

Laporan Praktikum Algoritma dan Struktur Data

Nama : Azzahra Salsabilla

NIM : L200170130

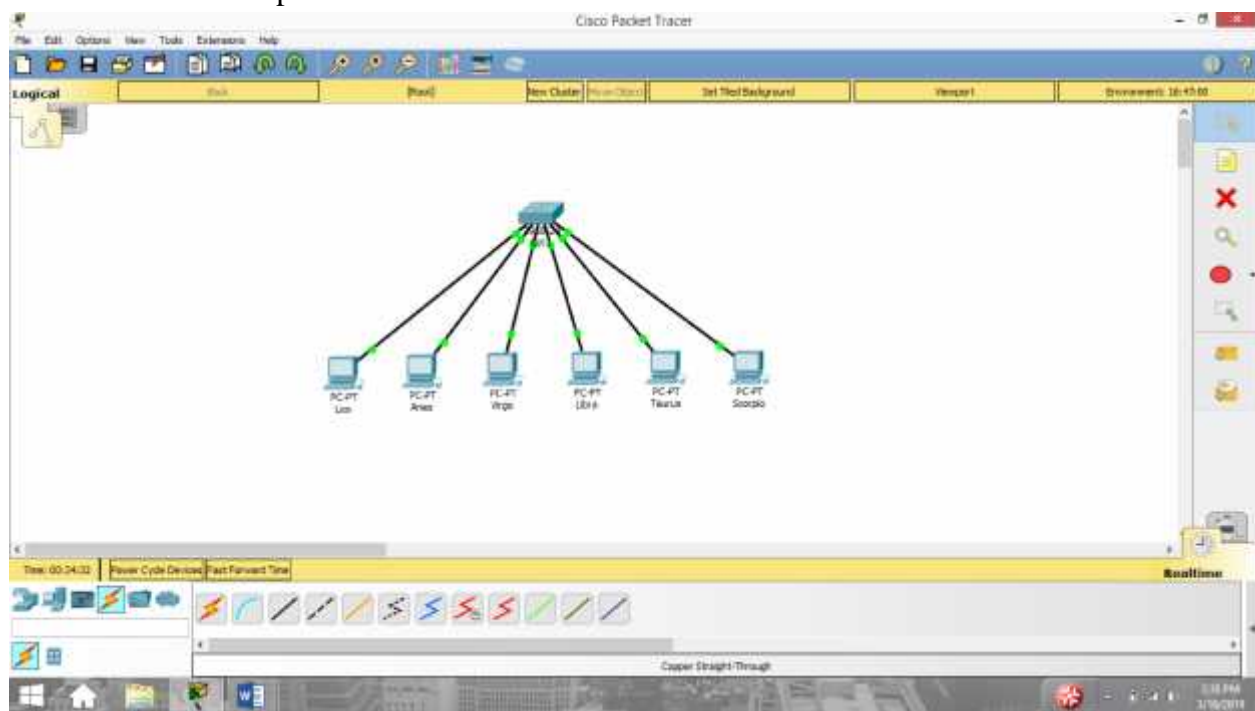
Kelas : C

Modul : 4 (Virtual LAN dan Trunking)

Kegiatan 1. Topologi 1

Nama masing – masing perangkat :

- switch : SW1
- PC0 : Leo
- PC1 : Aries
- PC2 : Virgo
- PC3 : Libra
- PC4 : Taurus
- P5 : Scorpio

