Nama : **Yarin Nanditya A**

Kelas : **D**

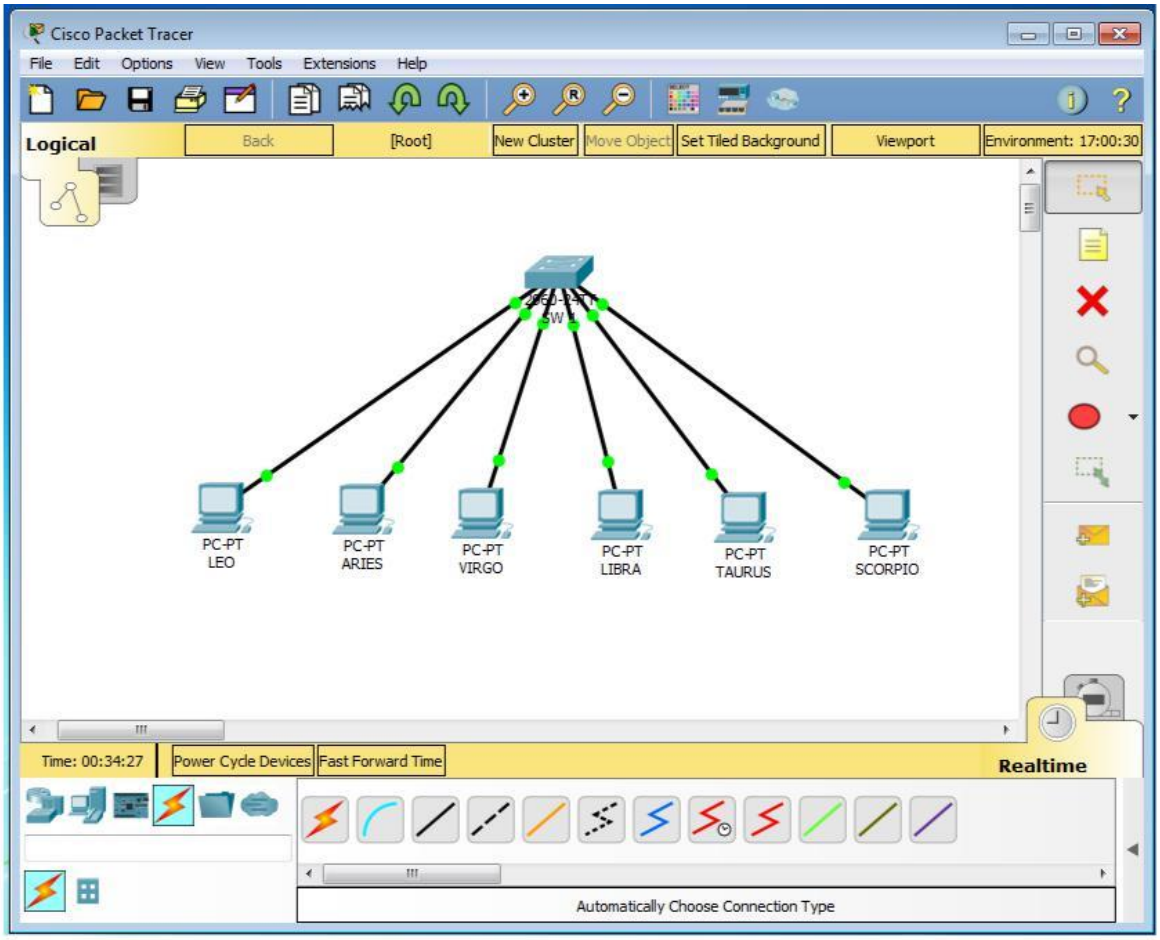
Nim : **L200170155**

Laporan Praktikum

MODUL 4

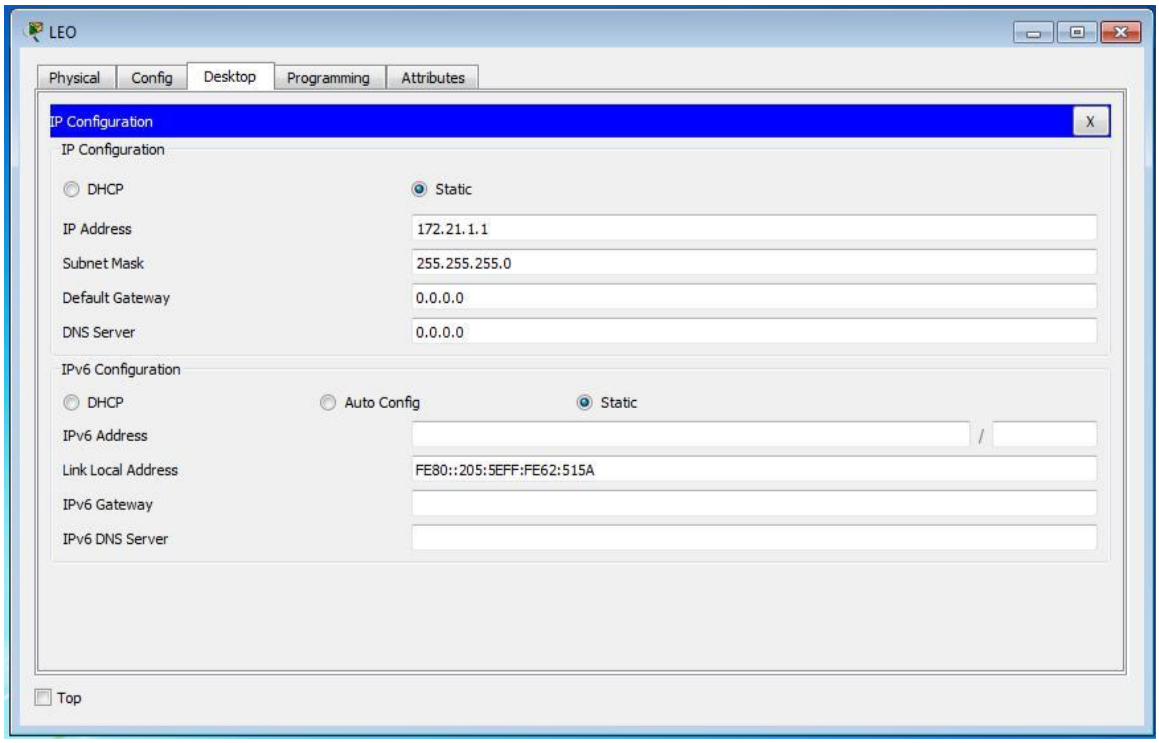
Kegiatan 1

1. Membuat topologi berikut ini menggunakan packet tracer
2. Memberi nama masing masing perangkat
    a. Switch : SW
    b. Pc1: Leo
    c. Pc2: Aries
    d. Pc3: Virgo
    e. Pc4: Libra
    f. Pc5: Taurus
    g. Pc6: Scorpio

