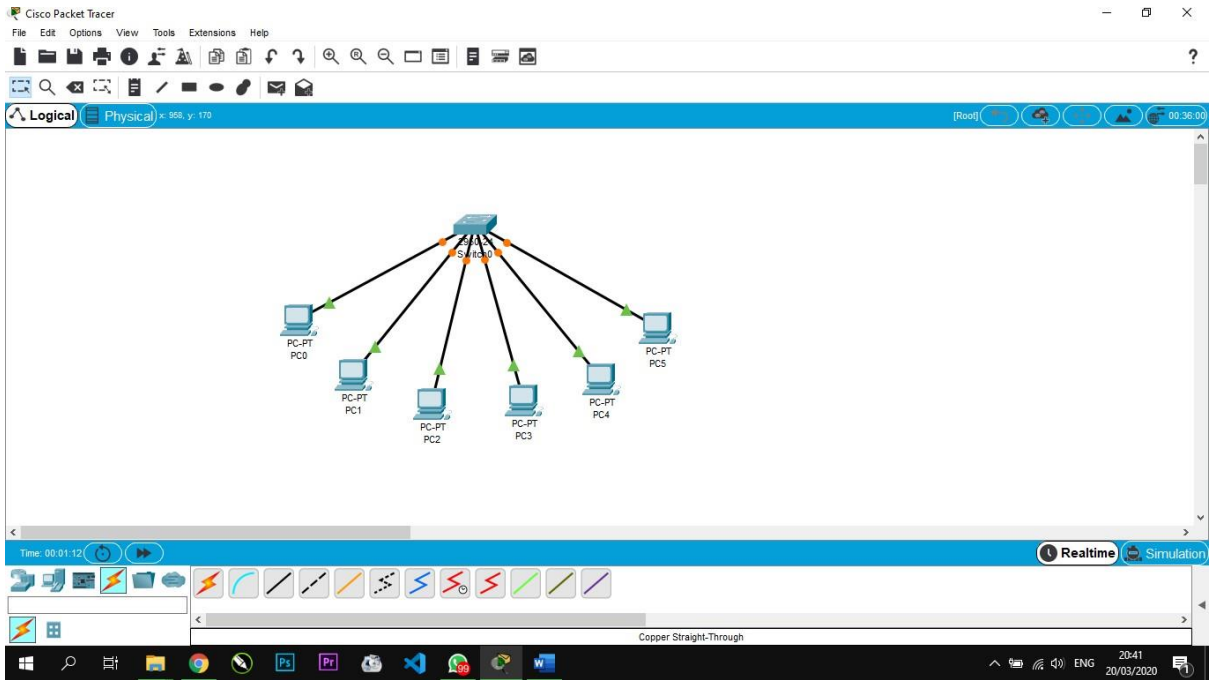


Nama : Sindhiana Aulia F
NIM : L200180084
Kelas : C

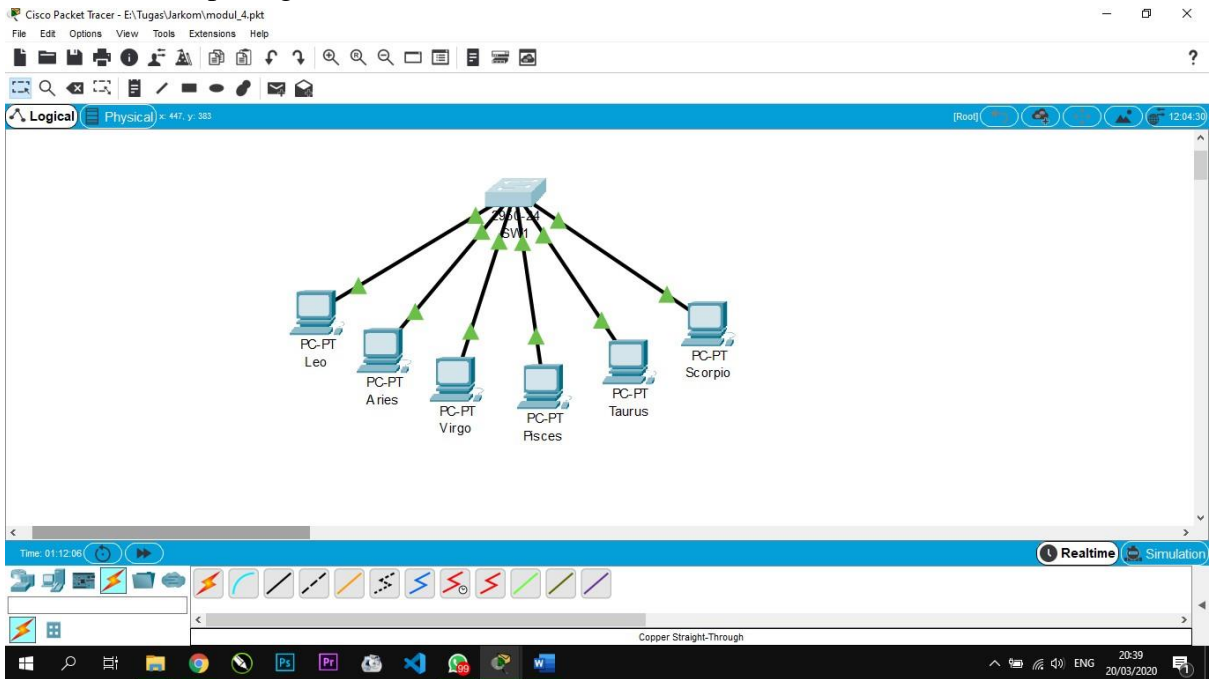
MODUL 4

Kegiatan Praktikum
Kegiatan 1

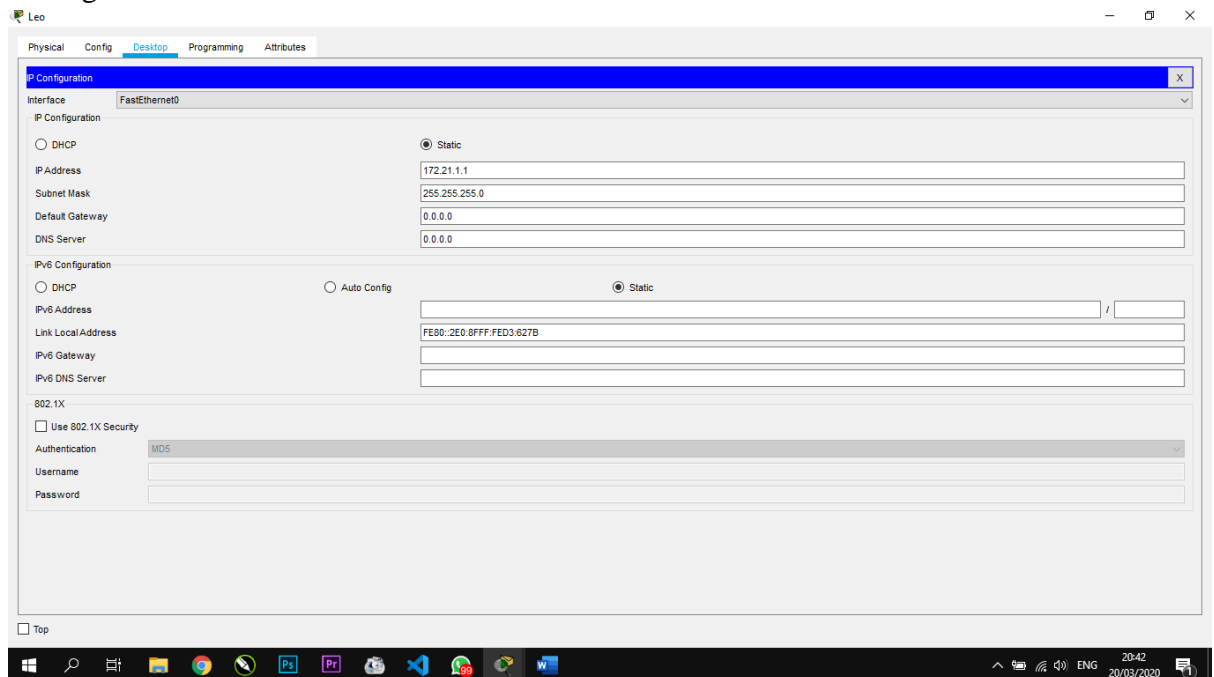
a. Topologi



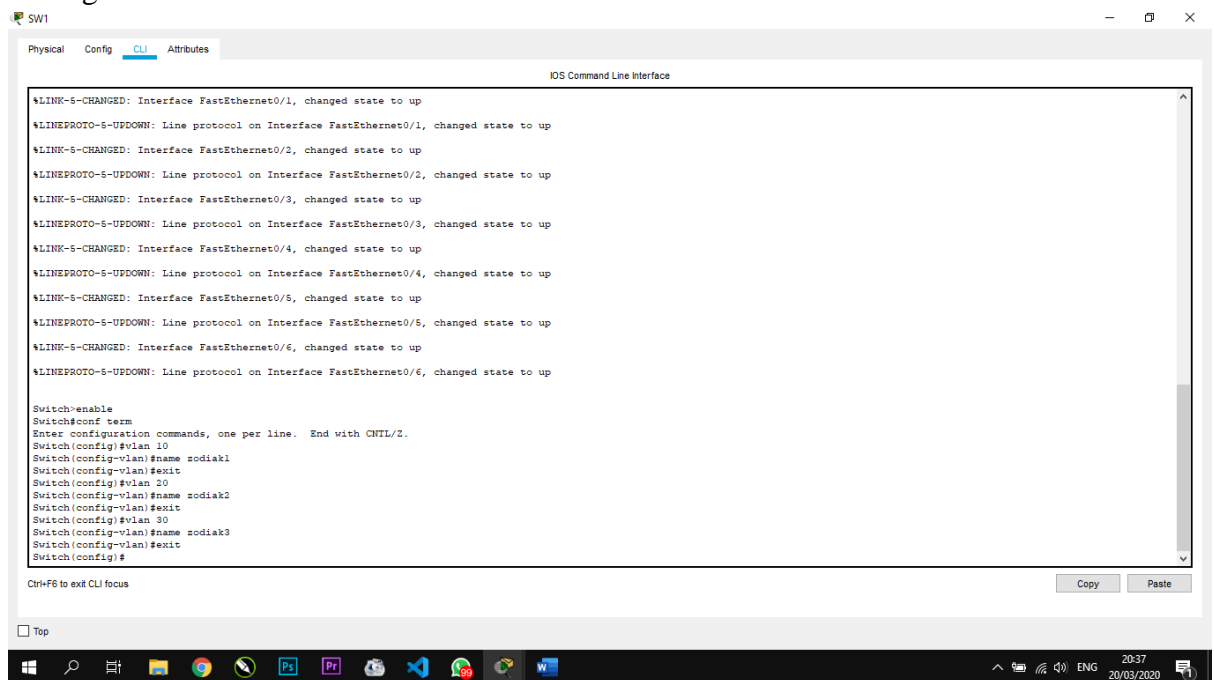
b. Memberi nama perangkat



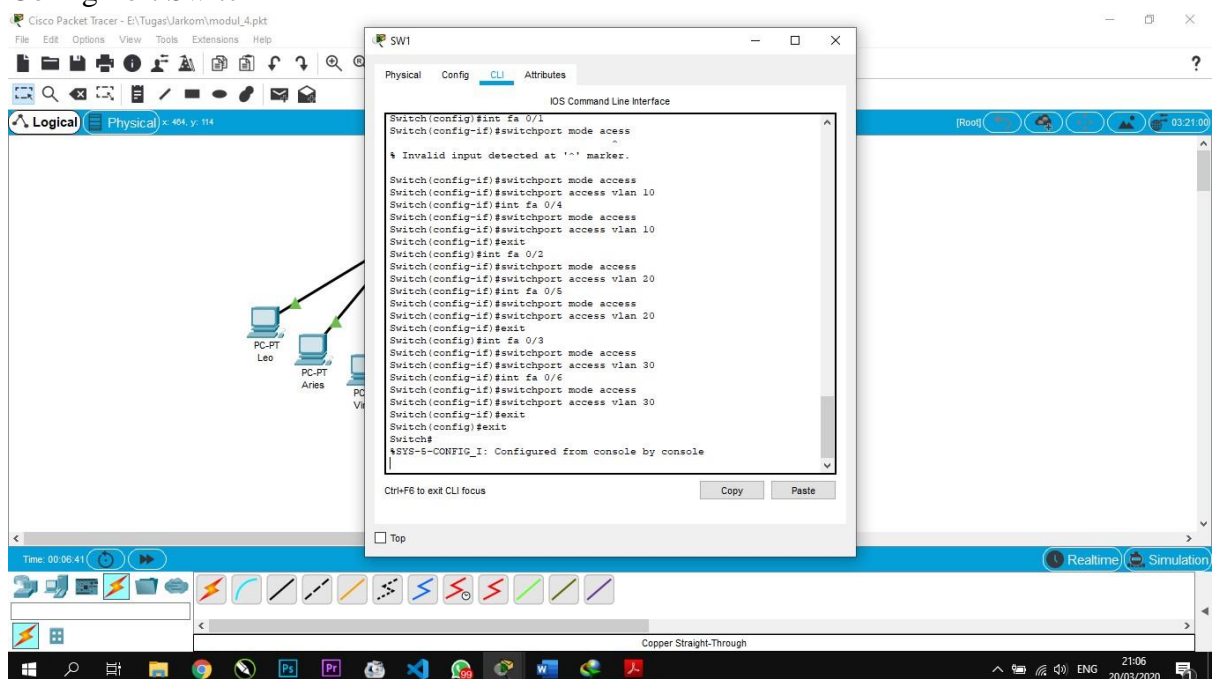
c. Config IP



d. Config Switch



e. Config Port Switch



f. Cek Config

SW1

Physical Config **CLI** Attributes

IOS Command Line Interface

```
Switch(config-if)#exit
Switch(config)#exit
Switch#
$SYS-$-CONFIG_I: Configured from console by console

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 Transl Trans2
-----
10  enet  100010  1500  -     -     -     -     -     0      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 Transl Trans2
-----
20  enet  100020  1500  -     -     -     -     -     0      0

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 Transl Trans2
-----
30  enet  100030  1500  -     -     -     -     -     0      0

Switch#show vlan id brief

% Invalid input detected at '^' marker.
```

Ctrl+F6 to exit CLI focus

Copy Paste

Top

SW1

Physical Config **CLI** Attributes

IOS Command Line Interface

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

VLAN Type  SAID      MTU   Parent RingNo BridgeNo Stp    BrdgMode Transl Trans2
-----
20  enet  100020  1500  -     -     -     -     -     0      0

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 Transl Trans2
-----
30  enet  100030  1500  -     -     -     -     -     0      0