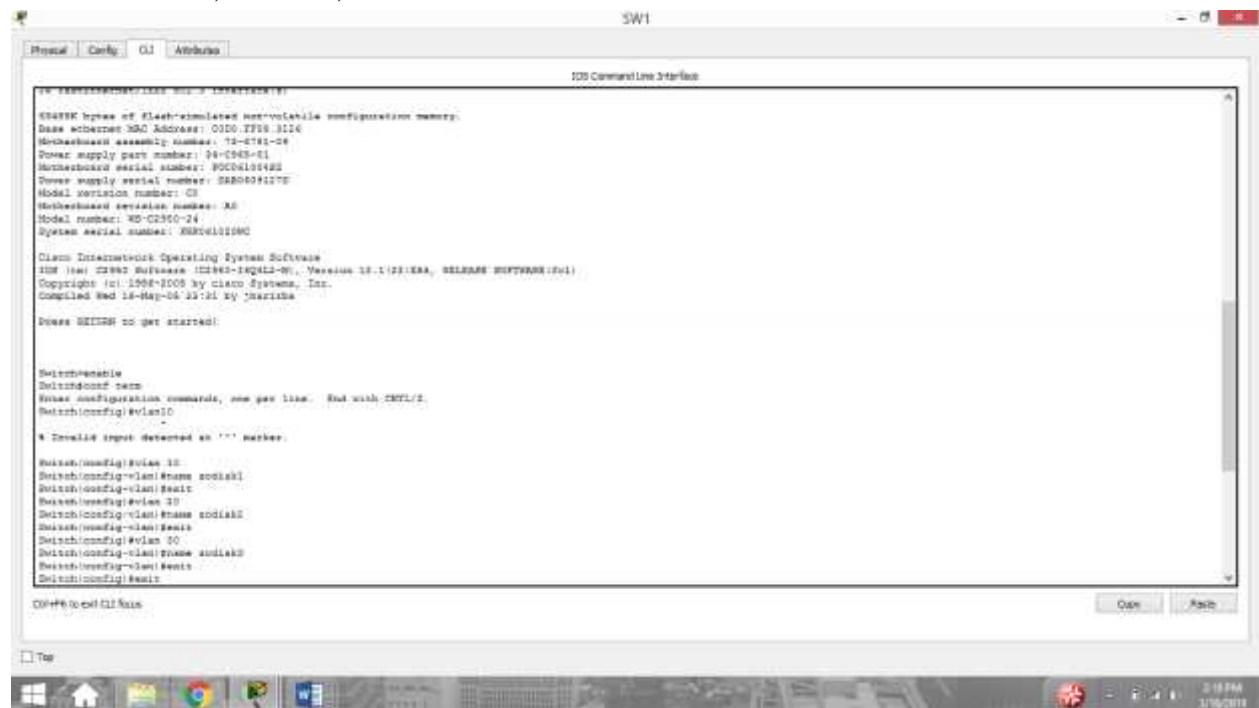


The screenshot shows the Cisco Packet Tracer interface with a router configuration window open. The 'IP Configuration' tab is selected, showing the following settings:

- IP Configuration:**
 - ☐ DHCP
 - ☒ Static:
 - IP Address: 172.21.1.1
 - Subnet Mask: 255.255.255.0
 - Default Gateway: 0.0.0.0
 - DNS Server: 0.0.0.0
- IPv6 Configuration:**
 - ☐ DHCP
 - ☒ Static:
 - IPv6 Address: (empty field)
 - Link Local Address: FE80::200:2::FF:FE80:8A2B
 - IPv6 Gateway: (empty field)
 - IPv6 DNS Server: (empty field)

The router is named 'Leo'. The interface is 'GigabitEthernet0/0/0'. The status is 'Up'. The configuration is applied to the interface.

