Nama : HaNIM : L200170100

Nama : Hada Hidayat
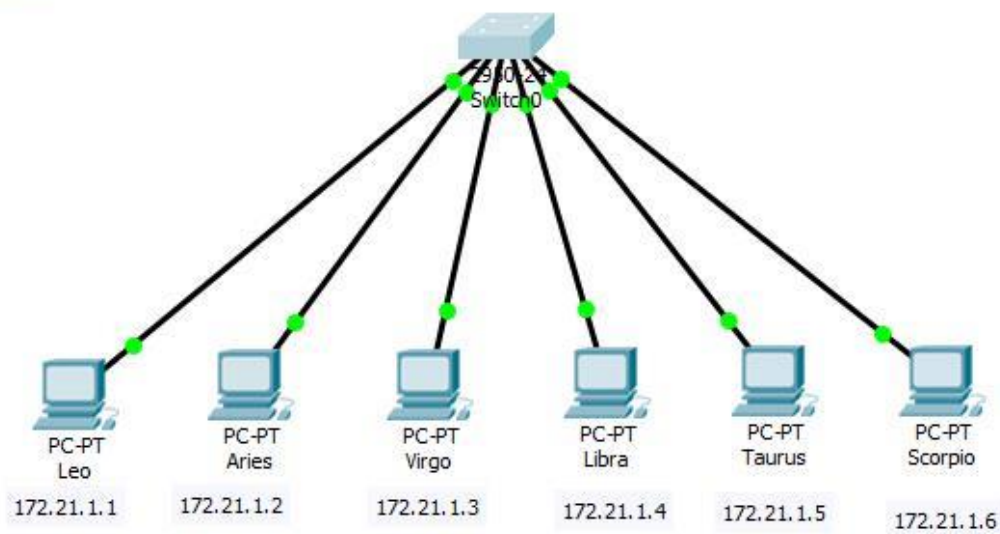
NIM : L200170100

Kelas : C

Modul : 4

Kegiatan 1.

1. Rancangan jaringan

2. Membuat vlan dengan nama zodiak1, zodiak2, dan zodiak3

```
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)#
```

Konfigurasi port untuk masing-masing pc ke vlan a.

untuk zodiak1 = leo(port 0/1) dan libra(port 0/4)

```
Switch(config)#int fa 0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#int fa 0/4
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
```

b. untuk zodiak2 = aries (port 0/2) dan taurus (port 0/5)

```
Switch(config)#int fa 0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#int fa 0/5
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
```

c. untuk zodiak3 = virgo (port 0/3) dan scorpio (port 0/6)

```
Switch(config)#int fa 0/3
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#int fa 0/6
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#exit
```

4. Melihat hasil

a. melihat informasi vlan secara keseruhan

```
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
```

b. melihat vlan id 10

```
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 Trans1 Trans2
---- ----- ---------- ----- ------ ------ -------- ---- -------- ------ ------
10   enet  100010     1500  -      -      -        -    -        0      0
```

c. melihat vlan id 20

```
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 Trans1 Trans2
---- ----- ---------- ----- ------ ------ -------- ---- -------- ------ ------
20   enet  100020     1500  -      -      -        -    -        0      0
```

d. melihat vlan id 30

```
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 Trans1 Trans2
---- ----- ---------- ----- ------ ------ -------- ---- -------- ------ ------
30   enet  100030     1500  -      -      -        -    -        0      0
```

No.	Variabel	Nilai		
1	Nomor Vlan	10	20	30
2	Nama Vlan	zodiak1	zodiak2	zodiak3
3	Port	0/1, 0/4	0/2, 0/5	0/3, 0/6
4	Status	Active	Active	Active

