Fa0/21, Fa0/22, Fa0/23, Fa0/24
10 noindex1    active      Fa0/1, Fa0/4
20 noindex2    active      Fa0/2, Fa0/3
30 noindex3    active      Fa0/5, Fa0/6
1000 Pkts-Default active
1000 token-ring-Default active
1000 fddi-Default active
1000 token-Default active

```
- At the bottom of the configuration window, there is a 'Copy' button and a 'Paste' button. The status bar at the bottom of the window shows 'Copper Straight-Through'.

- Informasi VLAN 10

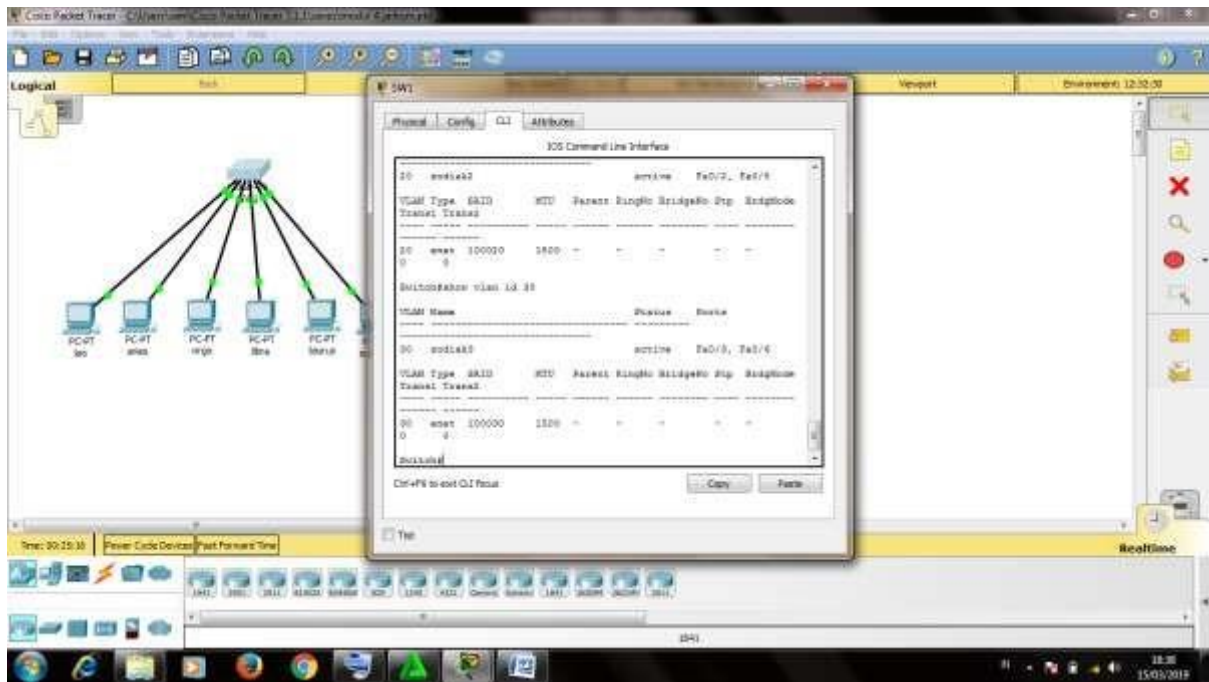


- Informasi VLAN 20



- Informasi VLAN 30





a. Tugas 4A : Capture masing – masing tampilan informasi VLAN dan isi table berikut.

No	Variabel	Nilai		
1	Nomor VLAN	10	20	30
2	Nama VLAN	Zodiak1	Zodiak2	Zodiak3
3	Port	Fa 0/1, fa 0/4	Fa 0/2, fa 0/5	Fa 0/3, fa 0/6
4	Status	Aktif	Aktif	Aktif

b. Tugas 4B : Jelaskan secara singkat hasil yang anda peroleh dari tugas 4A.

- Zodiak1 dengan no vlan 10, port fa 0/1, fa 0/4 berstatus aktif
- Zodiak2 dengan no vlan 20, port fa 0/2, fa 0/5 berstatus aktif
- Zodiak3 dengan no vlan 30, port fa 0/3, fa 0/6 berstatus aktif

## Kegiatan 2. Topologi 2