- Zodiak1, Zodiak2, Zodiak3



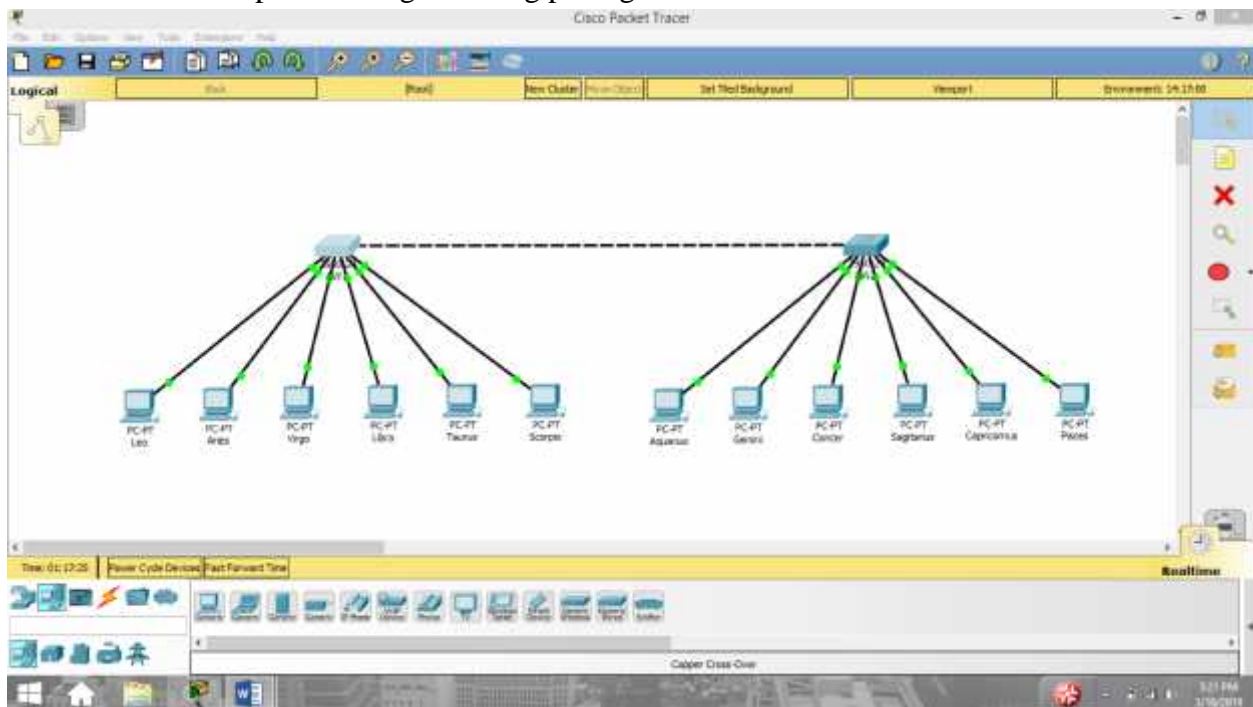
Konfigurasi port – port switch ke VLAN zodiak1, zodiak2, zodiak3



- Nilai VLAN 10 dengan nama VLAN zodiak1 memiliki port Fa 0/1 (Leo) dan Fa 0/4 (Libra)
- Nilai VLAN 20 dengan nama VLAN zodiak2 memiliki port Fa 0/2 (Aries) dan Fa 0/6 (Scorpio)
- Nilai VLAN 30 dengan nama VLAN zodiak3 memiliki port Fa 0/3 (Virgo) dan Fa 0/6 (Scorpio)

Kegiatan 2. Topologi 2

Memberikan nama pada masing – masing perangkat.