Switch#show vlan id brief

% Invalid input detected at '^' marker.
```

```
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  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#
```

Ctrl+F6 to exit CLI focus

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➤ Tugas 6A

- VLAN 10

No	Variabel	Nilai
1.	Nomor VLAN	10
2.	Nama VLAN	zodiak1
3.	Port	Fa 0/1, Fa 0/4
4.	Status	active

- VLAN 20

No	Variabel	Nilai
1.	Nomor VLAN	20
2.	Nama VLAN	zodiak2
3.	Port	Fa 0/2, Fa 0/5
4.	Status	active

- VLAN 30

No	Variabel	Nilai
1.	Nomor VLAN	30
2.	Nama VLAN	zodiak3
3.	Port	Fa 0/3, Fa 0/6
4.	Status	active

➤ Tugas 6B

- VLAN 10

Dengan nomor VLAN, yaitu 10, nama VLAN adalah zodiak1, memiliki port Fa 0/1 dan Fa 0/4 yang merupakan anggota dari zodiak1, yaitu Leo dan Pisces yang berstatus active.

- VLAN 20

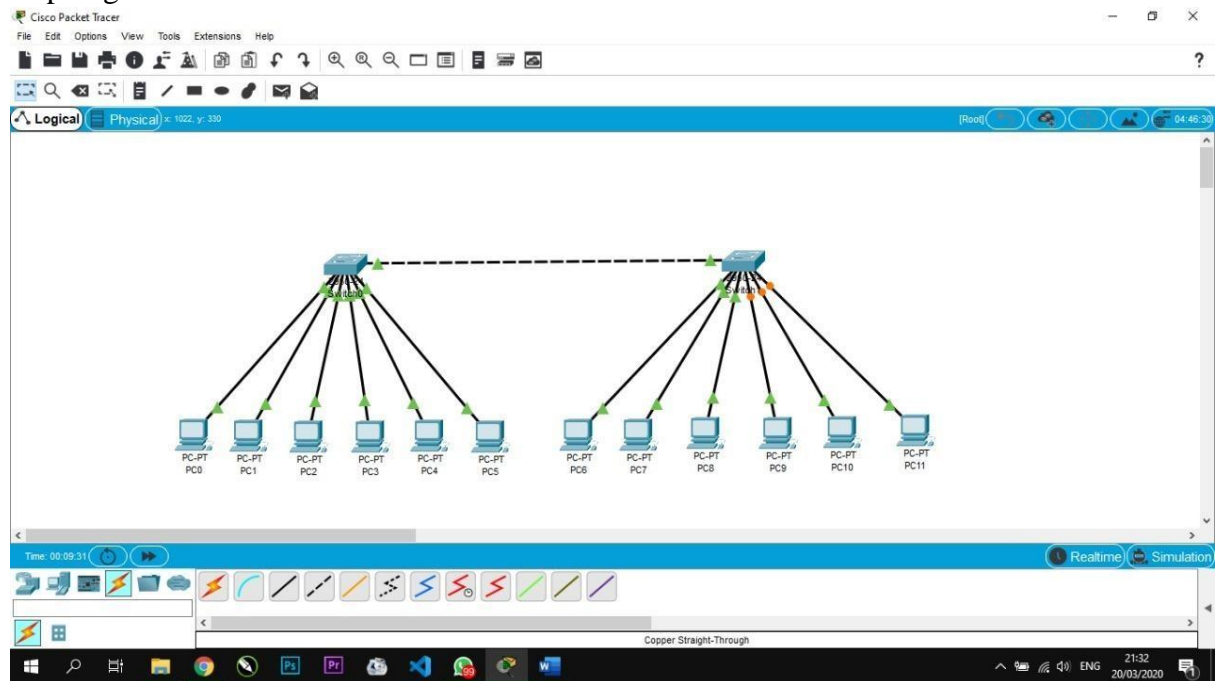
Dengan nomor VLAN, yaitu 20, nama VLAN adalah zodiak2, memiliki port Fa 0/2 dan Fa 0/5 yang merupakan anggota dari zodiak2, yaitu Aries dan Taurus yang berstatus active.

- VLAN 30

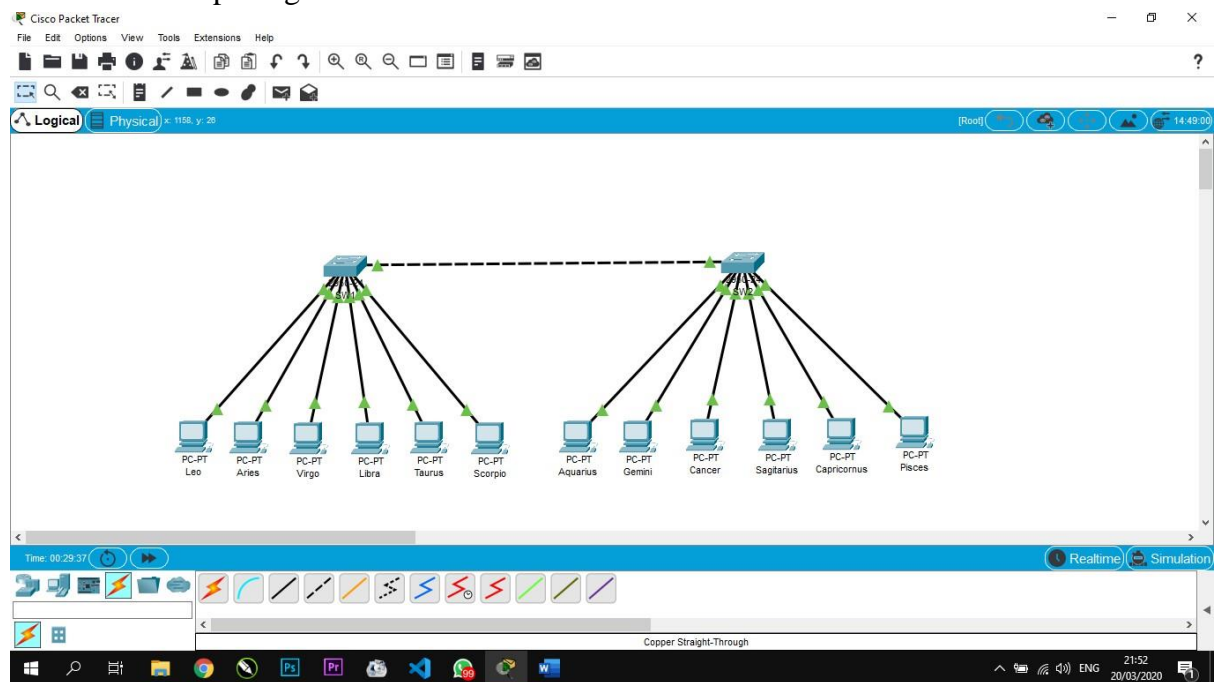
Dengan nomor VLAN, yaitu 30, nama VLAN adalah zodiak3, memiliki port Fa 0/3 dan Fa 0/6 yang merupakan anggota dari zodiak3, yaitu Virgo dan Scorpio yang berstatus active.

Kegiatan 2

a. Topologi



b. Memberi nama perangkat



c. Config IP

Leo

Physical Config Desktop Programming Attributes

P Configuration

Interface FastEthernet0

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 ☐ Auto Config ☒ Static

IPv6 Address

Link Local Address FE80::290:CFF:FEAB:5740

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

Authentication MDS

Username

Password

Top

Aquarius

Physical Config Desktop Programming Attributes

P Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IP Address 172.21.1.3

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address

Link Local Address FE80::260:70FF:FE08:D961

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

Authentication MDS

Username

Password

Top

Windows taskbar: 22:00 20/03/2020

d. Config Switch 1

SW1

Physical Config CLI Attributes

IOS Command Line Interface