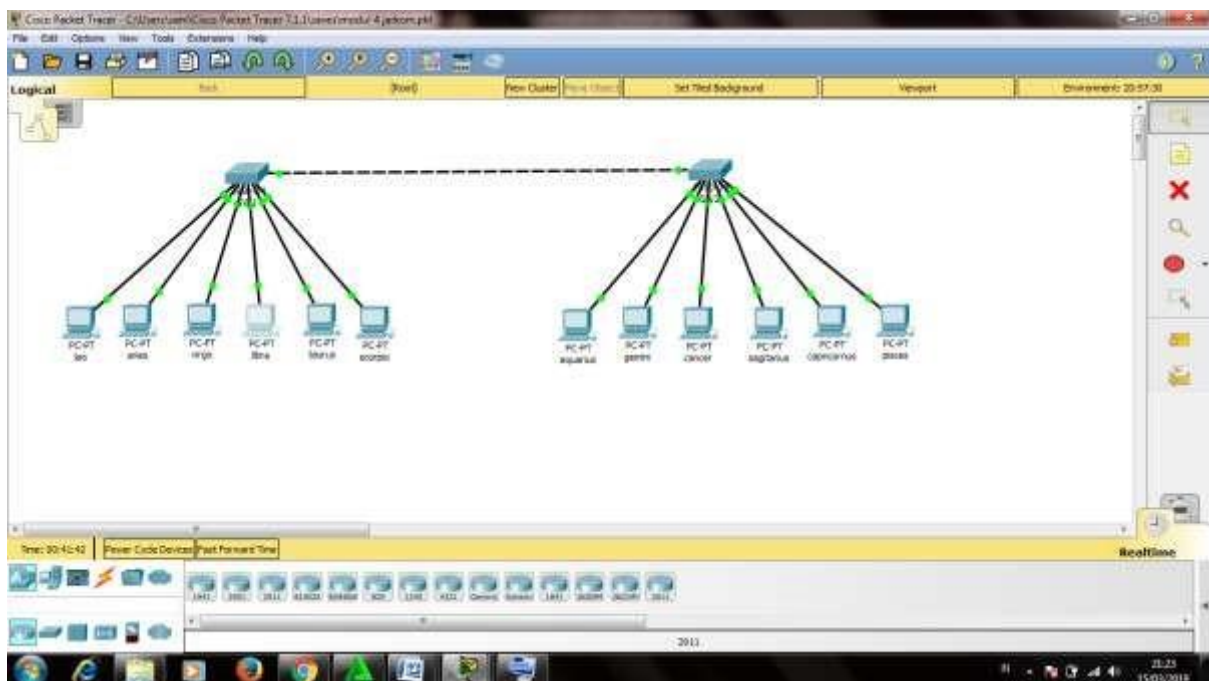
1. Menggunakan *cisco packet tracer* buat topologi berikut ini dengan menggunakan switch Catalyst 2950.

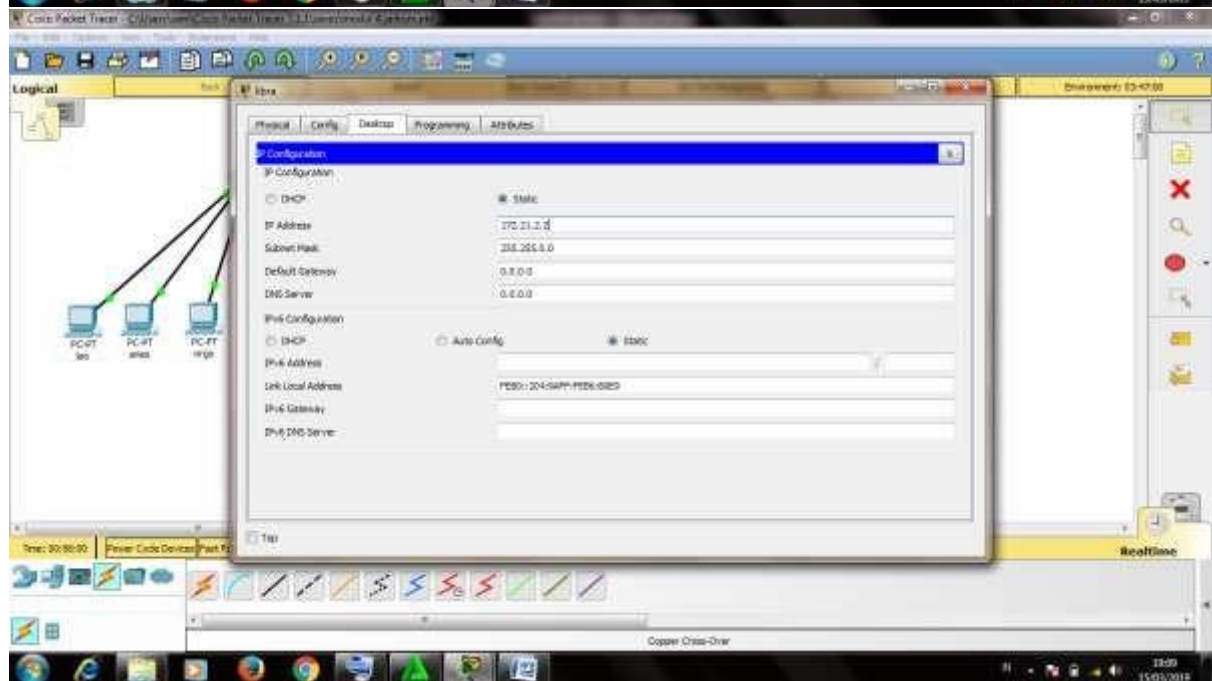
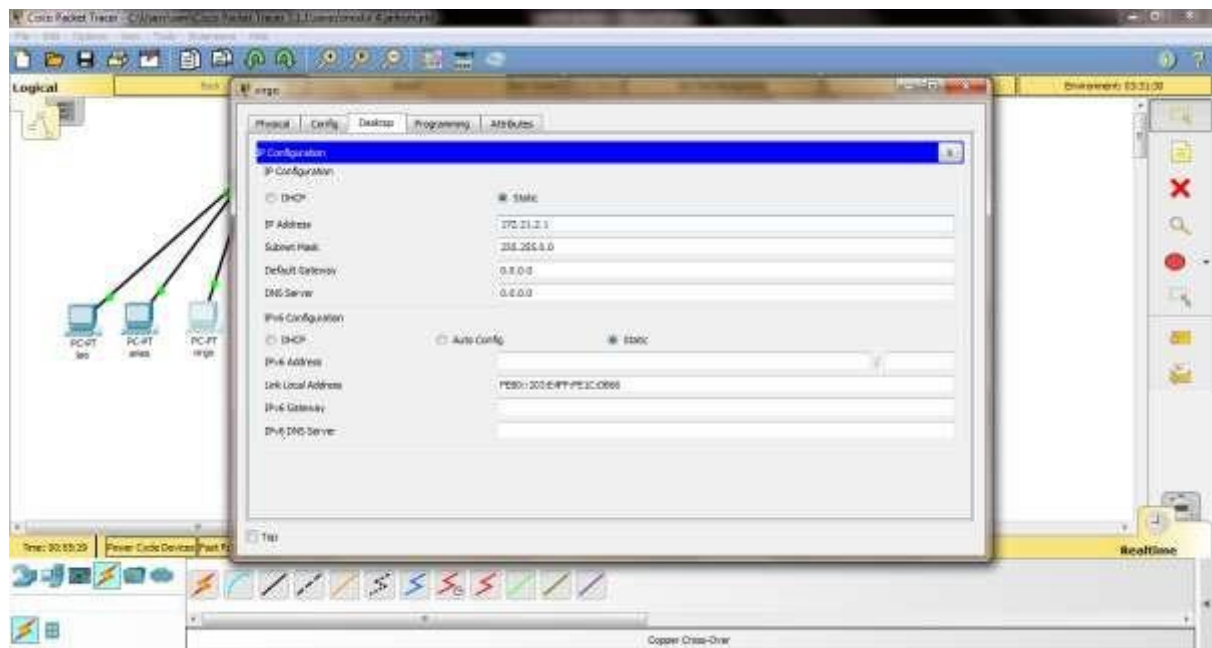
Memberi nama masing – masing perangkat dengan SW1 (switch 1), Leo (PC0), Aries (PC1), Virgo (PC2), Libra (PC3), Taurus (PC4), dan Scorpio (PC5) untuk segmen switch1.