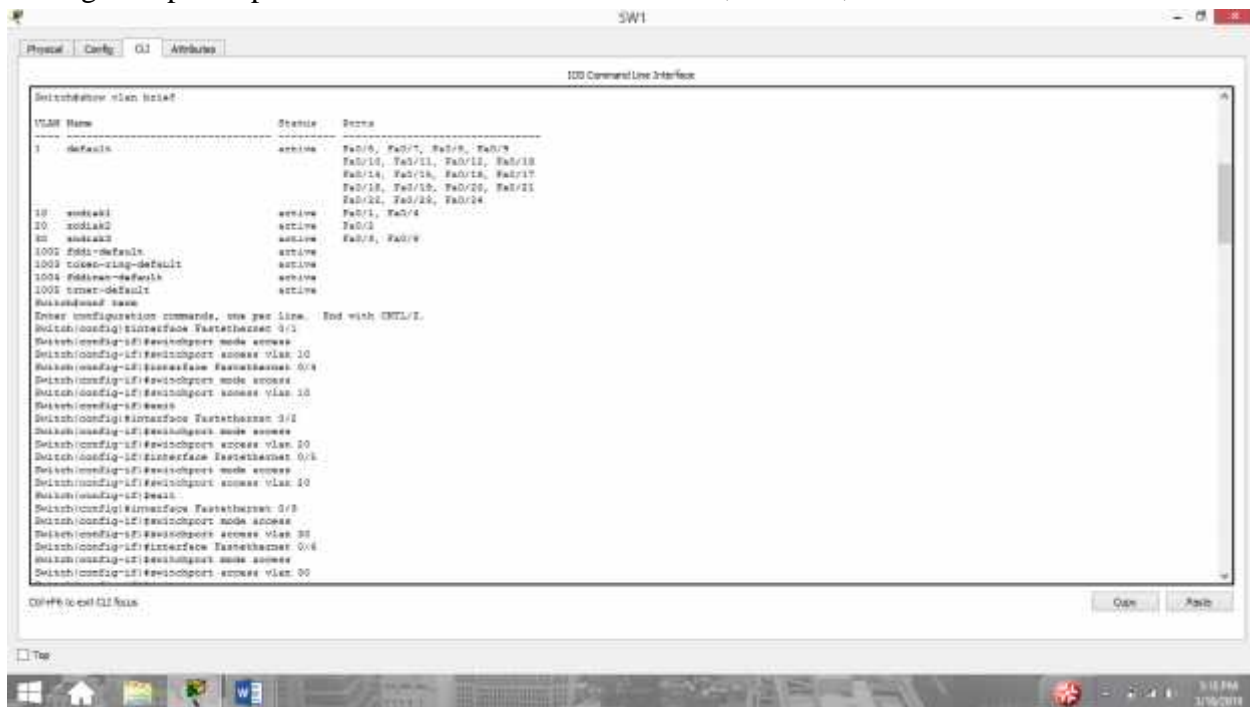


Membuat 3 VLAN dengan nama :

- zodiak1, zodiak2, zodiak3



Konfigurasi port – port switch ke dalam VLAN zodiak1, zodiak2, dan zodiak3.



The screenshot displays the command-line interface of a switch (SW1) showing the configuration for two VLANs: VLAN 1 and VLAN 10.

VLAN 1 Configuration:

```

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,
                                           Fa0/23, Fa0/24
10   sdiak1                  ACTIVE    Fa0/1, Fa0/4
10   sdiak2                  ACTIVE    Fa0/2, Fa0/3
10   sdiak3                  ACTIVE    Fa0/5, Fa0/6
1002 SW1-default          ACTIVE
1003 tokenring-default     ACTIVE
1004 fddisc-default        ACTIVE
1005 token-default         ACTIVE
Switch#show int vlan 10
Vlan10
# Internal input detected at '^' marker.
Switch#show vlan id 10
VLAN Name                Status    Ports
-----
10   sdiak1                  ACTIVE    Fa0/1, Fa0/4
VLAN Type: SAID        MTU   Parent RingNo BridgeNo Stp  BridgeMode Tunnel  Trnsl
10   ens1 100010         1500  -    -    -    -    -    -    -    -
Switch#show vlan id 10
VLAN Name                Status    Ports
-----
10   sdiak1                  ACTIVE    Fa0/1, Fa0/4
VLAN Type: SAID        MTU   Parent RingNo BridgeNo Stp  BridgeMode Tunnel  Trnsl

```

VLAN 10 Configuration:

The configuration for VLAN 10 shows it is named 'sdiak1' and is in an 'ACTIVE' state. It includes a list of ports (Fa0/1, Fa0/4) and a detailed table of VLAN attributes.

VLAN 10 Attributes Table:

VLAN Type	SAID	MTU	Parent	RingNo	BridgeNo	Stp	BridgeMode	Tunnel	Trnsl
10	ens1 100010	1500	-	-	-	-	-	-	-