```
%LINK-5-CHANGED: Interface FastEthernet0/2, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/3, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/4, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/4, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/5, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/5, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/6, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/6, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/7, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/7, changed state to up

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)#
```

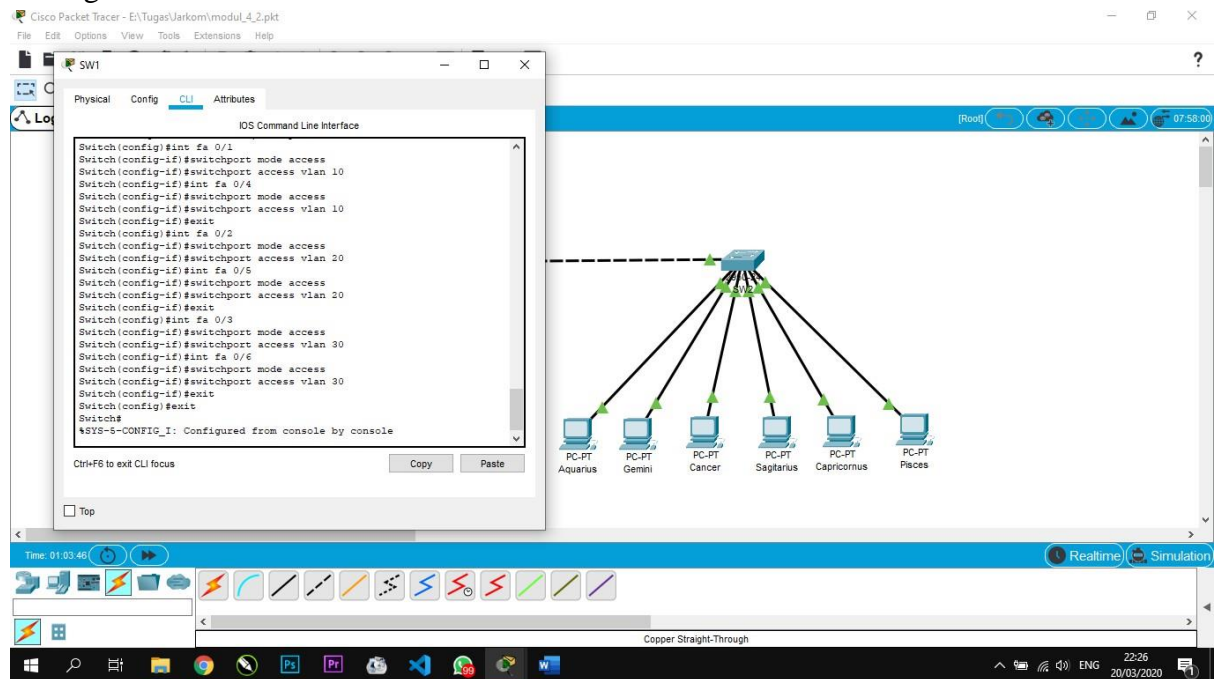
Ctrl+F6 to exit CLI focus

Copy Paste

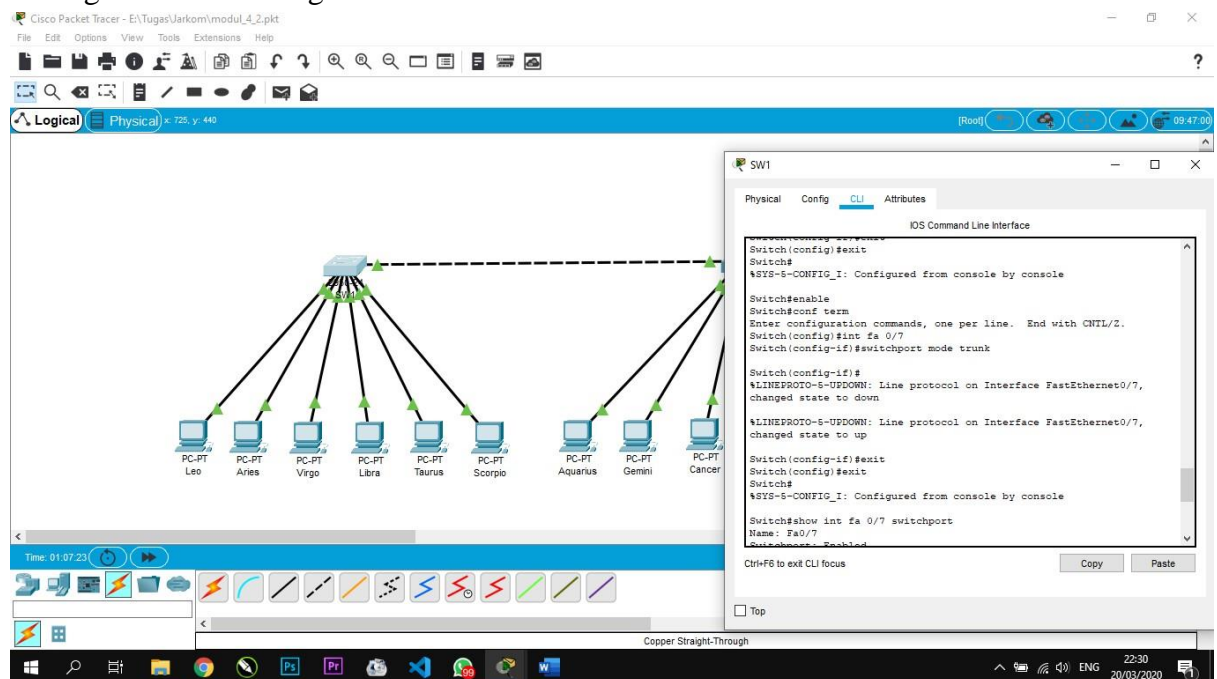
Top

Windows taskbar: 22:12 20/03/2020

e. Config Port Switch 1



f. Config VLAN Trunking switch 1



g. Cek Config VLAN Switch 1

Cisco Packet Tracer - E:\Tugas\Jarkom\modul_4_2.pkt

File Edit Options View Tools Extensions Help

Logical Physical x 725, y 440 [Root] 10:44:30

SW1

Physical Config CLI Attributes

IOS Command Line Interface

```
Switch#show int fa 0/7 switchport
Name: Fa0/7
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
```

Ctrl+F6 to exit CLI focus

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Top

Time: 01:09:18

SW1

Physical Config CLI Attributes

IOS Command Line Interface

```
Switch#show int trunk
Port      Mode      Encapsulation  Status      Native vlan
Fa0/7     on        802.1q         trunking    1

Port      Vlans allowed on trunk
Fa0/7     1-1005

Port      Vlans allowed and active in management domain
Fa0/7     1,10,20,30

Port      Vlans in spanning tree forwarding state and not pruned
Fa0/7     1,10,20,30

Switch#show vlan

VLAN Name                Status    Ports
-----
1    default                active    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   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

VLAN Type  SAID      MTU    Parent RingNo BridgeNo Stp    BrdgMode Trans1 Trans2
-----
1    enet  100001   1500    -     -     -     -     -     0      0
10   enet  100010   1500    -     -     -     -     -     0      0
20   enet  100020   1500    -     -     -     -     -     0      0
30   enet  100030   1500    -     -     -     -     -     0      0
1002 fddi  101002   1500    -     -     -     -     -     0      0
1003 tr  101003   1500    -     -     -     -     -     0      0
1004 fdnet 101004   1500    -     -     -     -     -     0      0
1005 trnet 101005   1500    -     -     -     -     -     0      0
```

Ctrl+F6 to exit CLI focus

Copy Paste

Top

Time: 01:09:18

SW1

Physical Config CLI Attributes

IOS Command Line Interface