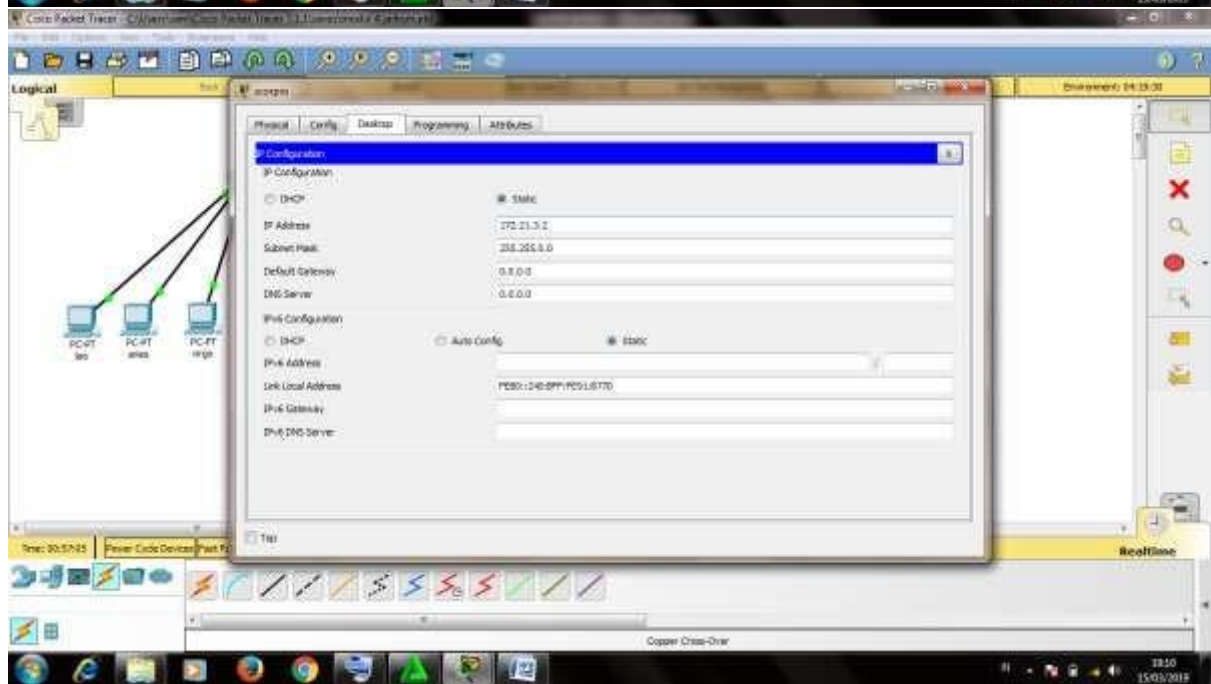
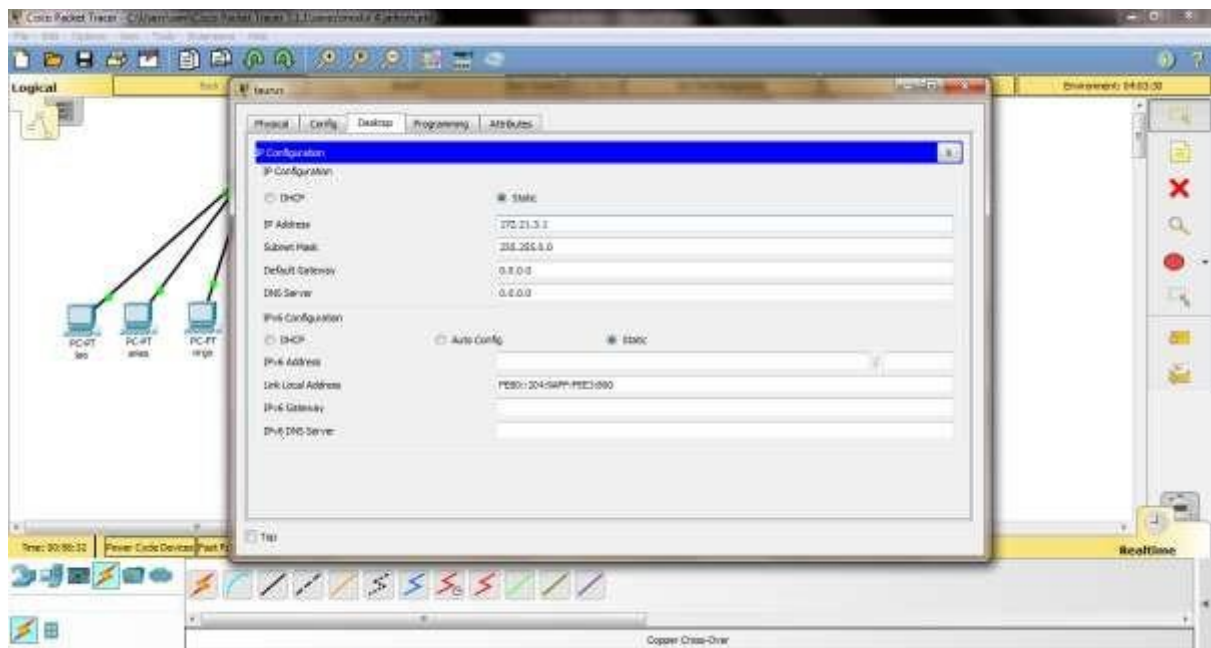
Memberi nama masing – masing perangkat dengan SW2 (switch 21), Aquarius (PC6), Gemini (PC7), Cancer (PC8), Sagitarius (PC9), Capricornus (PC10), dan Pisces (PC11) untuk segmen switch 2.

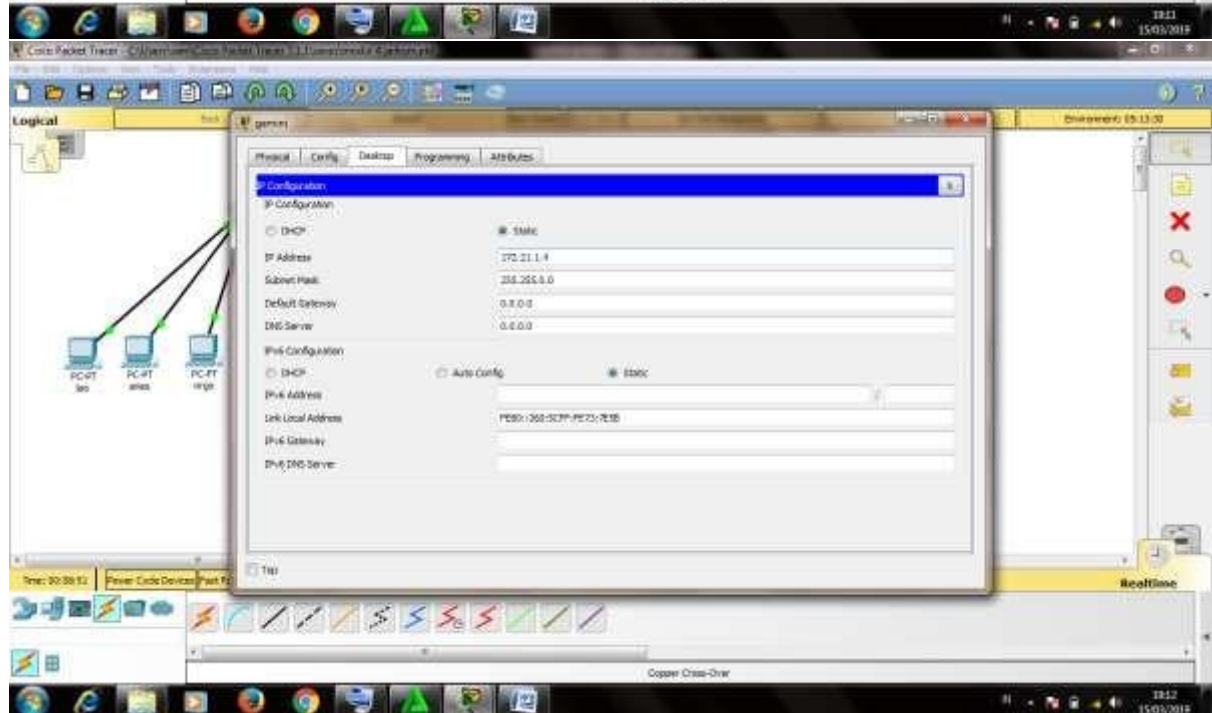