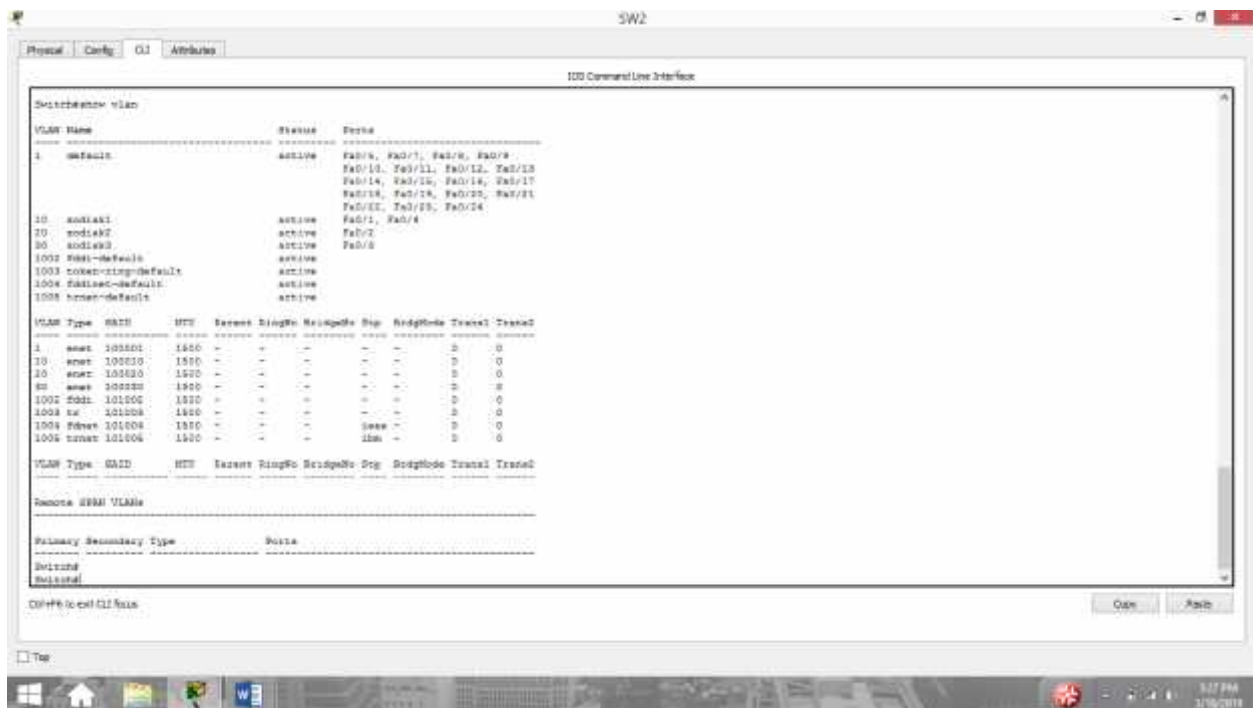
The interface also shows the command prompt 'C:\>' and a 'Top' button at the bottom left.