Kegiatan 2

1. Rancangan jaringan
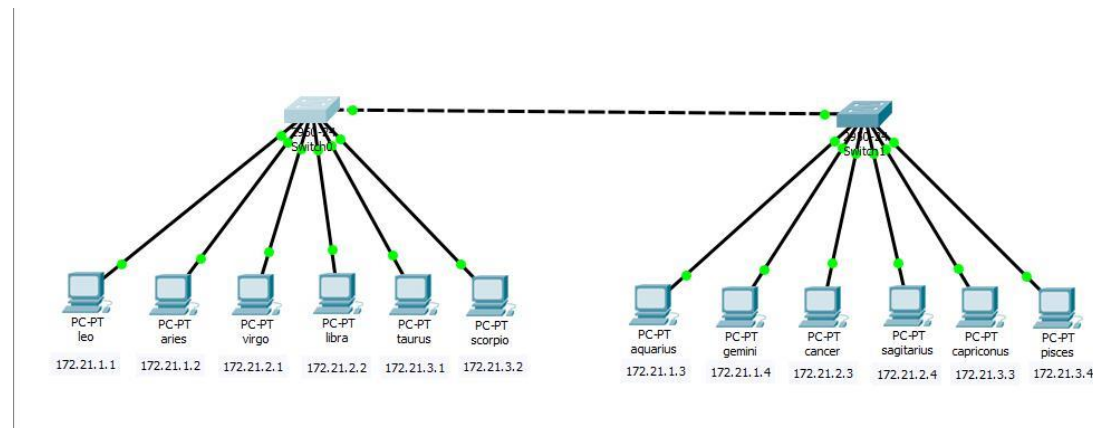
2. Membuat vlan dengan nama zodiak1, zodiak2, dan zodiak3

```
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)#
```

Konfigurasi port untuk masing-masing pc ke vlan a.

untuk zodiak1 = leo (port 0/1) dan aries (port 0/4)

```
Switch(config)#int fa 0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#int fa 0/4
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
```

b. untuk zodiak2 = virgo (port 0/2) dan libra (port 0/5)

```
Switch(config)#int fa 0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#int fa 0/5
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
```

c. untuk zodiak3 = taurus (port 0/3) dan scorpio (port 0/6)

```
Switch(config)#int fa 0/3
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#int fa 0/6
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#exit
```

Melakukan konfigurasi trunk pada port 0/7

```
Switch(config)#int fa 0/7
Switch(config-if)#switchport mode trunk
Switch(config-if)#exit
```

Hasilnya

```
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
```

```
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
 --More--
```
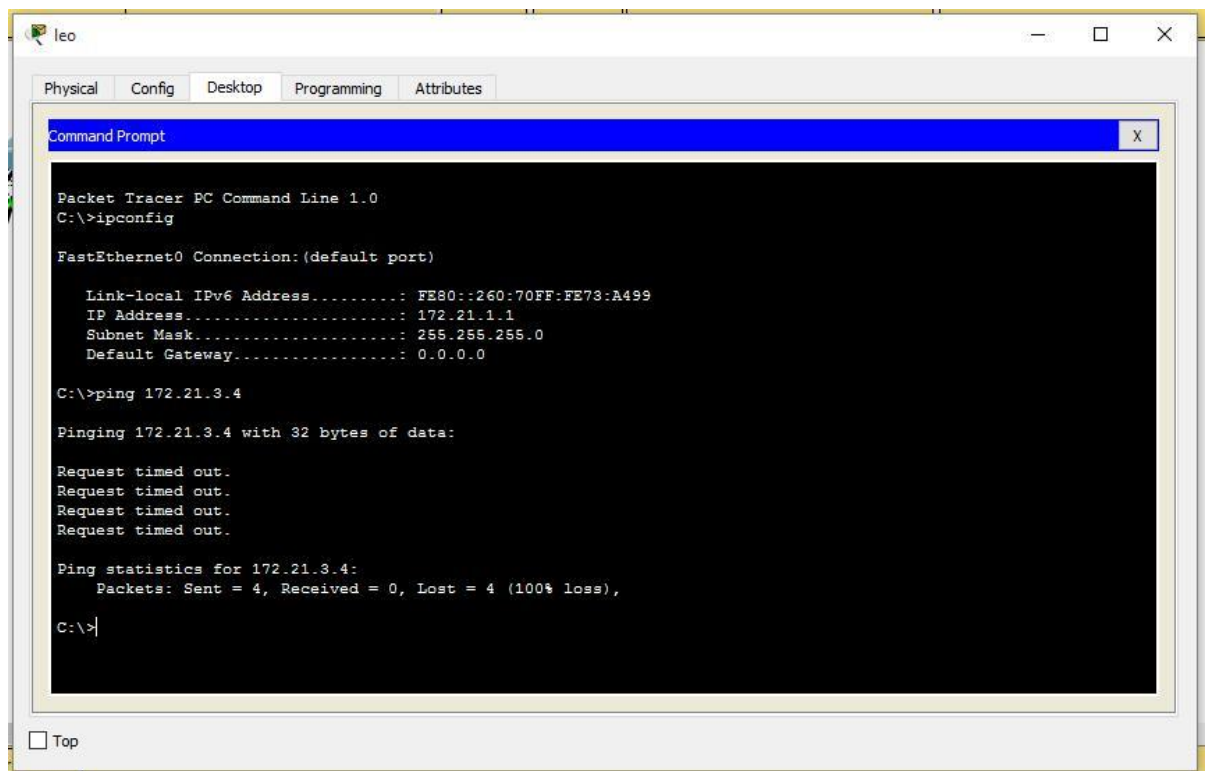
Tugas 7A: Untuk port 0/7 pada switch 0 telah disetting untuk trunk dan berhasil. Sehingga port 0/7 tidak tersedia untuk vlan.