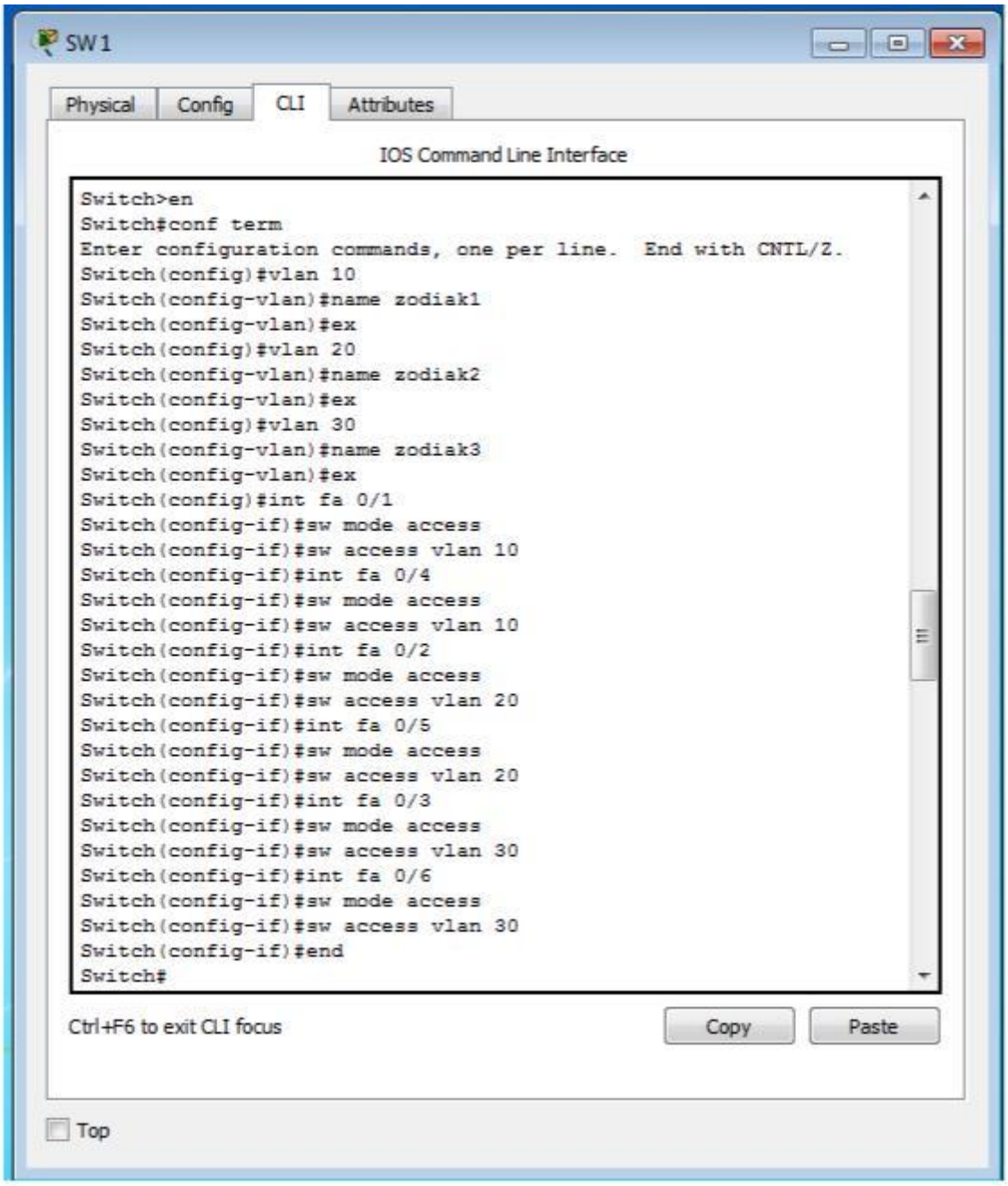


3. Merubah konfigurasi tiap PC
    a. Leo : 172.21.1.1/24
    b. Aries : 172.21.1.2/24
    c. Virgo : 172.21.1.3/24
    d. Libra : 172.21.1.4/24
    e. Taurus : 172.21.1.5/24
    f. Scorpio : 172.21.1.6/24