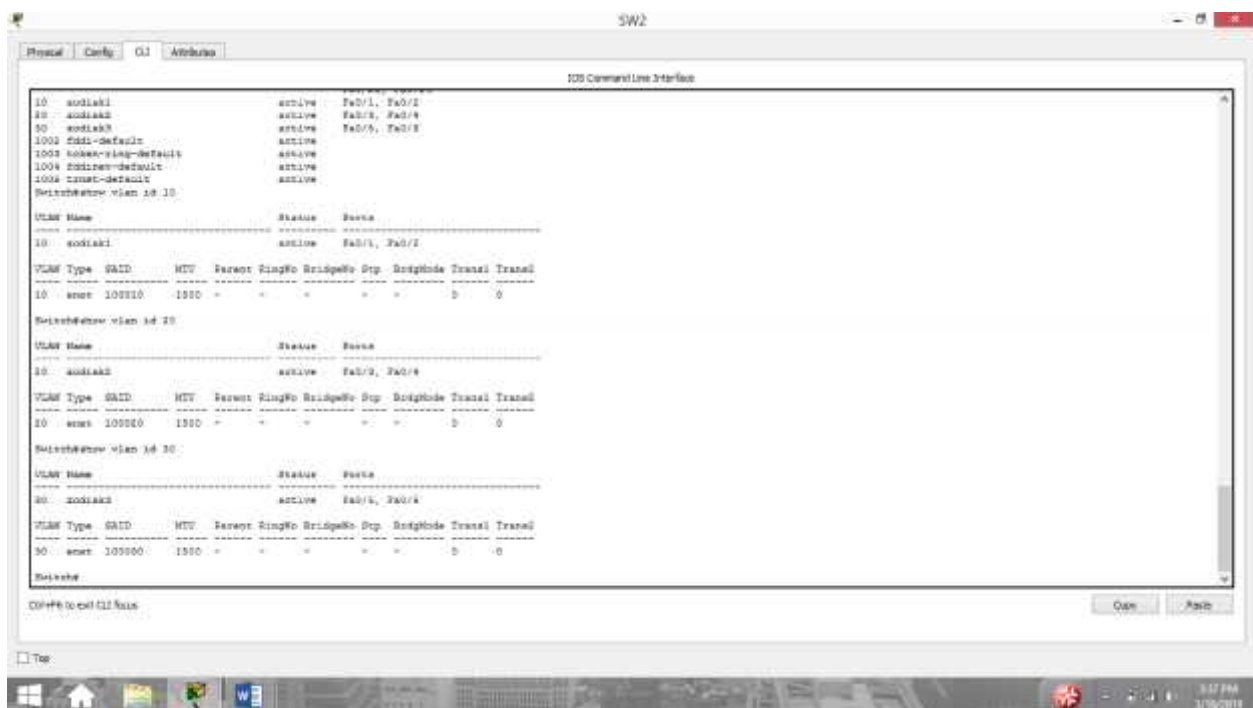
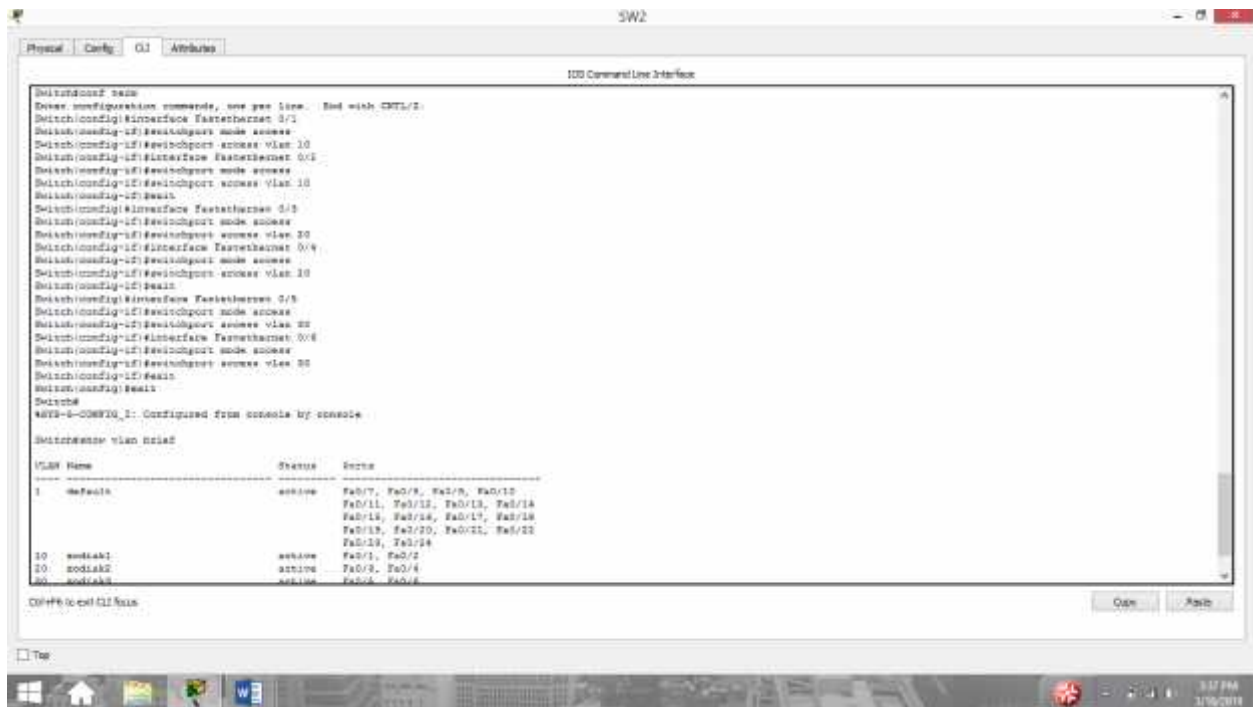
```
SW1
Physical Config Attributes
100 Command Line Interface

Switch#
Switch>show
Enter configuration commands, one per line. End with CTRL/Z.
Switch(config)#interface Fa 0/24
Switch(config-if)#no shutdown
Switch(config-if)#exit
Switch#
SW1-S-CORRIG_1: Configured from console by console

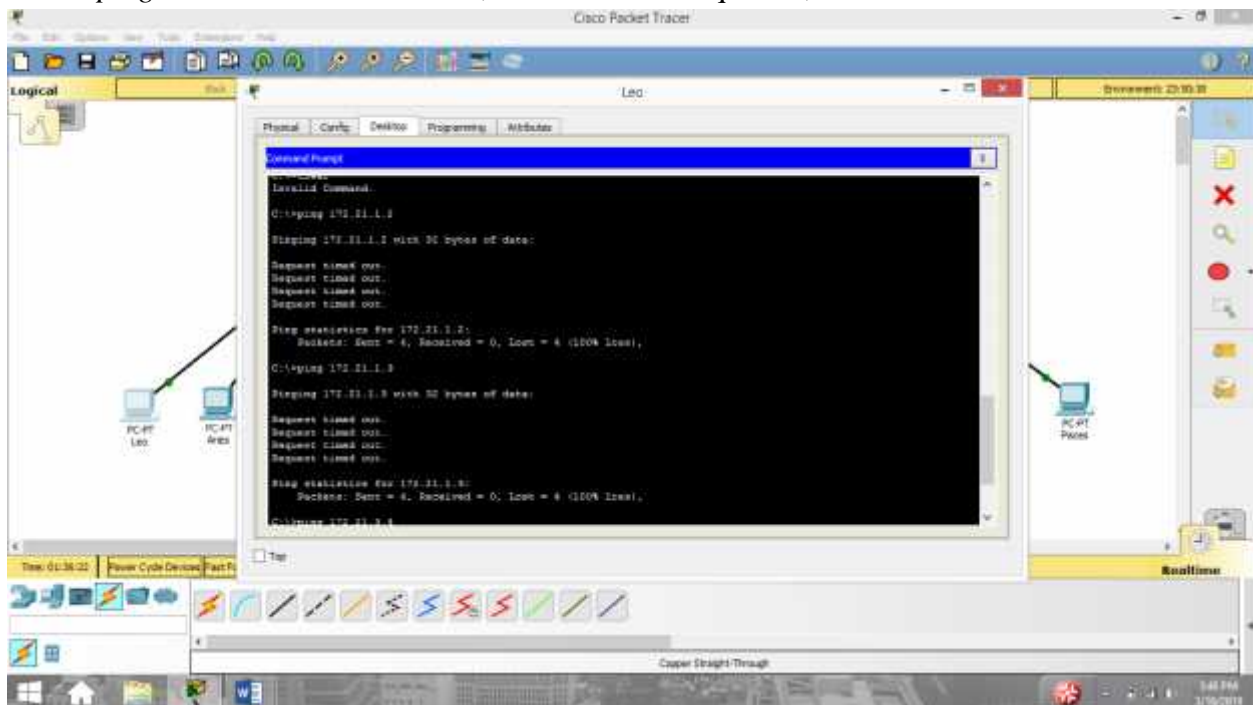
Switch#show interface FastEthernet 0/24
FastEthernet0/24 is down, line protocol is down (disabled)
Hardware is Lomac, address is 02d0.92fc.d31c (bia 02d0.92fc.d31c)
MTU 1500 bytes, Bcast 1024 bytes
 reliability 255/255, value 1/255, s/w 1/255
Encapsulation ARPA, loopback not set
Keepalive set (1s sec)
Half-duplex, 100Mb/s
input flow-control is off, output flow-control is off
ARP type: ARPA, ARP Timeout 04:00:00
Last input 00:00:00, output 00:00:00, output hang never
Last clearing of "show interface" counters never
Input queue: 0/0/0/0 (size/max/drops/flushes); Total output drops: 0
Queueing strategy: fifo
Output queue 0/0/0 (size/max)
5 minute input rate 0 bits/sec, 0 packets/sec
5 minute output rate 0 bits/sec, 0 packets/sec
365 packets input, 150561 bytes, 0 no buffer
Received 0 input frames, 0 rx errors, 0 discarded, 0 throttles
0 input errors, 0 CRC, 0 frame, 0 overrun, 0 ignored, 0 abort
0 watchdog, 0 multicast, 0 pause input
0 input packets with dribble condition detected
2887 packets output, 248370 bytes, 0 undersize
```


Proses konfigurasi VLAN *trunking* pada switch 2.





Proses *ping* dari PC Leo ke PC Aries, PC Leo ke PC Aquarius, dan PC Leo ke PC Pisces.



Proses *ping* dari PC Libra ke PC Cancer, and PC Libra ke PC Leo.