```
Switch#show vlan

VLAN Name                Status    Ports
-----
1    default                active    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   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

VLAN Type  SAID      MTU    Parent RingNo BridgeNo Stp    BrdgMode Trans1 Trans2
-----
1    enet  100001   1500    -     -     -     -     -     0      0
10   enet  100010   1500    -     -     -     -     -     0      0
20   enet  100020   1500    -     -     -     -     -     0      0
30   enet  100030   1500    -     -     -     -     -     0      0
1002 fddi  101002   1500    -     -     -     -     -     0      0
1003 tr  101003   1500    -     -     -     -     -     0      0
1004 fdnet 101004   1500    -     -     -     -     -     0      0
1005 trnet 101005   1500    -     -     -     -     -     0      0

Remote SPAN VLANs
-----
Primary Secondary Type      Ports
-----
Switch#
Switch#
Switch#
Switch#
```

Ctrl+F6 to exit CLI focus

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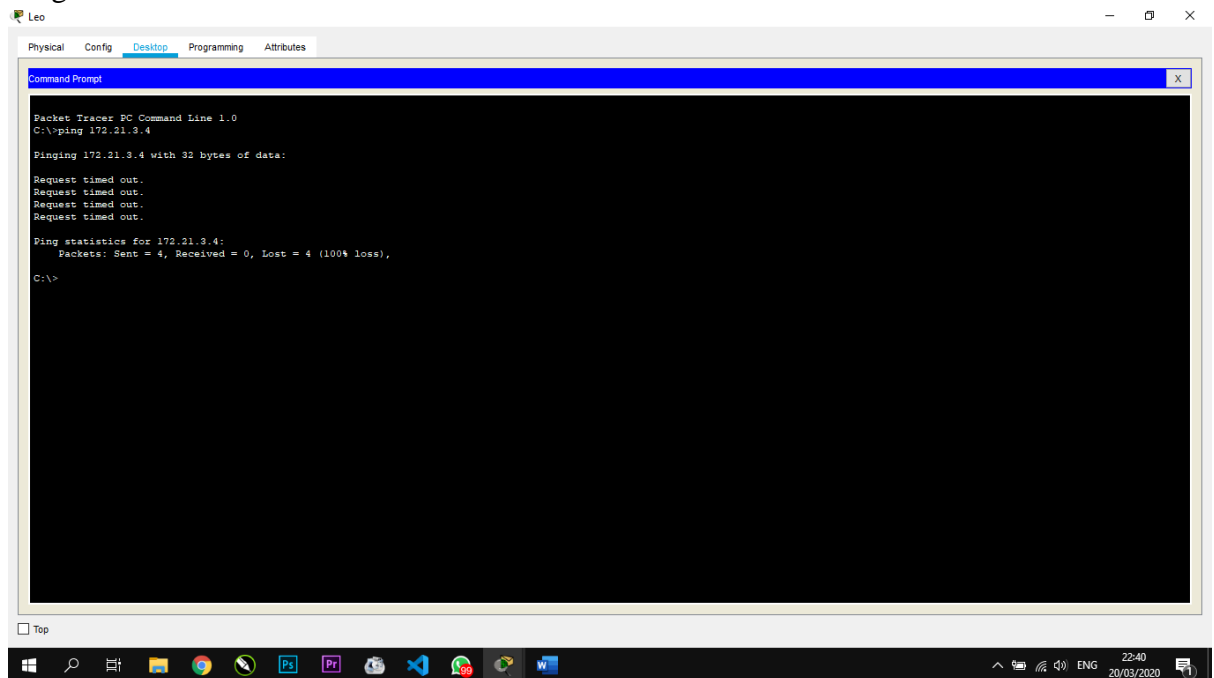
Top

Time: 01:09:18

➤ Tugas 7A

Pada langkah ini port yang sudah terkonfigurasi ke dalam vlan yaitu port 0/1 sampai port 0/6, sedangkan port 0/7 untuk trunking antar switch.

h. Ping Leo ke Pisces



```
Packet Tracer PC Command Line 1.0
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.

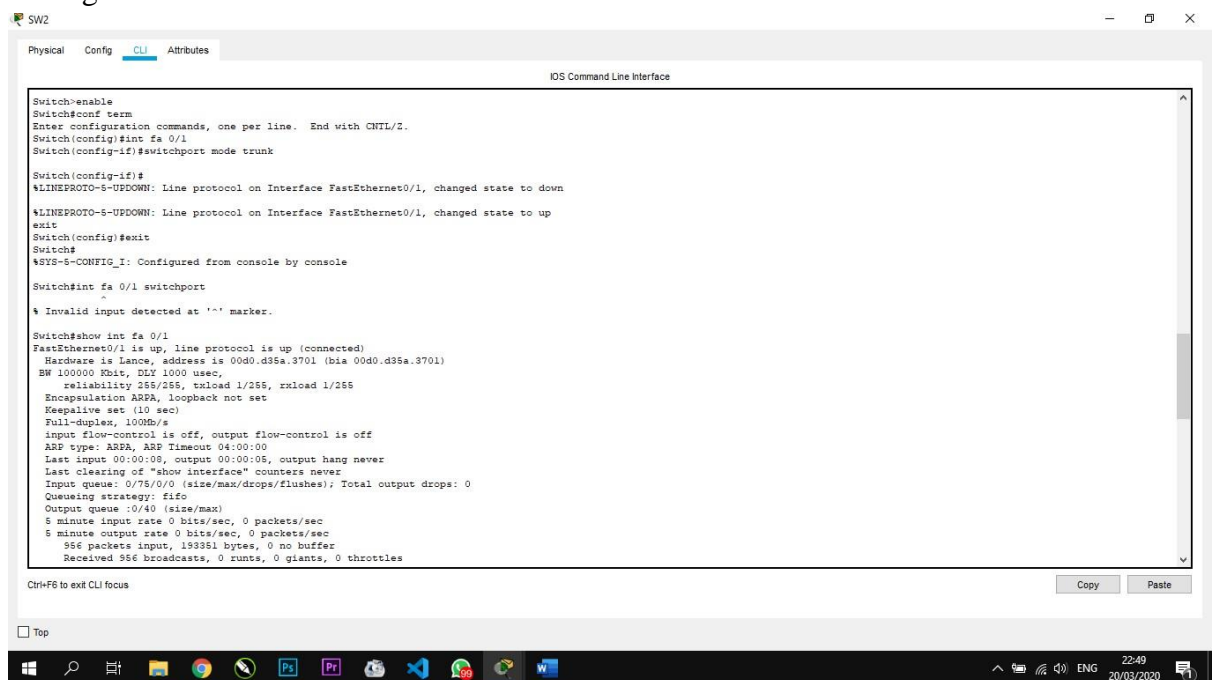
Ping statistics for 172.21.3.4:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```

➤ Tugas 8A

Hasil ping dari PC Leo ke PC Pisces “Request timed out” karena PC Leo dan PC Pisces tidak berada dalam satu VLAN dan memiliki network access yang berbeda.