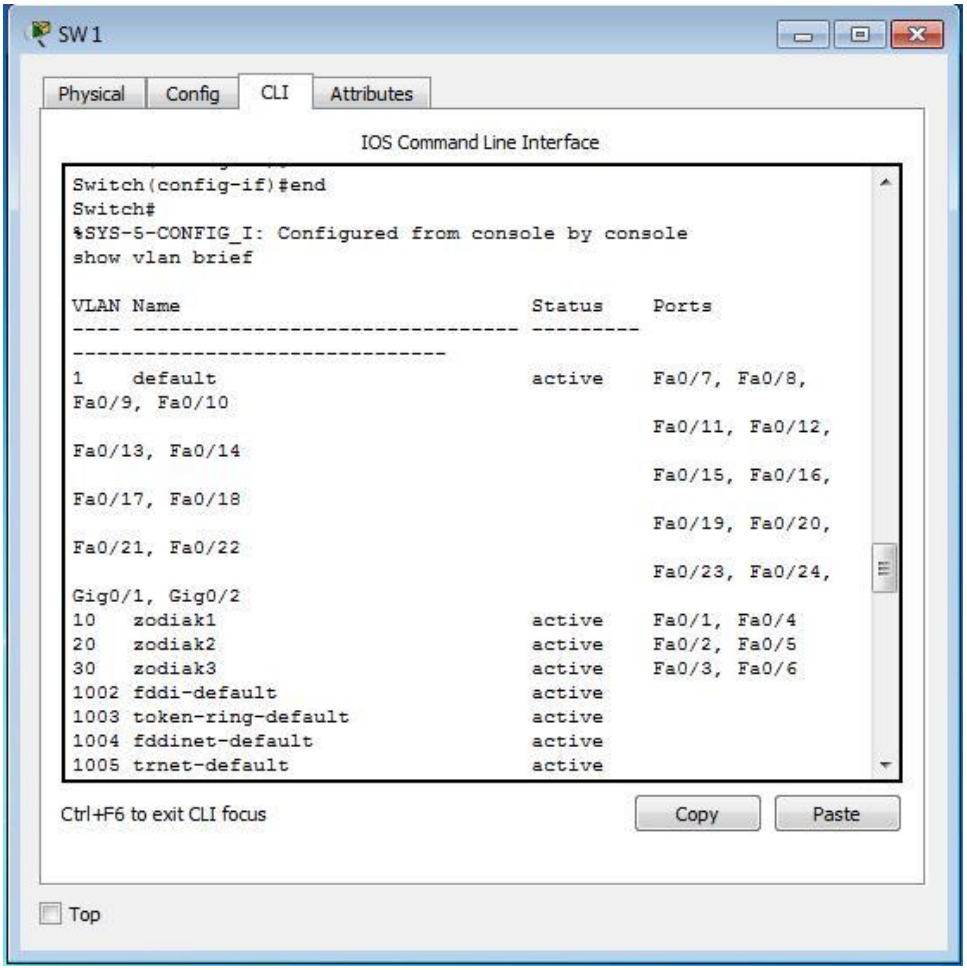
    /24 maksudnya adalah masuk kelas c



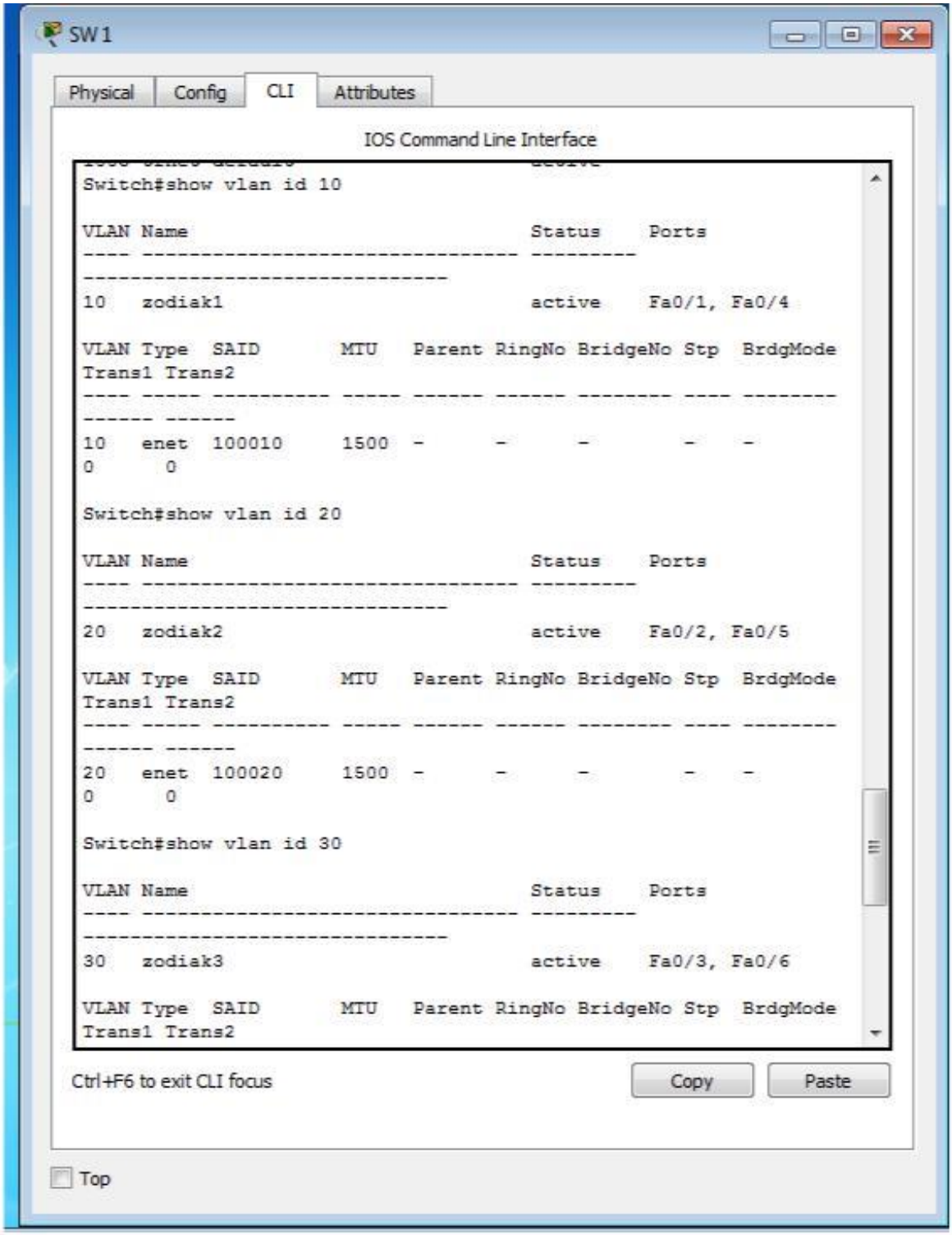
4. Membuat 3 buahVLAN dengan nama zodiak1, zodiak2, dan zodiak3
5. Selanjutnya pada mode konfigurasi, kelompokkan port-port switch kedalam VLAN zodiak1, zodiak2, dan zodiak3. Pengaturannya sebagai berikut :
    - Zodiak1 : leo dan libra
    - Zodiak2 : ariesdan Taurus
    - Zodiak3 : virgodanscorpio



6. Menampilkan informasi VLAN secara keseluruhan



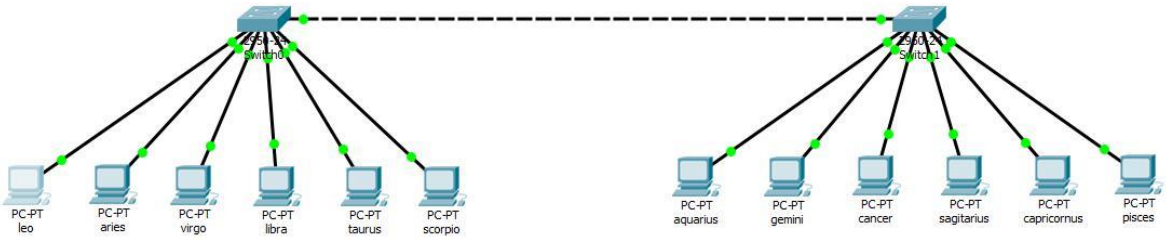
7. Menampilkan informasi VLAN 10, 20,dan 30