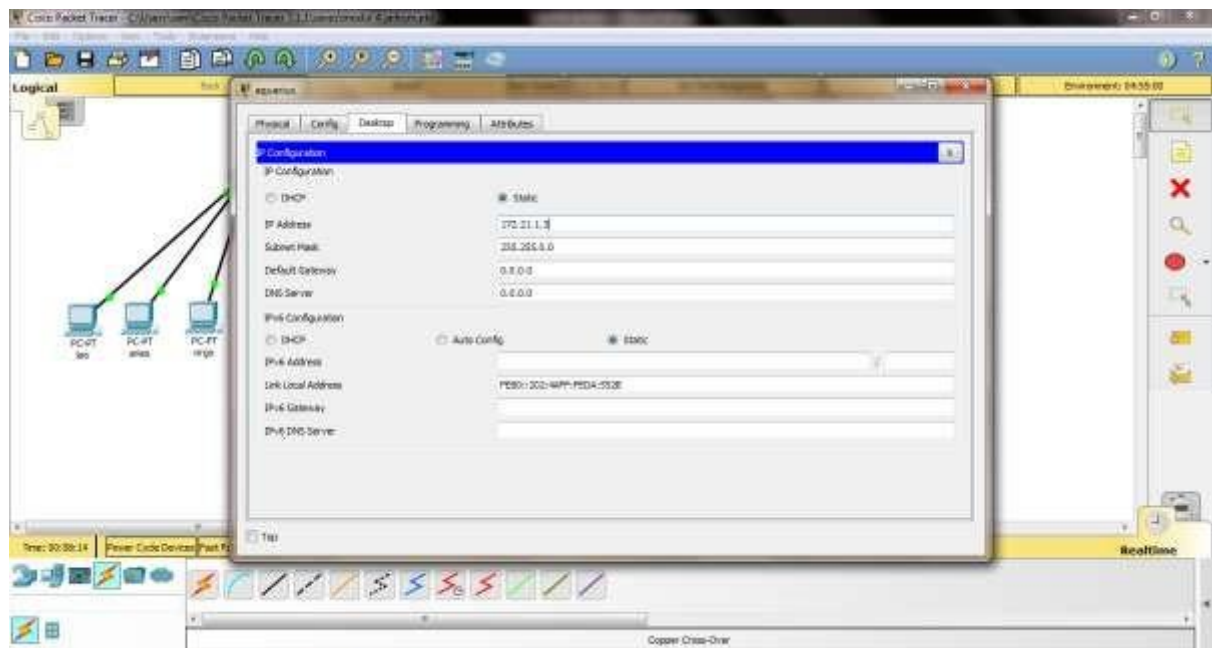
Konfigurasi masing – masing PC dengan nama dan alamat IP berikut ini :

- Leo = 172.21.1.1/24
- Aries = 172.21.1.2/24
- 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
- Sagitarius = 172.21.2.4/24
- Capricornus = 172.21.3.3/24
- Pisces = 172.21.3.4/24