i. Config VLAN Trunk Switch 2



```
Switch#enable
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#int fa 0/1
Switch(config-if)#switchport mode trunk

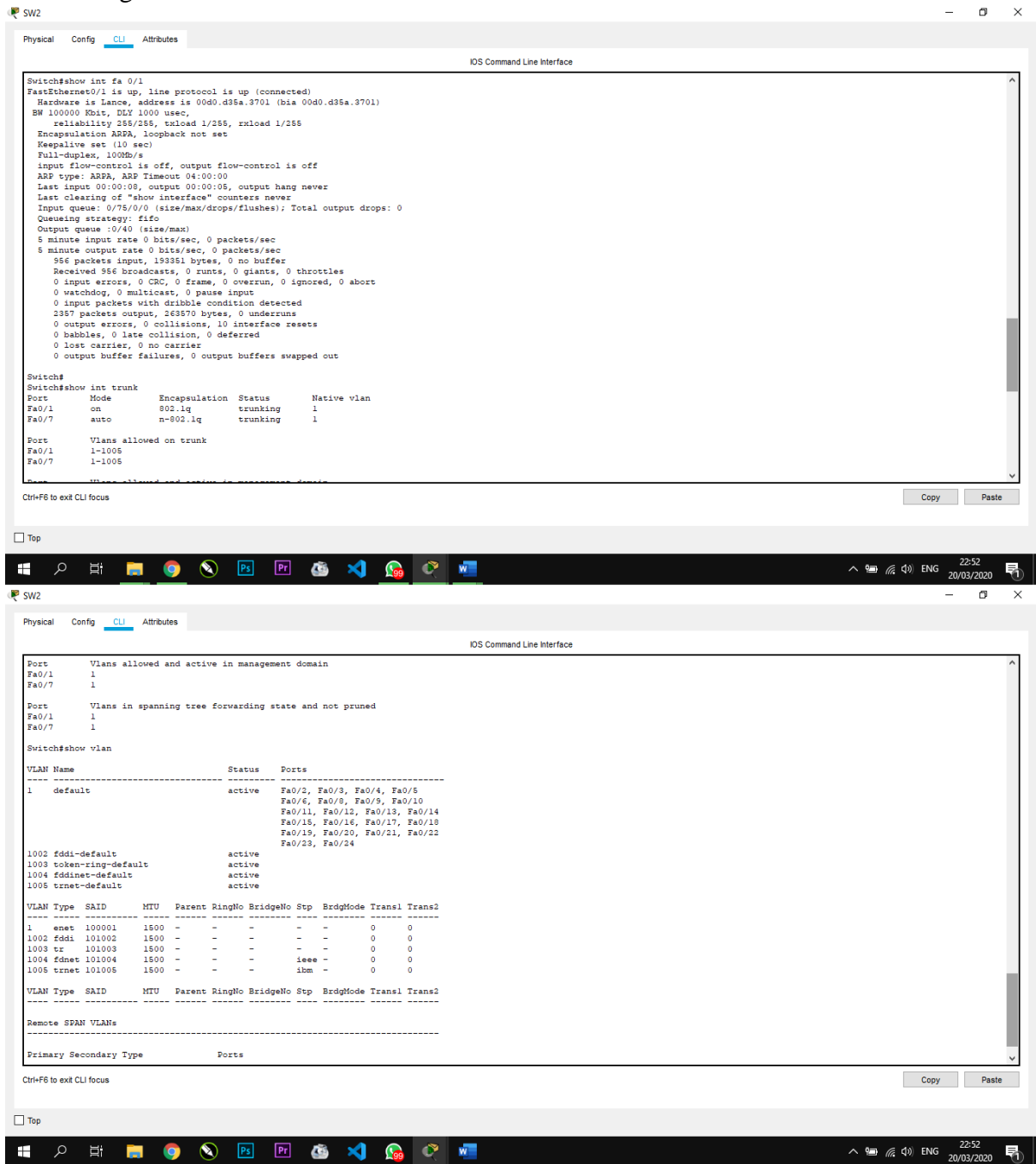
Switch(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to down
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
exit
Switch(config)#exit
Switch#
%SYS-6-CONFIG_I: Configured from console by console

Switch#int fa 0/1 switchport
^
% Invalid input detected at '^' marker.

Switch#show int fa 0/1
FastEthernet0/1 is up, line protocol is up (connected)
  Hardware is Lance, address is 00d0.d35a.3701 (bia 00d0.d35a.3701)
  BW 1000000 Kbit, DLY 1000 usec,
    reliability 255/255, txload 1/255, rxload 1/255
  Encapsulation ARPA, loopback not set
  Keepalive set (10 sec)
  Full-duplex, 100Mb/s
  input flow-control is off, output flow-control is off
  ARP type: ARPA, ARP Timeout 04:00:00
  Last input 00:00:08, output 00:00:05, output hang never
  Last clearing of "show interface" counters never
  Input queue: 0/75/0/0 (size/max/drops/flushes); Total output drops: 0
  Queueing strategy: fifo
  Output queue: 0/40 (size/max)
  5 minute input rate 0 bits/sec, 0 packets/sec
  5 minute output rate 0 bits/sec, 0 packets/sec
    556 packets input, 19351 bytes, 0 no buffer
      Received 556 broadcasts, 0 runts, 0 giants, 0 throttles

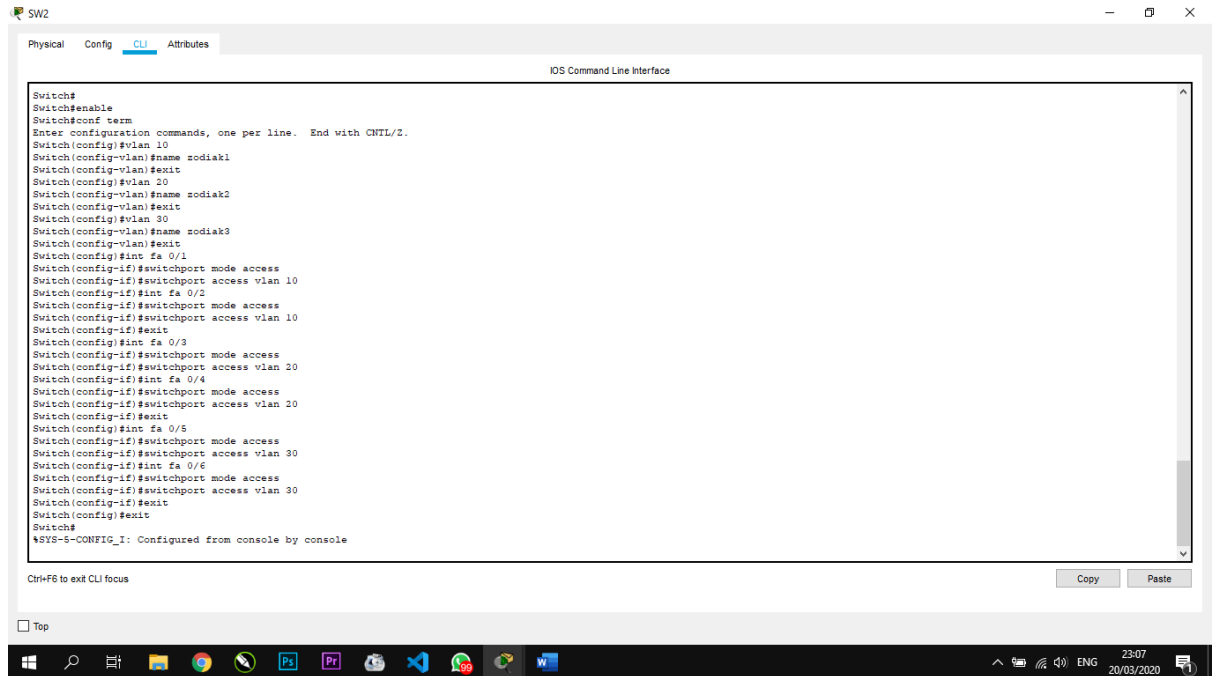
Ctrl-F6 to exit CLI focus
```