Kegiatan 2

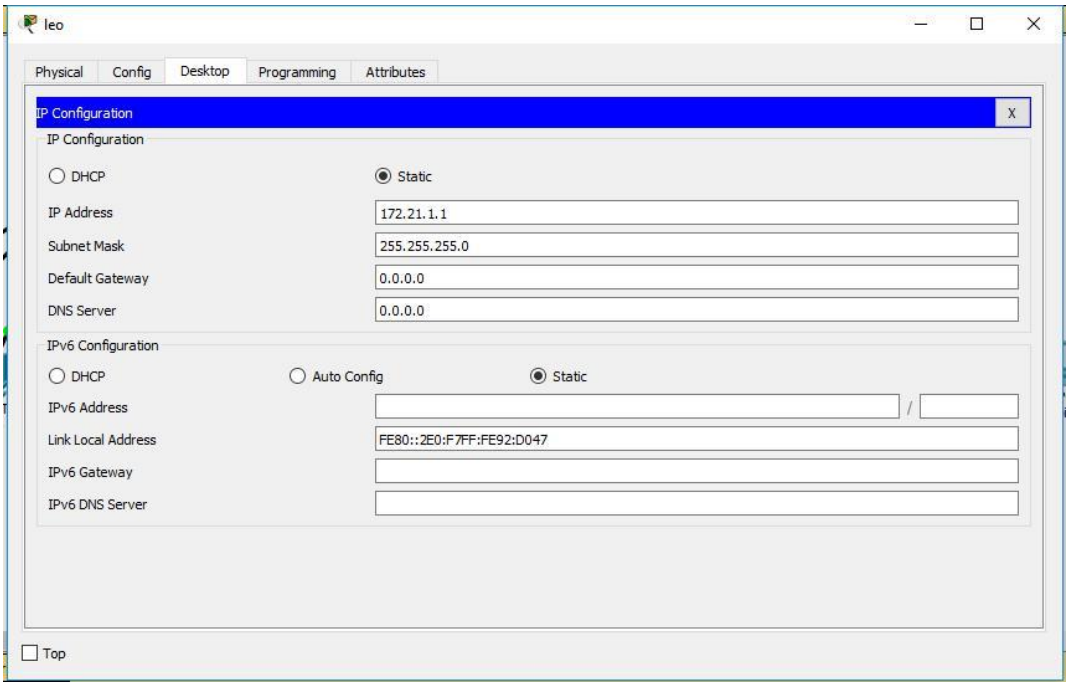
Kegiatan 2

1. Topologi menggunakan switch Catalyst 2950

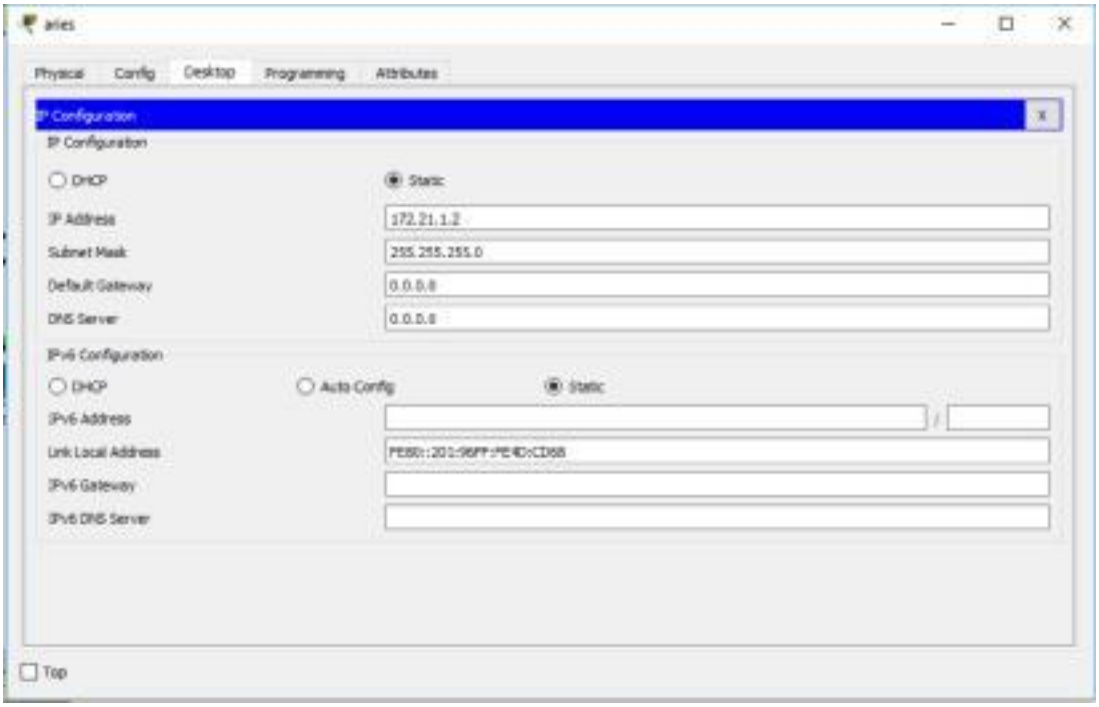


- Konfigurasi masing-masing pc

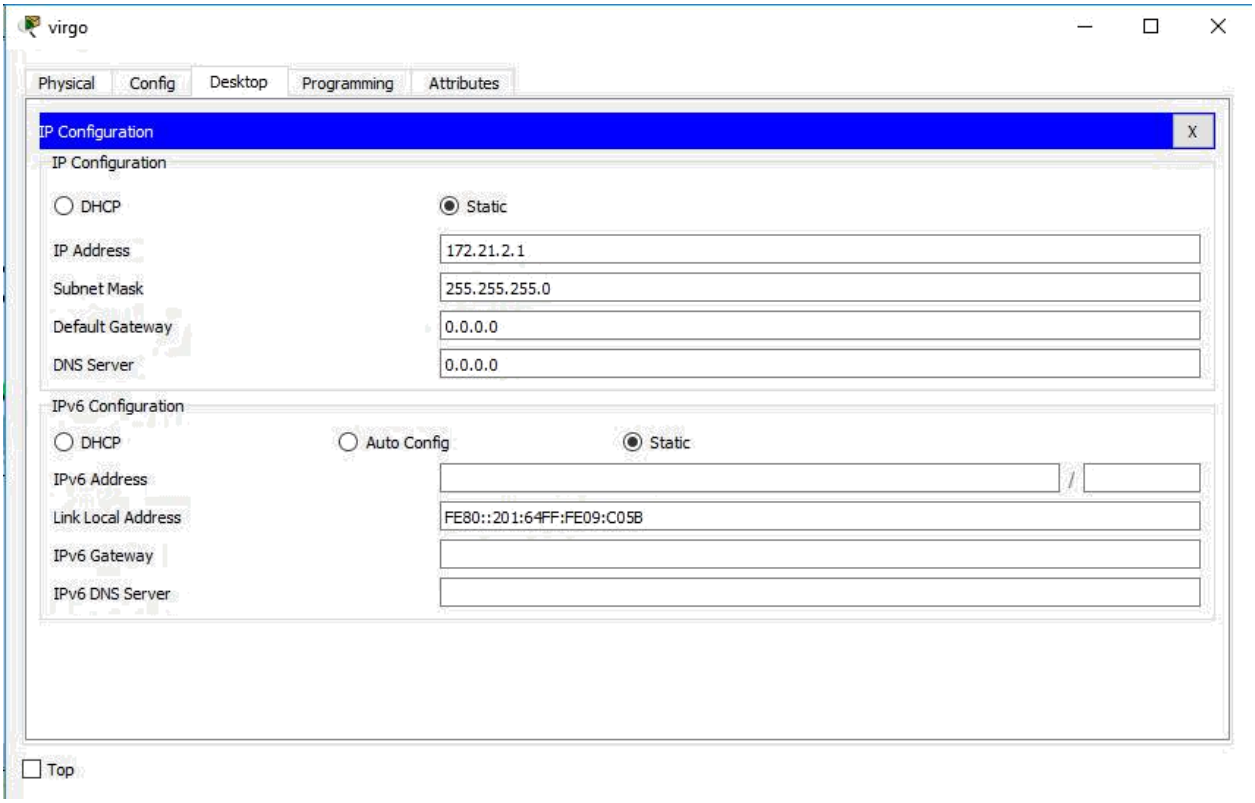
LEO



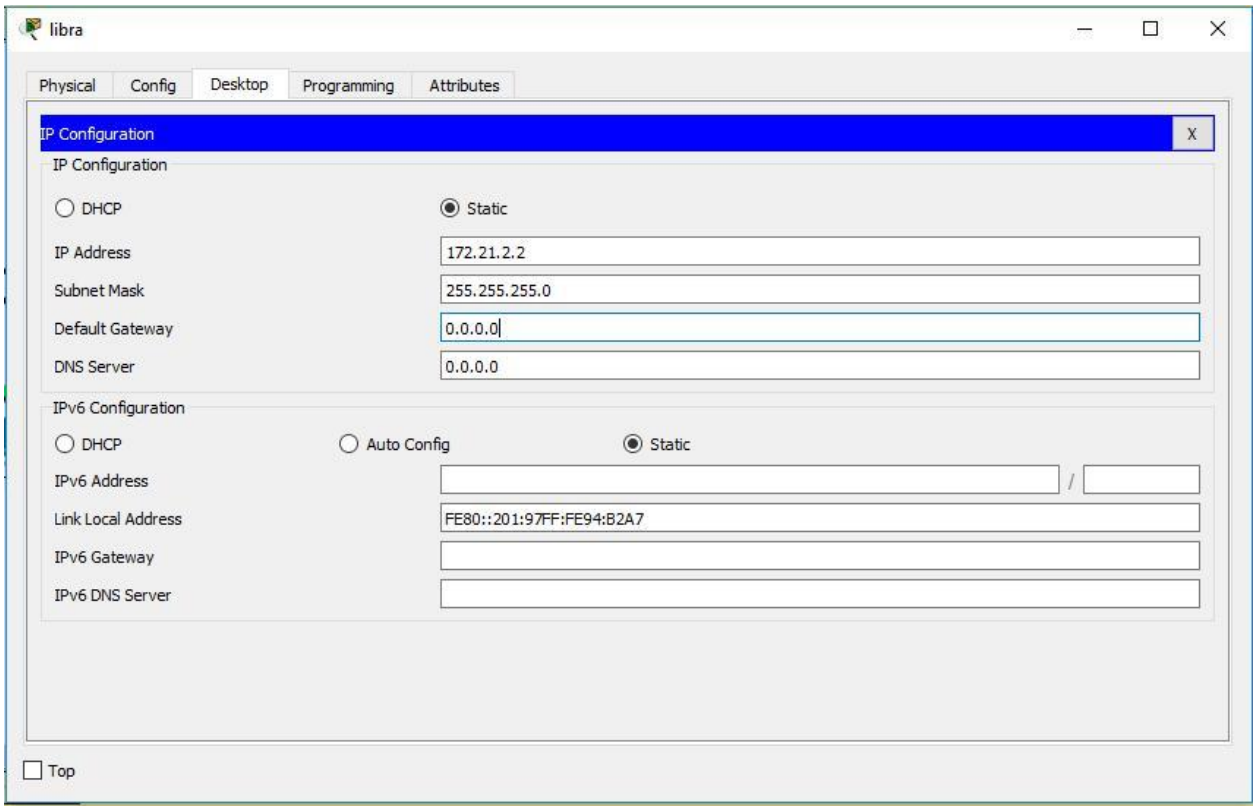
- ARIES


aries
Physical
Config
Desktop
Programming
Attributes
IP Configuration
IP Configuration
DHCP
Static