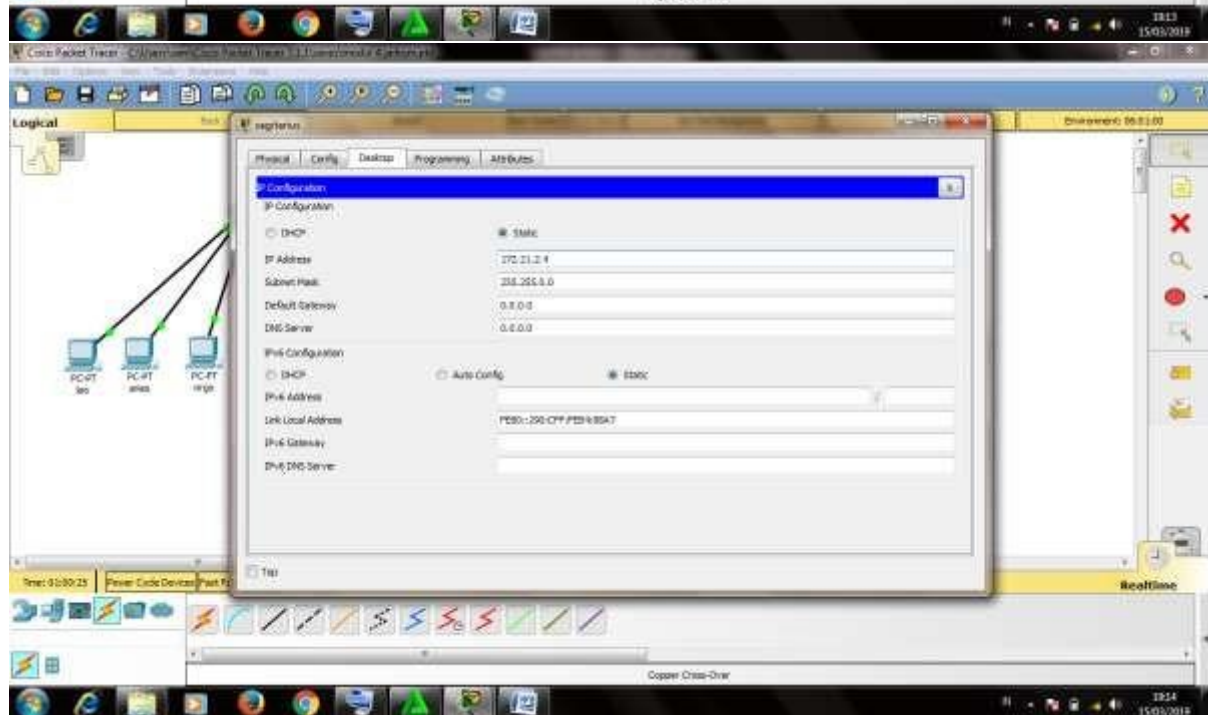
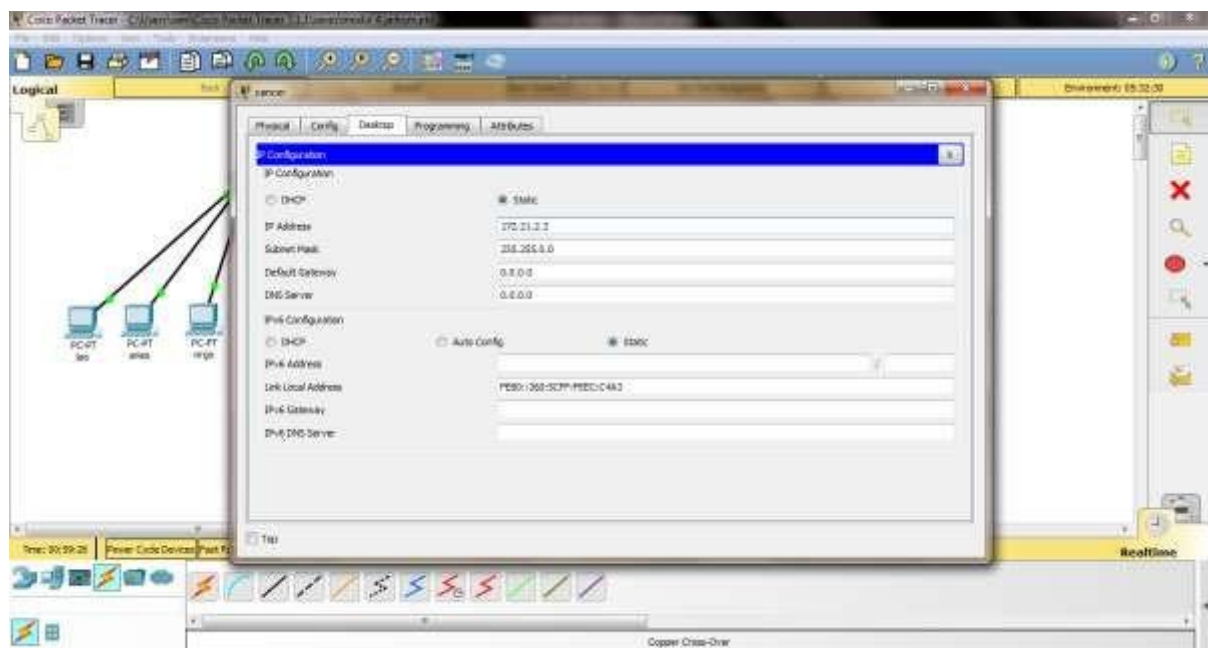


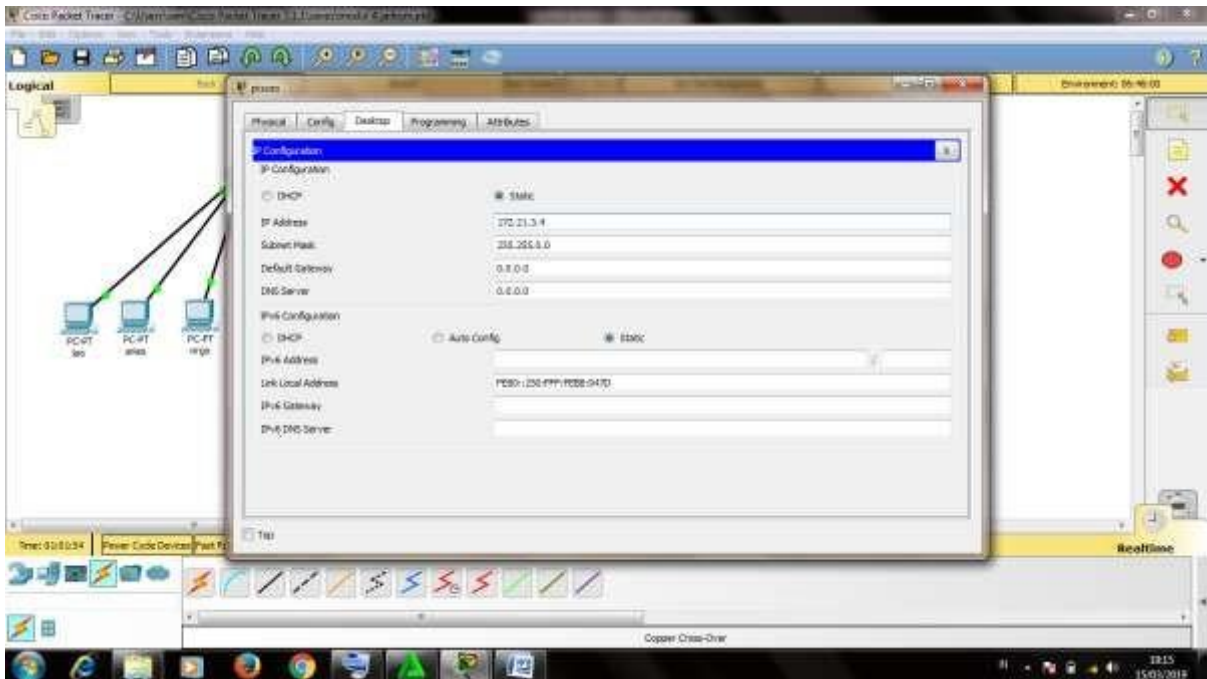
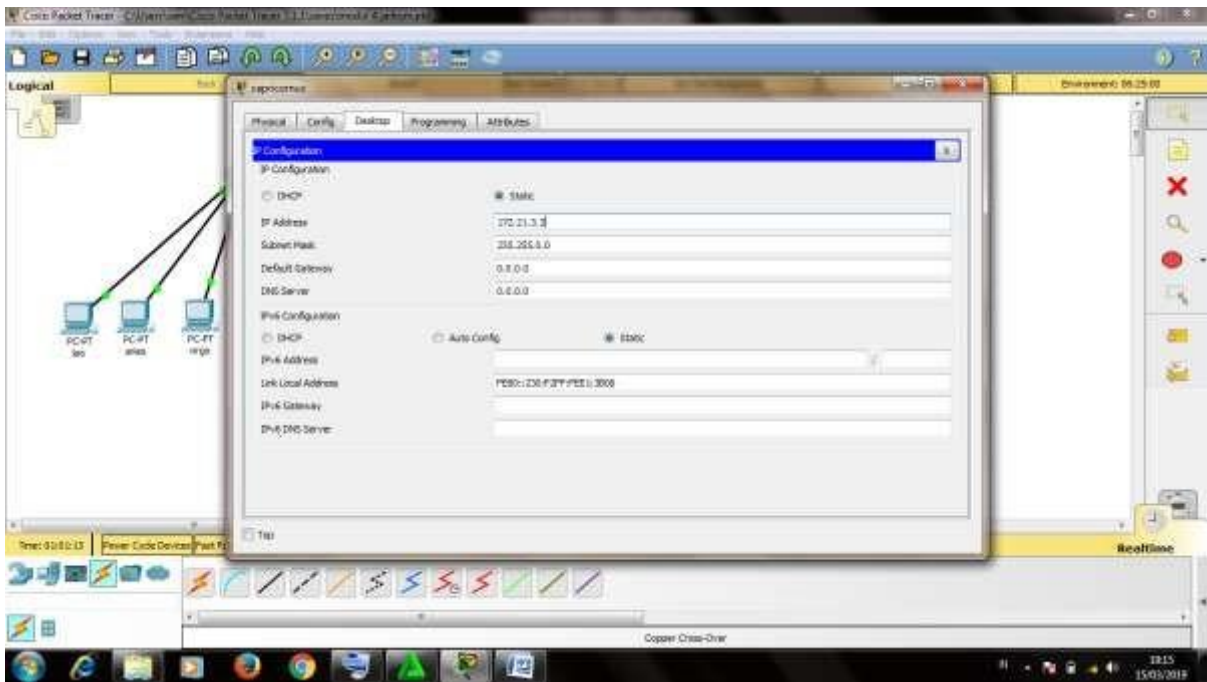




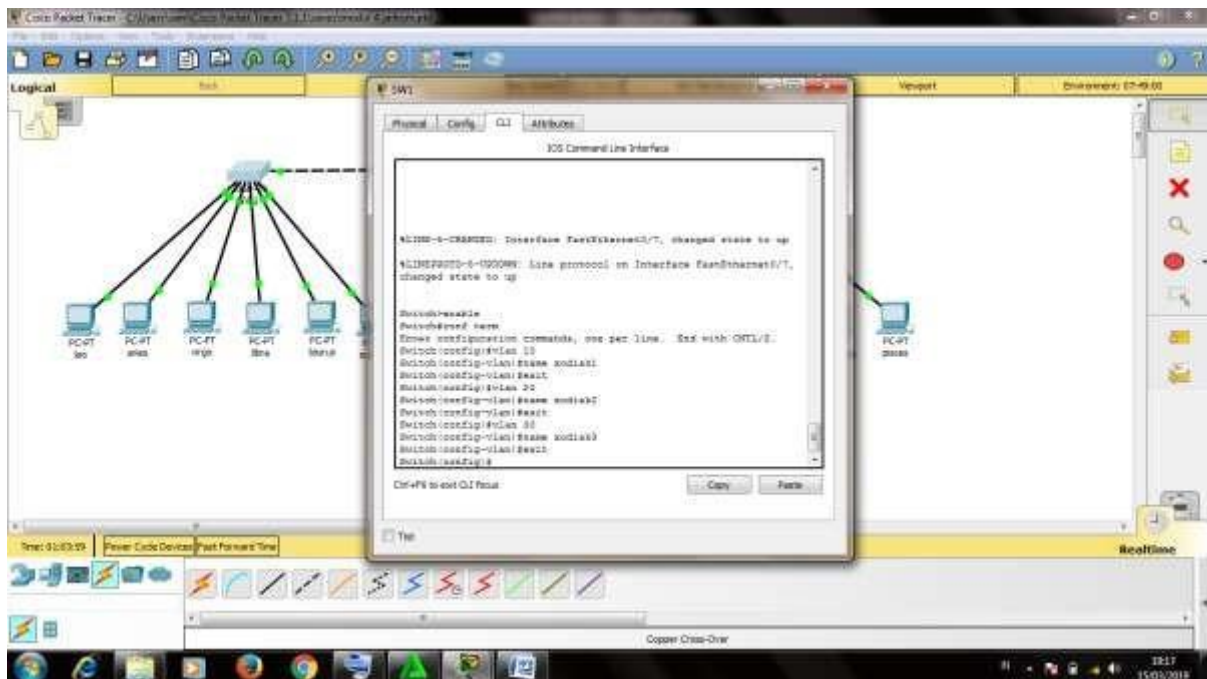




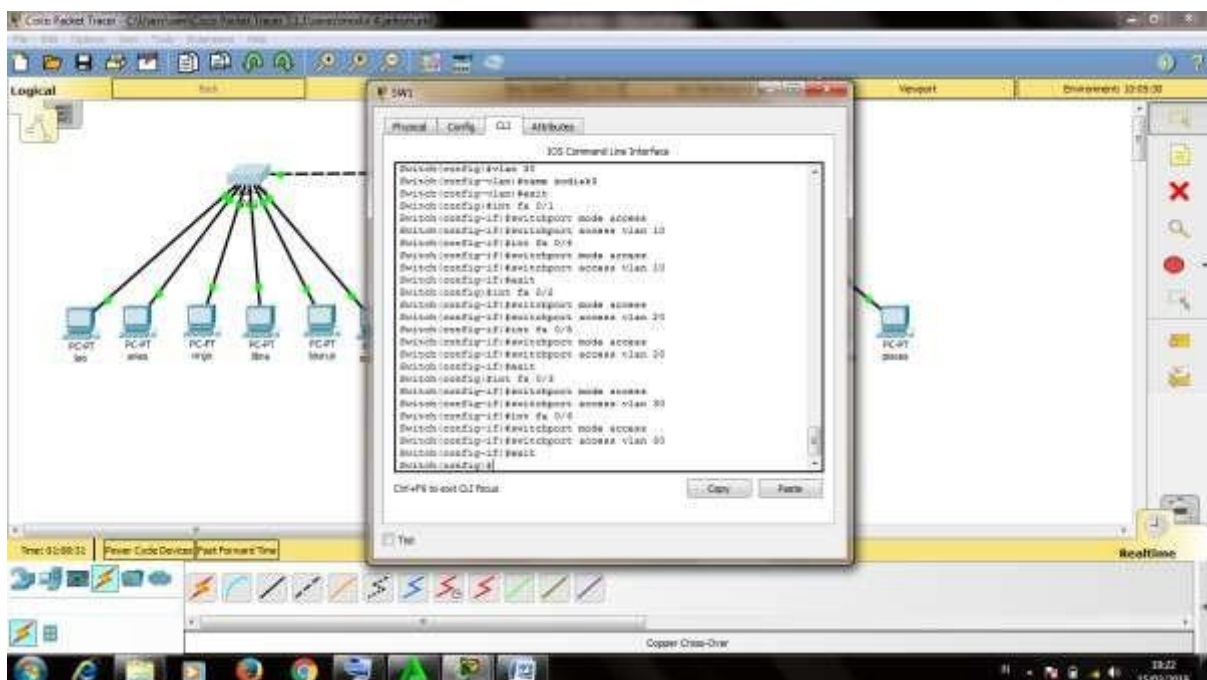




2. Konfigurasi Pada switch dengan *mode user* atau *mode privileged*, buat 3 VLAN dengan nama zodiak1, zodiak2, dan zodiak3. Dengan cara klik pada switch 2 kali kemudian pilih CLI.



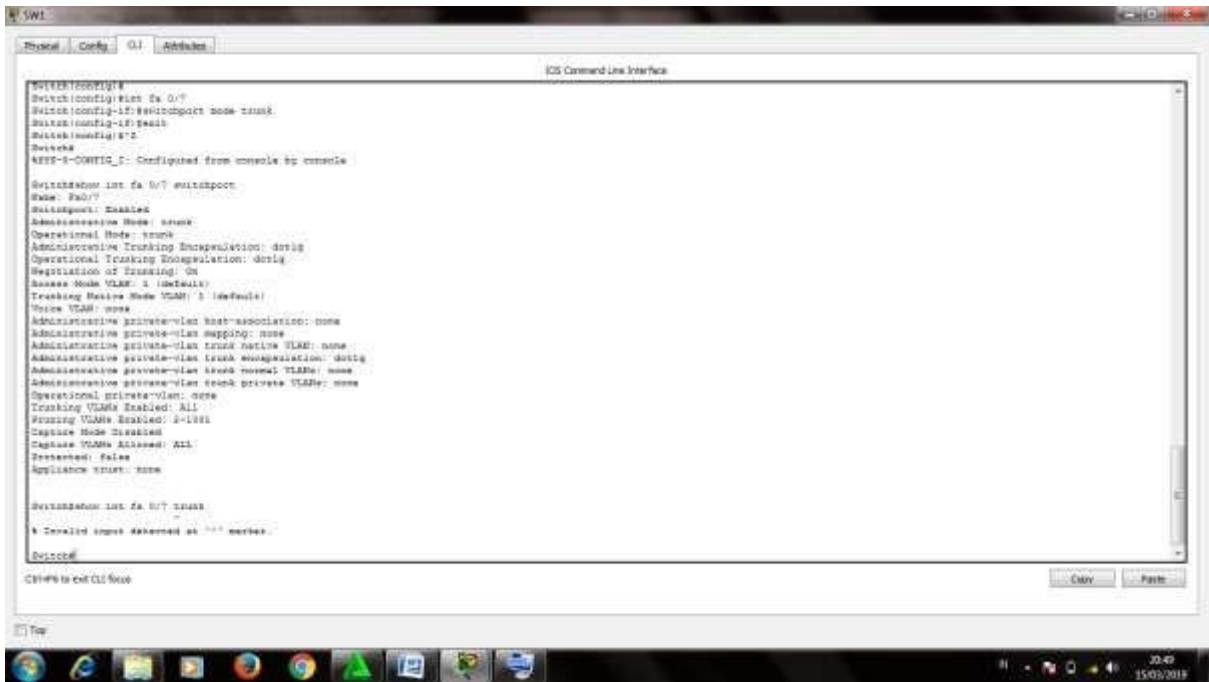
3. Pada *mode configuration*, konfigurasi port – port switch ke dalam VLAN zodiak1, zodiak2, dan zodiak3 dengan anggota sebagai berikut.