6. Melakukan ping dari leo ke pisces

```
leo                                                              —   □   ×

Physical  Config  Desktop  Programming  Attributes

Command Prompt                                                        X

  Packet Tracer PC Command Line 1.0
  C:\>ipconfig

  FastEthernet0 Connection:(default port)

     Link-local IPv6 Address.........: FE80::260:70FF:FE73:A499
     IP Address......................: 172.21.1.1
     Subnet Mask.....................: 255.255.255.0
     Default Gateway.................: 0.0.0.0

  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:\>|

  □ Top
```
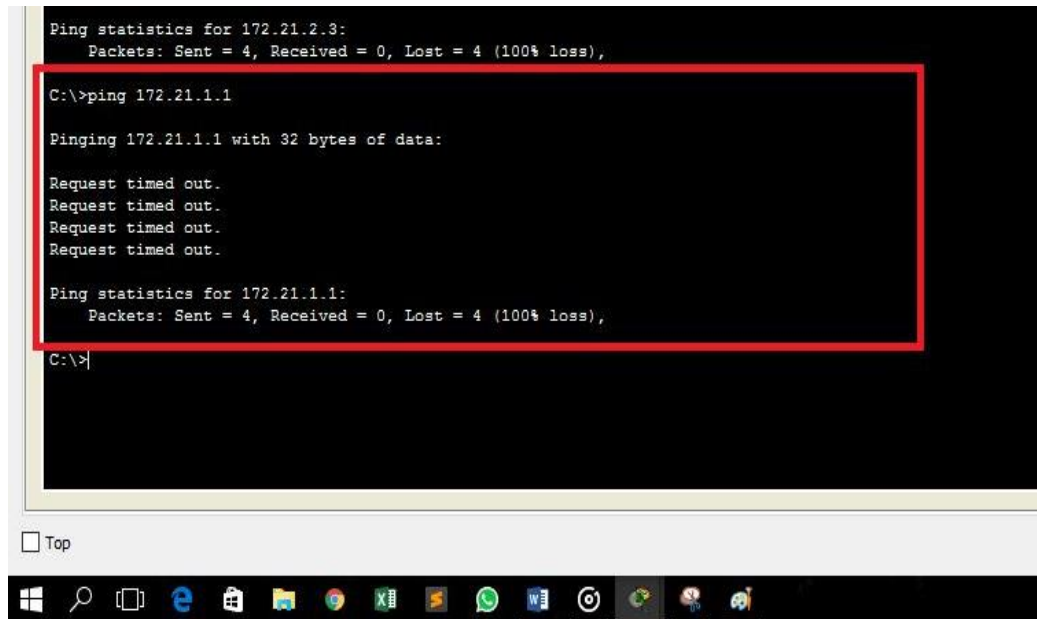
Tugas 8A: Hasilnya adalah RTO karena berada pada jaringan yang berbeda dan pada switch 1 belum disetting trunk

7. Melakukan konfigurasi trunk pada switch 1

```
Switch(config)#int fa 0/7
Switch(config-if)#switchport mode trunk
Switch(config-if)#exit
```

Tugas 10A: Berhubung udah dikerjain di kelas dan ngga aku sc mas, jadinya hasilnya konfigurasi vlan yang udah jadi. Yang harusnya int fa 0/7 masih tersedia sebagai vlan.

8. Konfigurasi vlan

a. zodiak1: aquarius (port 0/1) dan gemini (port 0/2)

```
Switch(config)#int fa 0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#int fa 0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
```

b. zodiak2: cancer (port 0/3) dan sagitarius (port 0/4)

```
Switch(config)#int fa 0/3
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#int fa 0/4
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#exit
```

c. zodiak 1: capriconus (port 0/5) dan pisces (port 0/6)

```
Switch(config)#int fa 0/5
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#int fa 0/6
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 30
Switch(config-if)#exit
```

Melakukan ping a.

leo – aries

b. leo – aquarius

c. leo – pisces

d. libra – cancer

e. libra – leo

Tugas 12A:

Hasil ping PC leo ke PC pisces adalah request time out permintaan koneksi yang lama dan karena subnet address nya sudah berbeda.