IP Address
172.21.1.2
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
IPv6 Gateway
IPv6 DNS Server
Top

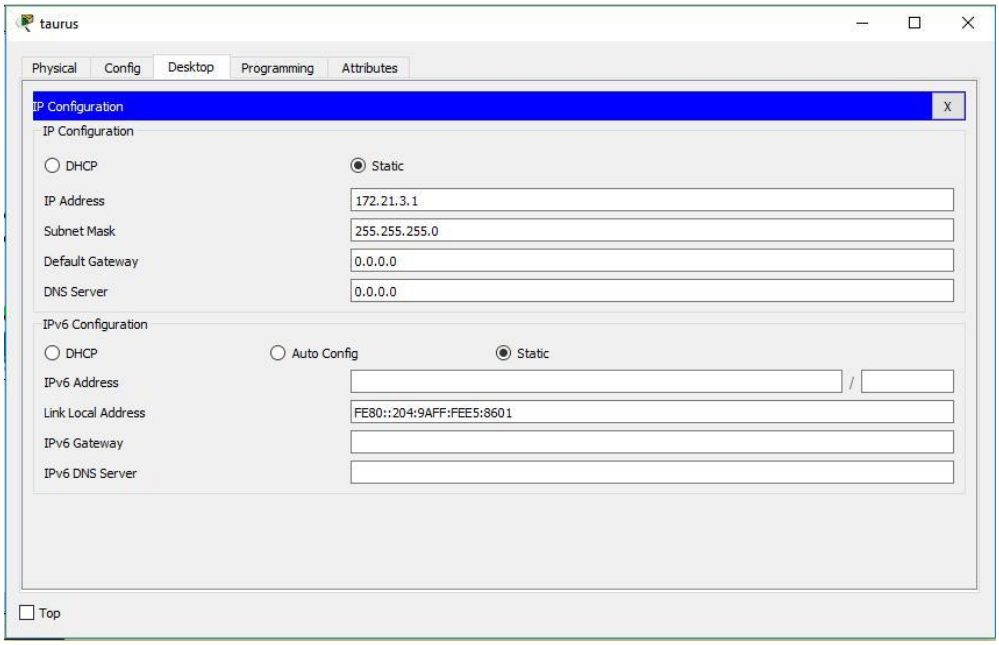
- VIRGO


virgo
Physical
Config
Desktop
Programming
Attributes
IP Configuration
X
IP Configuration
DHCP
Static
IP Address
172.21.2.1
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::201:64FF:FE09:C05B
IPv6 Gateway
IPv6 DNS Server
Top