j. Cek Config VLAN Switch 2

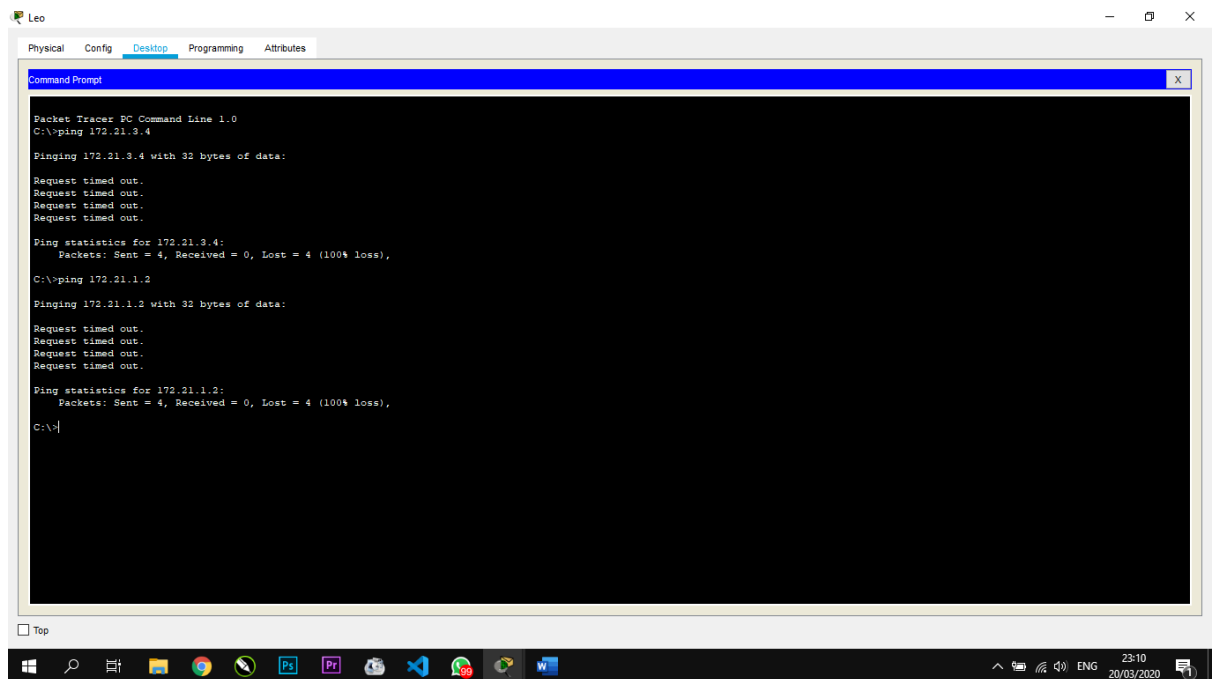


- Tugas 10A
- Pada langkah ini port port fastethernet belum terkonfigurasi ke dalam VLAN, bahkan VLAN nya belum dibuat

k. Config Port Switch 2

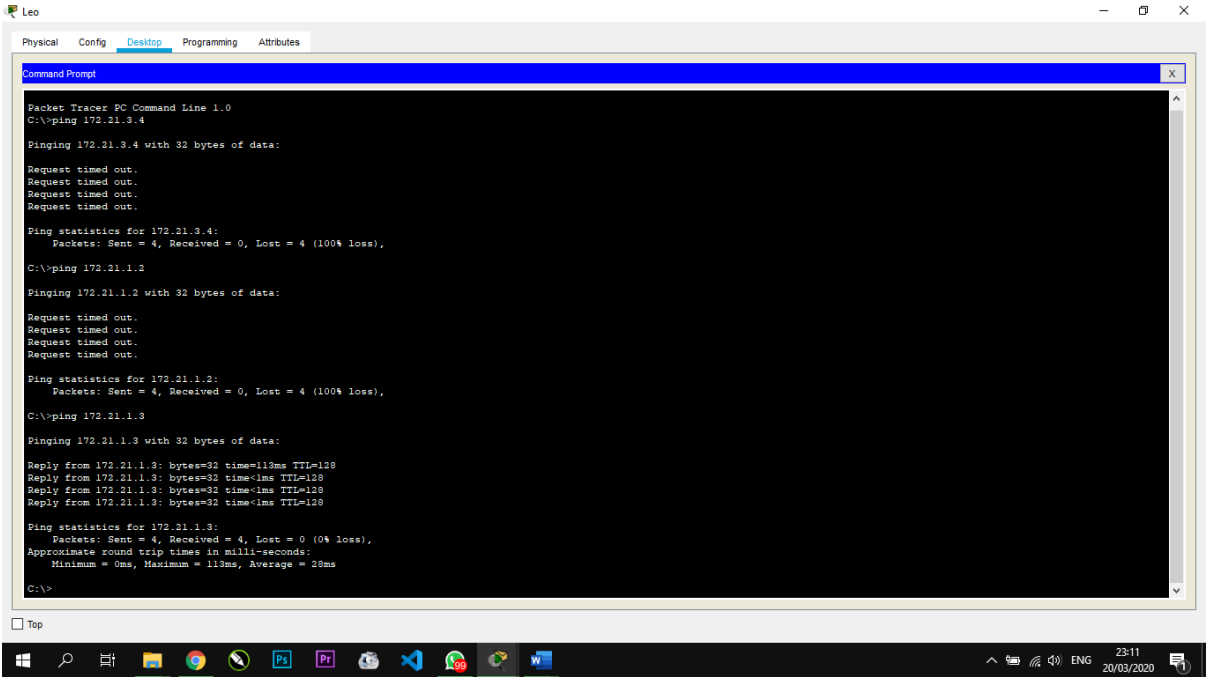


l. Cek Ping Leo ke Aries



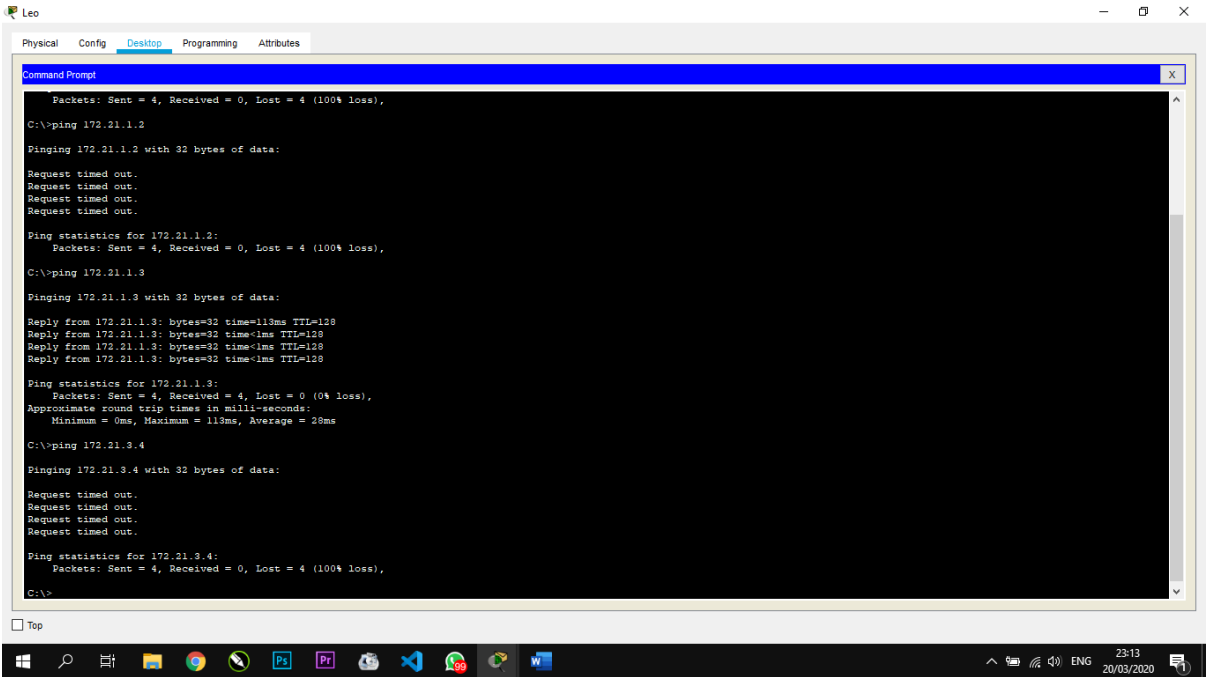
Hasil ping dari PC leo ke PC aries “Request timed out” karena PC leo dan PC aries tidak berada dalam satu VLAN meskipun memiliki network access yang sama.