  - Zodiak1 = leo dan libra
  - Zodiak2 = aries dan taurus
  - Zodiak3 = virgo dan scorpio



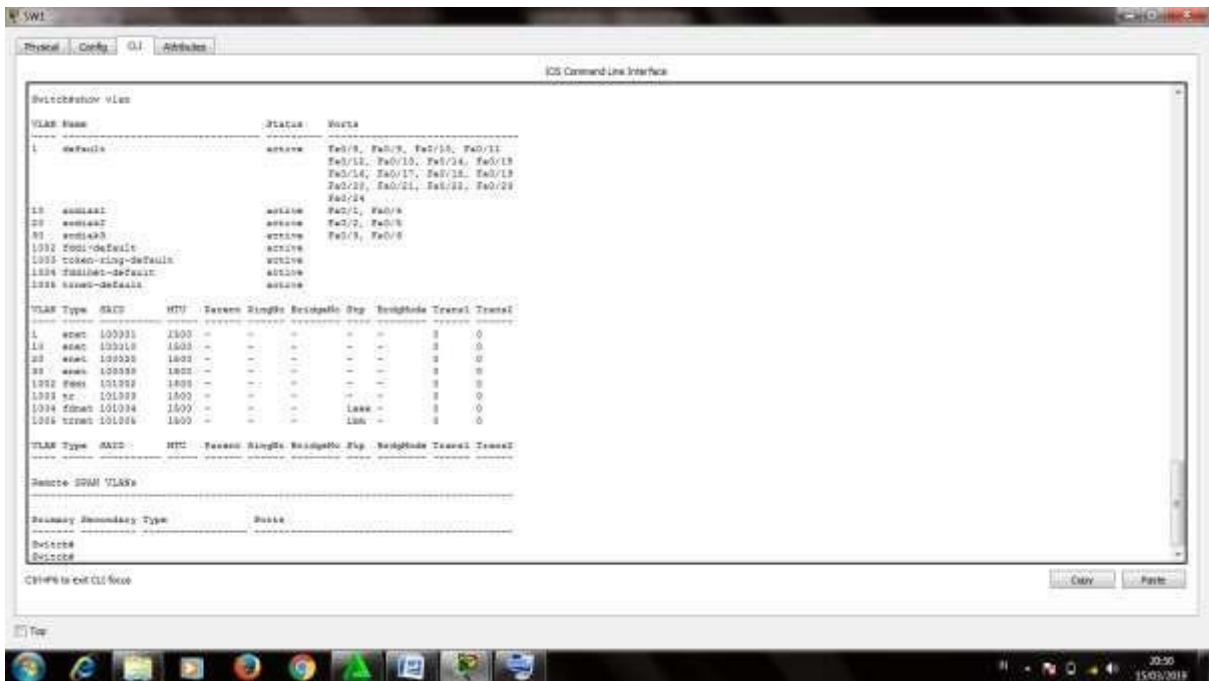
4. Lakukan konfigurasi VLAN trunking pada switch 1.



- Informasi *interface fashethernet 0/7*



- Informasi VLAN



Jelaskan secara singkat hasil yang anda peroleh dari langkah 5 **Informasi interface fashethernet 0/7 switchport** menampilkan :

Switchport : enable

Administrative mode : trunk

Operational mode : trunk

**Informasi *interface fashethernet 0/7* menampilkan :**

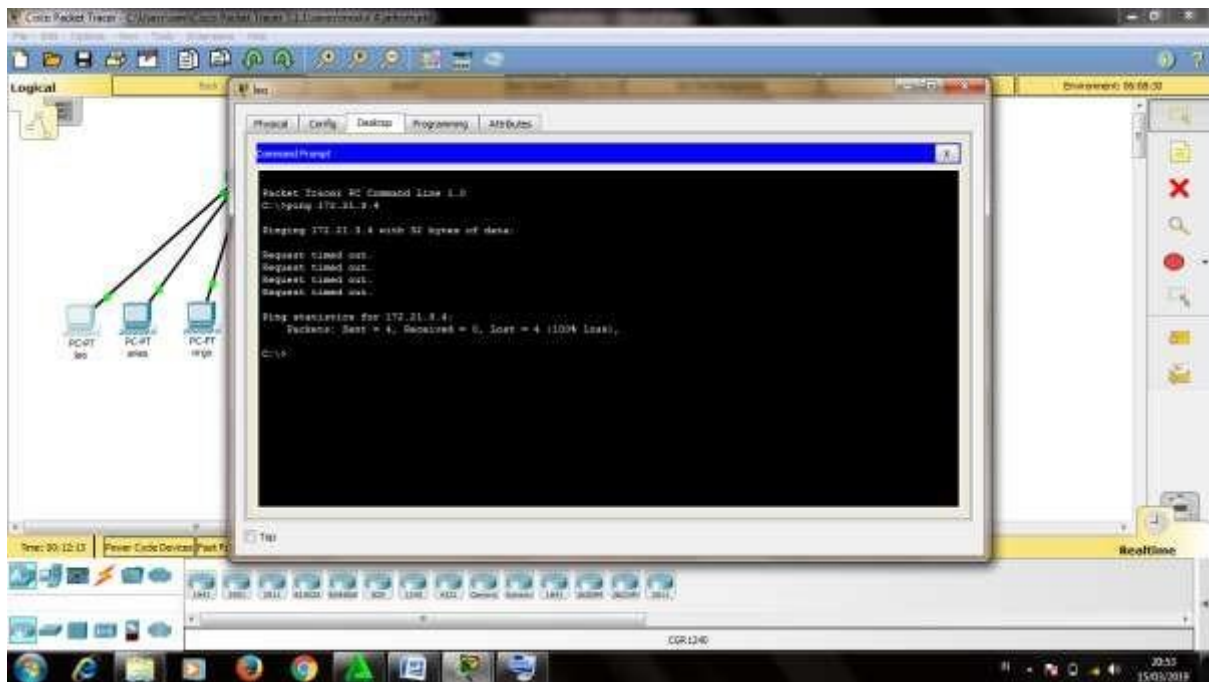


*Invalid*

**Informasi VLAN menampilkan :**

No	Variabel	Nilai		
1	Nomor VLAN	10	20	30
2	Nama VLAN	Zodiak1	Zodiak2	Zodiak3
3	Port	Fa 0/1, fa 0/4	Fa 0/2, fa 0/5	Fa 0/3, fa 0/6
4	Status	Aktif	Aktif	Aktif

6. Lakukan ping dari PC leo ke PC pisces



Jelaskan secara singkat mengapa hasil yang anda peroleh dari langkah 6 mendapatkan status “reply”?.