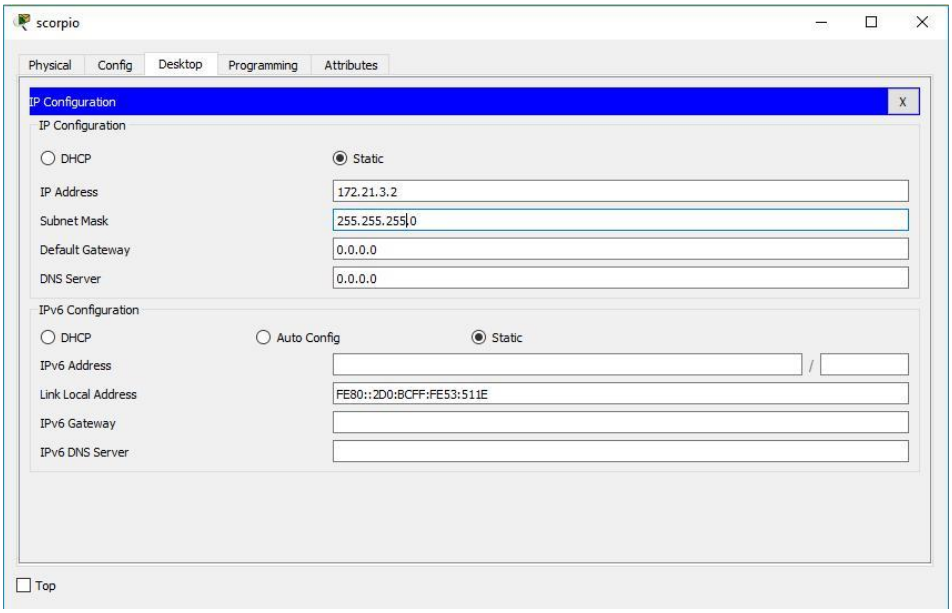
- LIBRA



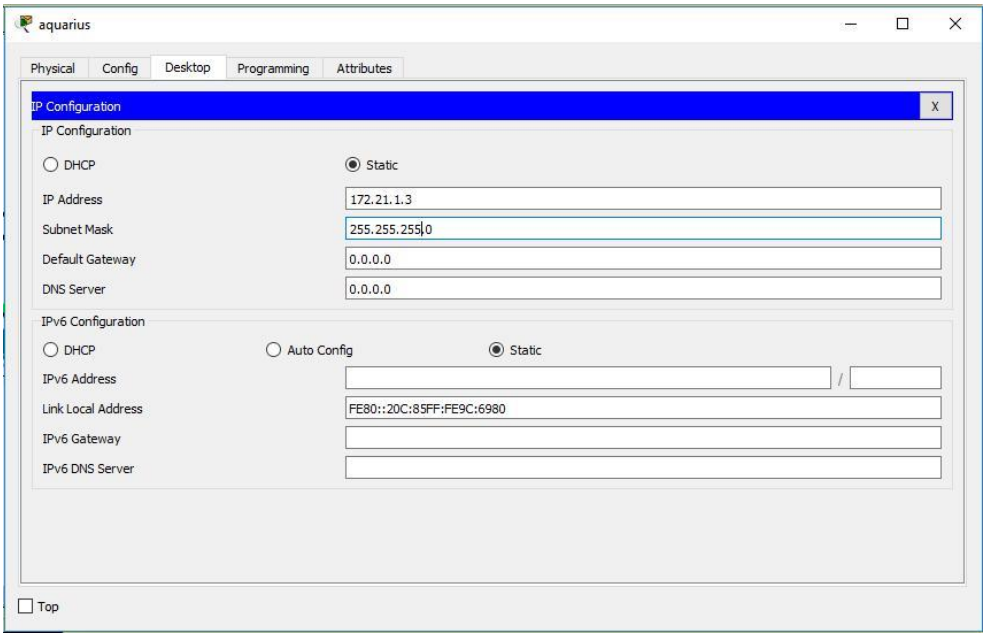
- TAURUS



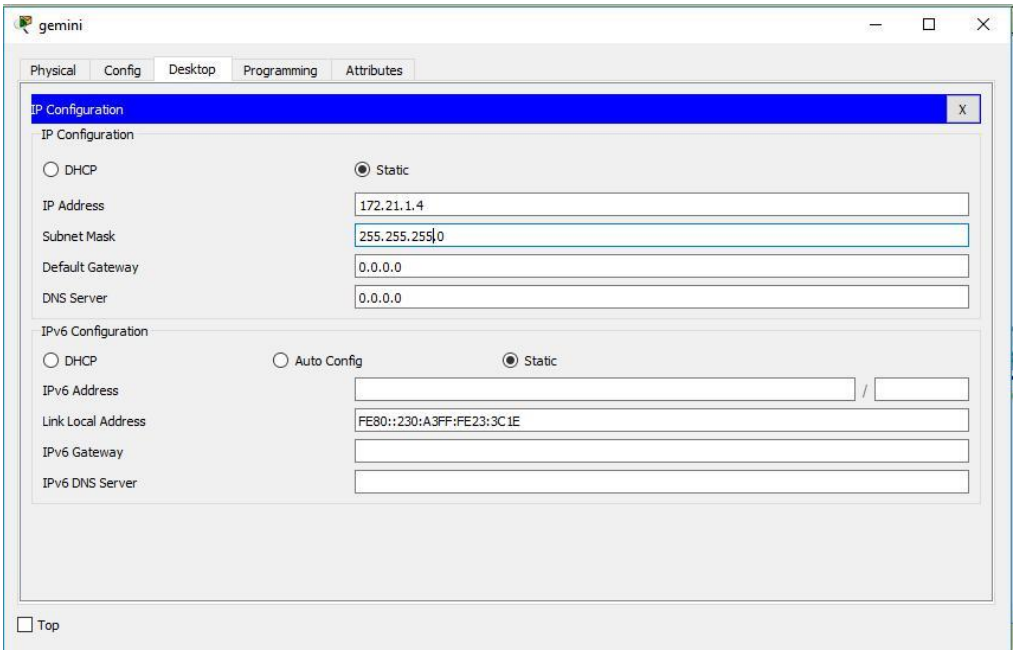
- SCORPIO



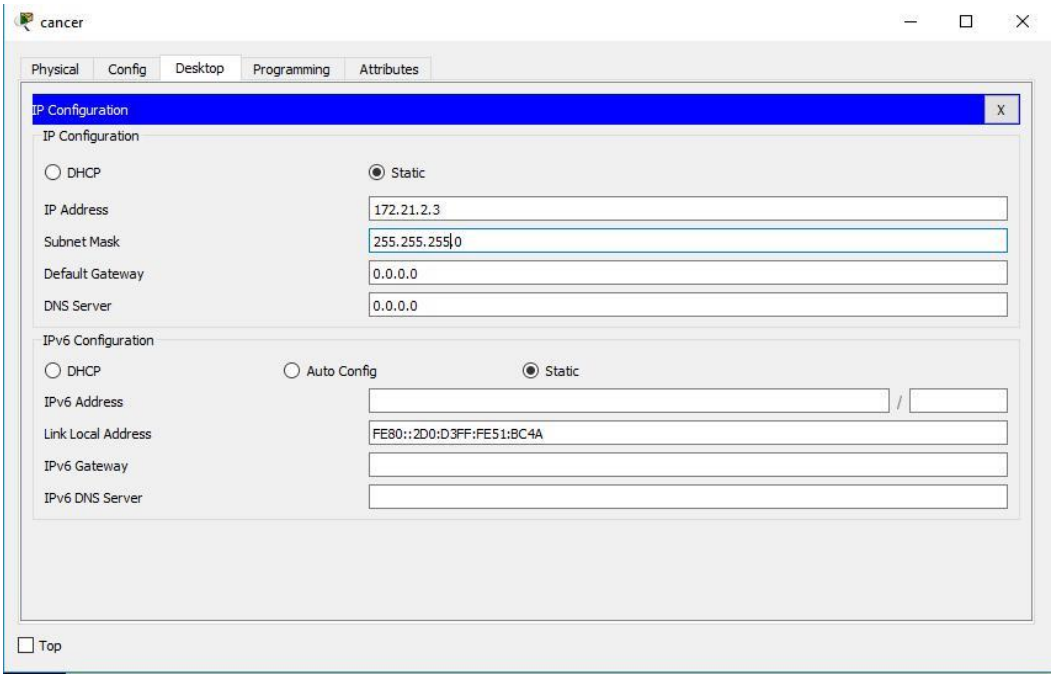
- AQUARIUS



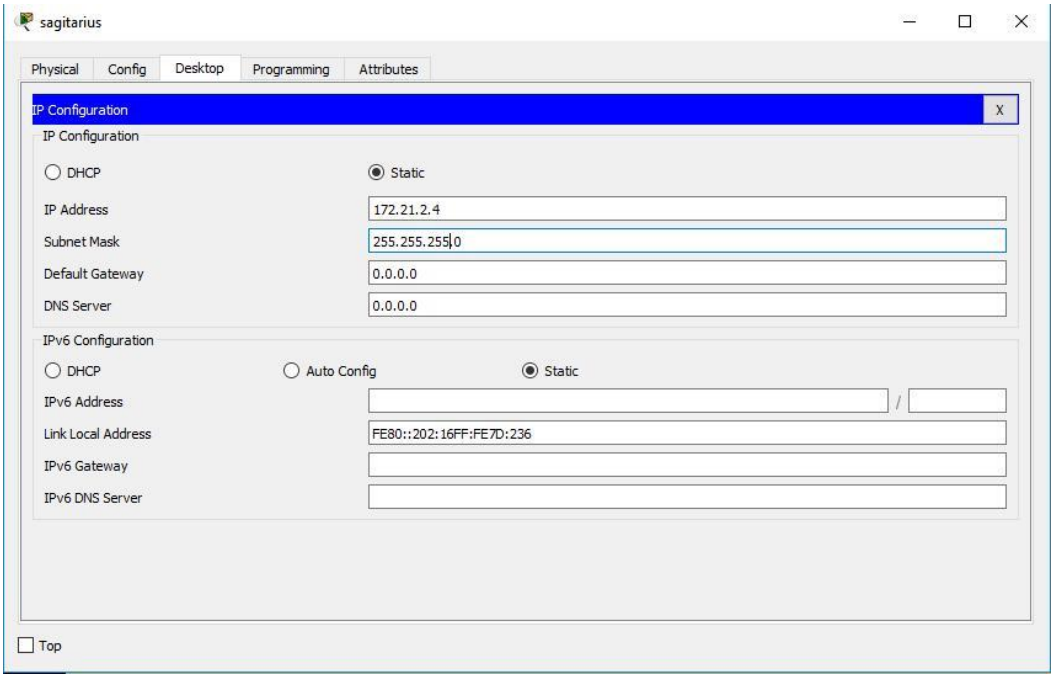
- GEMINI



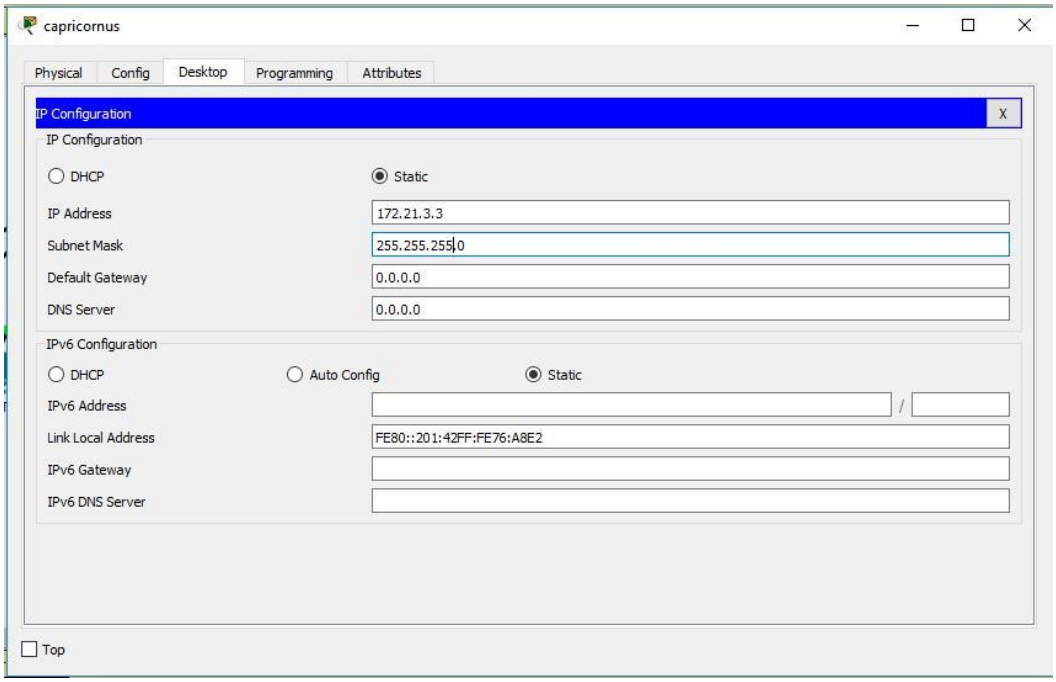
- CANCER



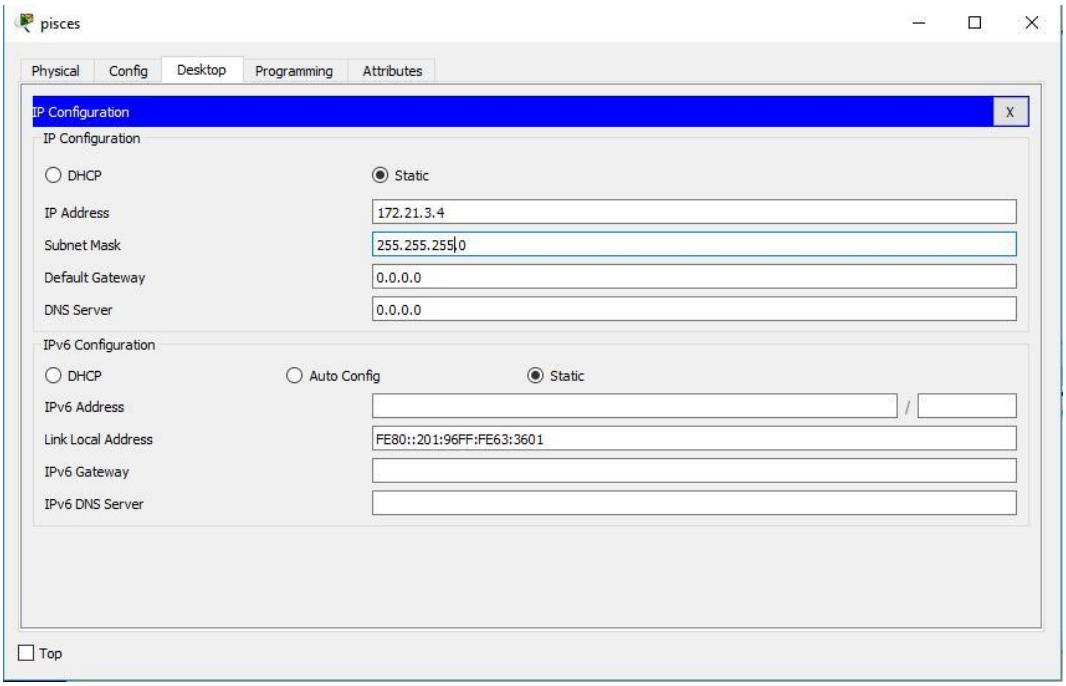
- SAGITARIUS



- CAPRICONUS



- PISCES



3. Langkah 4 & 5

```
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)#int fa 0/1
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 10
Switch(config-if)#exit%SPANTREE-2-RECV_PVID_ERR: Received 802.1Q
BPDU on non trunk FastEthernet0/1 VLAN1.

%SPANTREE-2-BLOCK_PVID_LOCAL: Blocking FastEthernet0/1 on
VLAN0001. Inconsistent port type.


%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on
FastEthernet0/1 (10), with Switch FastEthernet0/1 (1).

Switch(config)#int fa 0/4
Switch(config-if)#sw mod
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on
FastEthernet0/1 (10), with Switch FastEthernet0/1 (1).
e access
Switch(config-if)#int fa 0/4
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 10
Switch(config-if)#exit
Switch(config)#int fa 0/2
Switch(config-if)#sw mode access
Switch(config-if)#int fa 0/3
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 30
Switch(config-if)#exit
Switch(config)#int fa 0/5
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 20
Switch(config-if)#sw mode ac
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on
FastEthernet0/1 (10), with Switch FastEthernet0/1 (1).
cess
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 30
Switch(config-if)#end
Switch#
%SYS-5-CONFIG_I: Configured from console by console
```

Activate W

4. Konfigurasi vlan trunking pada switch 1

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

Switch(config-if)#exit
```

5. Pada mode user dan mode privileged lihat komfigurasi trunking switch 1 yang telah dibuat

```
Switch#show interface fastethernet 0/1 switchport
Name: Fa0/1
Switchport: Enabled
Administrative Mode: trunk