Leo ke Aquarius



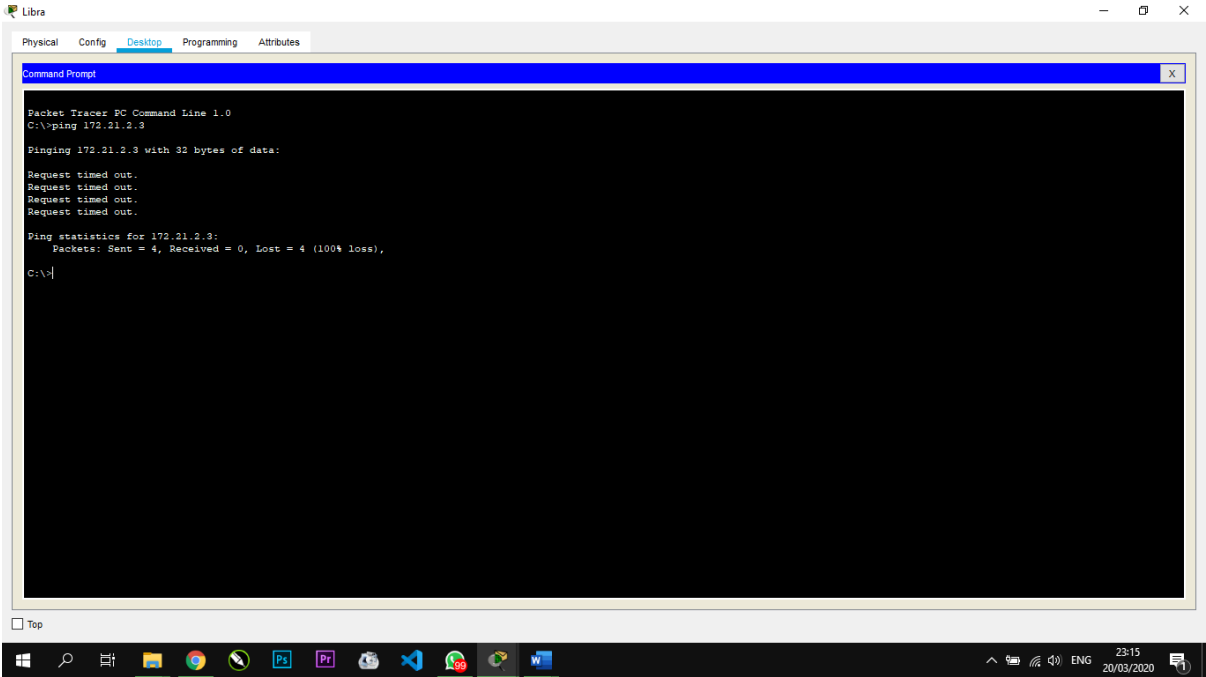
Hasil ping dari PC leo ke PC aquarius “Reply” karena PC leo dan PC aquarius berada dalam satu VLAN dan memiliki network access yang sama

Leo ke Pices

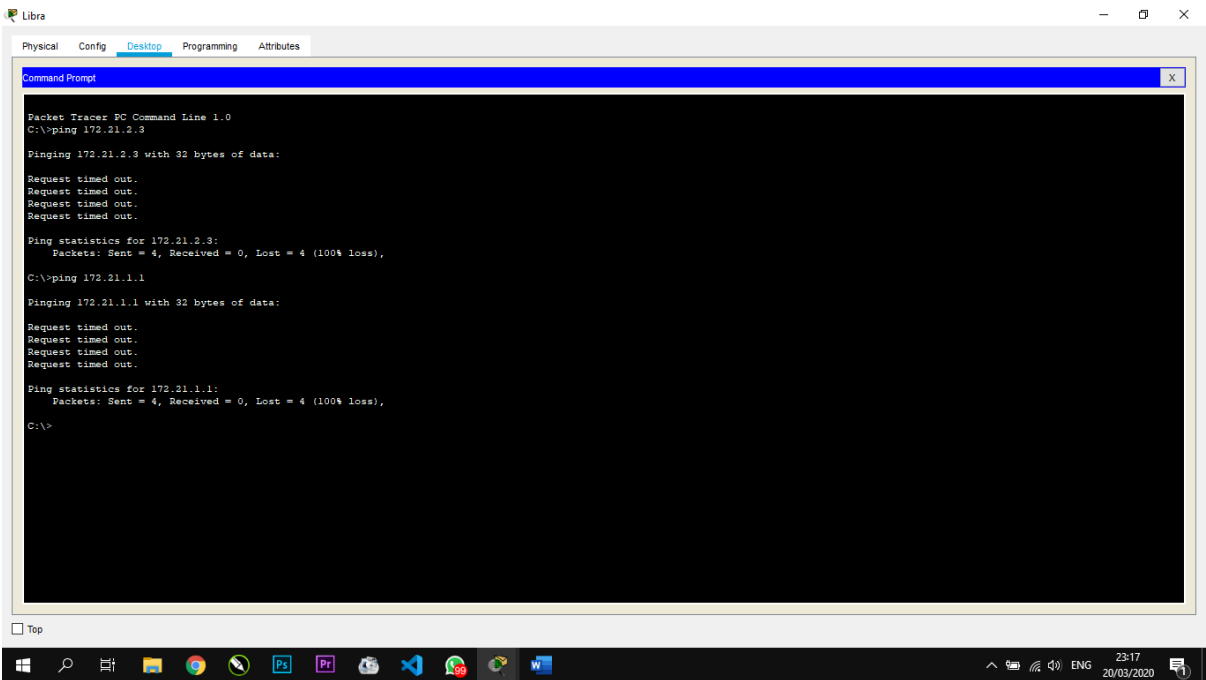


Hasil ping dari PC leo ke PC pisces “Request timed out” karena PC leo dan PC pisces tidak berada dalam satu VLAN dan memiliki network access yang berbeda.

Libra ke Cancer



Hasil ping dari PC libra ke PC cancer “Request timed out” karena PC libra dan PC cancer tidak berada dalam satu VLAN meskipun memiliki network access yang sama.
Libra ke Leo



Hasil ping dari PC libra ke PC leo “Request timed out” karena PC libra dan PC leo tidak berada dalam satu VLAN meskipun memiliki network access yang sama.