*Hasil yang anda peroleh dari langkah 6 mendapatkan status timed out.*

No	Variabel	Nilai		
1	Nomor VLAN	10	20	30
2	Nama VLAN	Zodiak1	Zodiak2	Zodiak3
3	Port	Fa 0/1, fa 0/2	Fa 0/3, fa 0/4	Fa 0/5, fa 0/6

4	Status	Aktif	Aktif	Aktif
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9. Pada *mode configuration*, konfigurasi port – port switch ke dalam VLAN zodiak1, zodiak2, dan zodiak3 dengan anggota sebagai berikut.

- Zodiak1 = aquarius dan gemini
- Zodiak2 = cancer dan sagitarius
- Zodiak3 = capricornus dan pisces

```

Switch#conf t
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)#int fa 0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#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 0/7
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
Switch(config)#int fa 0/8
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
Switch(config)#int fa 0/9
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
Switch(config)#int fa 0/18
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#exit
Switch(config)#

```

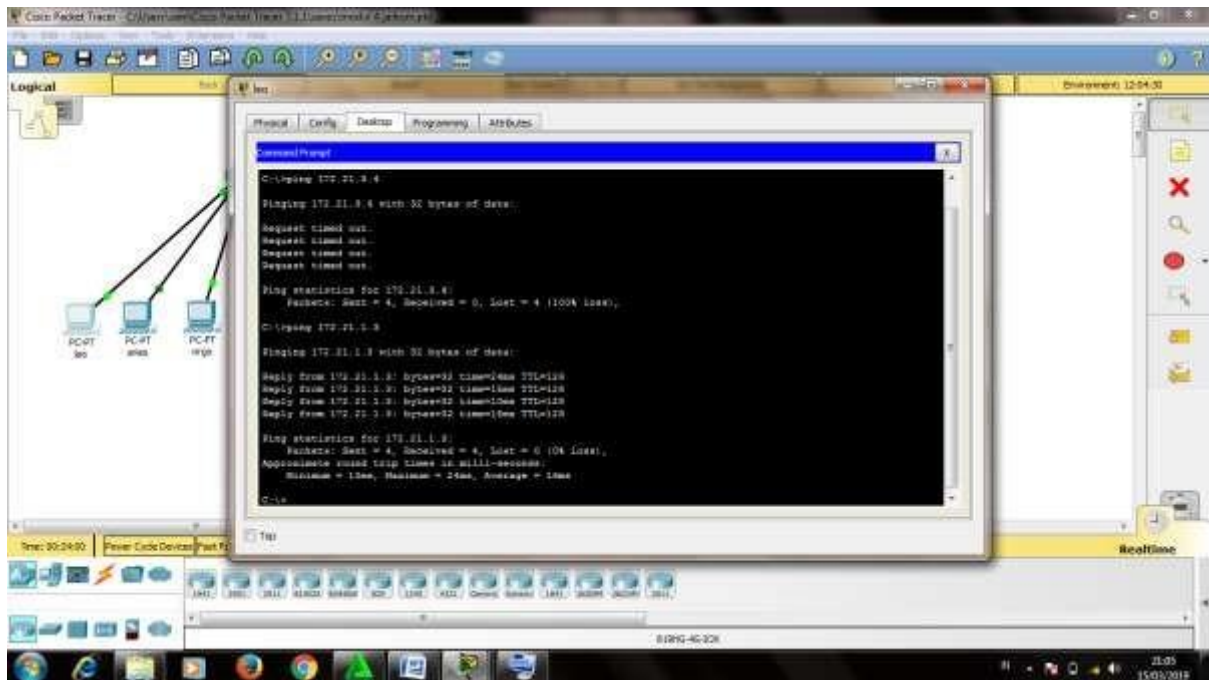
```

Switch#conf t
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)#int fa 0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#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 0/7
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
Switch(config)#int fa 0/8
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
Switch(config)#int fa 0/9
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
Switch(config)#int fa 0/18
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#exit
Switch(config)#

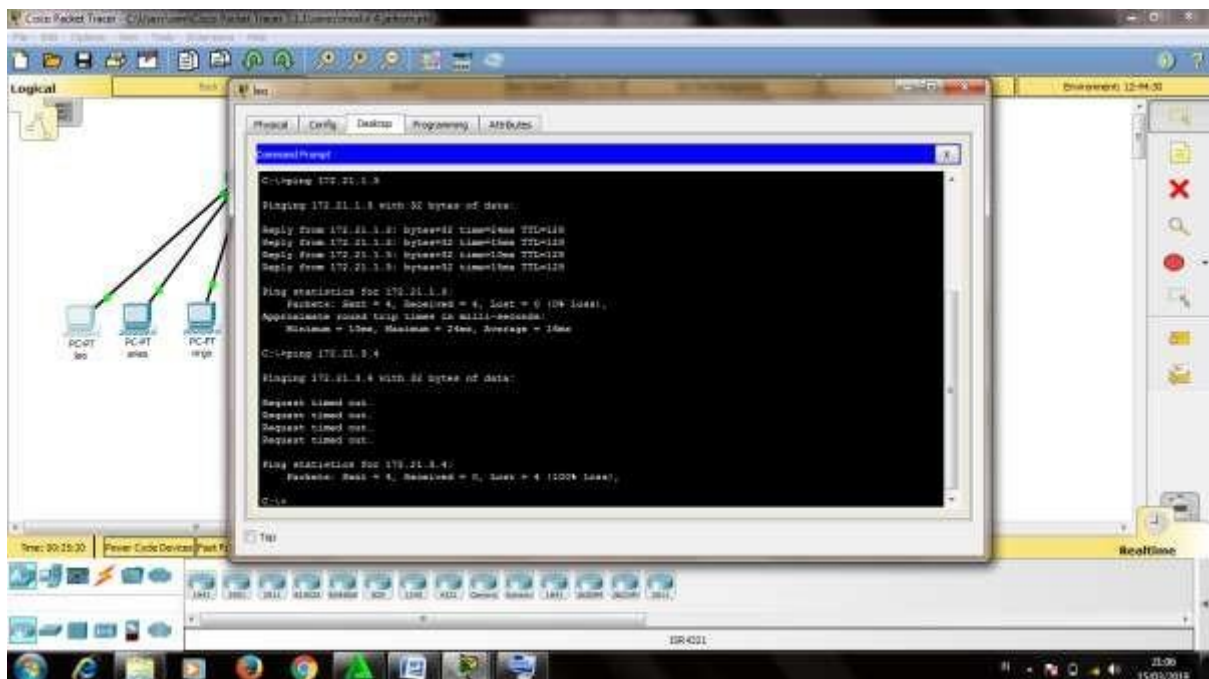
```

VLAN Name	Status	Ports
1 default	ACTIVE	Fa0/8, Fa0/9, 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 FFFF-FFFF	ACTIVE	
1003 FFFF-FFFF	ACTIVE	
1004 FFFF-FFFF	ACTIVE	
1005 FFFF-FFFF	ACTIVE	

10. Ping PC leo ke PC aries, PC leo ke PC aquarius



Ping PC leo ke PC pisces



Ping PC libra ke PC cancer, PC libra ke PC leo.