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 vlan

VLAN Name                              Status    Ports
---- --------------------------------- --------- -------------------------------
1    default                           active    Fa0/6, 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    Fa0/4
20   zodiak2                           active    Fa0/2
30   zodiak3                           active    Fa0/3, Fa0/5
1002 fddi-default                      act/unsup
1003 token-ring-default                act/unsup
1004 fddinet-default                   act/unsup
1005 trnet-default                     act/unsup

VLAN Type  SAID       MTU   Parent RingNo BridgeNo Stp  BrdgMode
```

6. Lakukan ping dari pc leo ke pc pisces

```
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),
```

7. Lakukan konfigurasi vlan trunking pada switch 2

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

8. Pada mode user dan mode privileged lihat komfigurasi trunking switch 2 yang telah dibuat

```
Switch#show vlan

VLAN Name                              Status    Ports
---- --------------------------------- --------- -------------------------------
1    default                           active    Fa0/2, Fa0/3, Fa0/4, Fa0/5
                                                 Fa0/6, 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
1002 fddi-default                      act/unsup
1003 token-ring-default                act/unsup
1004 fddinet-default                   act/unsup
1005 trnet-default                     act/unsup

VLAN Type  SAID       MTU   Parent RingNo BridgeNo Stp  BrdgMode Trans1 Trans2
```

```
VLAN Type  SAID       MTU   Parent RingNo BridgeNo Stp  BrdgMode
Trans1 Trans2
---- ----- ---------- ----- ------ ------ -------- ---- --------
------ ------
1    enet  100001     1500  -      -      -        -    -
0      0
1002 fddi  101002     1500  -      -      -        -    -
0      0
1003 tr    101003     1500  -      -      -        -    -
0      0
1004 fdnet 101004     1500  -      -      -        ieee -
0      0
1005 trnet 101005     1500  -      -      -        ibm  -
0      0

VLAN Type  SAID       MTU   Parent RingNo BridgeNo Stp  BrdgMode
Trans1 Trans2
---- ----- ---------- ----- ------ ------ -------- ---- --------
------ ------

Remote SPAN VLANs
------------------------------------------------------------------------
-------------
```

9. Konfigurasi port-port switch kedalam VLAN zodiak1, zodiak2, zodiak3 Zodiak1 = aquarius & gemini
   Zodiak2 = cancer & sagitarius
   Zodiak3 = capricornus & pisces

```
Switch(config)#int fa 0/1
Switch(config-if)#sw mode access
Switch(config-if)#%SPANTREE-2-RECV_PVID_ERR: Received 802.1Q BPDU
on non trunk FastEthernet0/1 VLAN1.

%SPANTREE-2-BLOCK_PVID_LOCAL: Blocking FastEthernet0/1 on
VLAN0001. Inconsistent port type.

sw access
% Incomplete command.
Switch(config-if)#sw access vlan 10
Switch(config-if)#exit
Switch(config)#int fa 0/4
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 10
Switch(config-if)#exit
Switch(config)#int fa 0/2
Switch(config-if)#sw mode access
Switch(config-if)#sw access vlan 20
Switch(config-if)#exit
Switch(config)#
%CDP-4-NATIVE_VLAN_MISMATCH: Native VLAN mismatch discovered on
FastEthernet0/1 (10), with Switch FastEthernet0/1 (1).
```

10. Lakukan ping

Ping PC leo ke PC aries

```
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),
```

Ping PC leo ke PC aquarius

```
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),
```

Ping PC leo ke PC pisces

```
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),
```

Ping PC libra ke PC cancer

```
Packet Tracer PC Command Line 1.0
C:\>ping 172.21.2.3

Pinging 172.21.2.3 with 32 bytes of data:

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

Ping statistics for 172.21.2.3:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

Ping PC libra ke PC leo

```
C:\>ping 172.21.1.1

Pinging 172.21.1.1 with 32 bytes of data:

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

Ping statistics for 172.21.1.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```