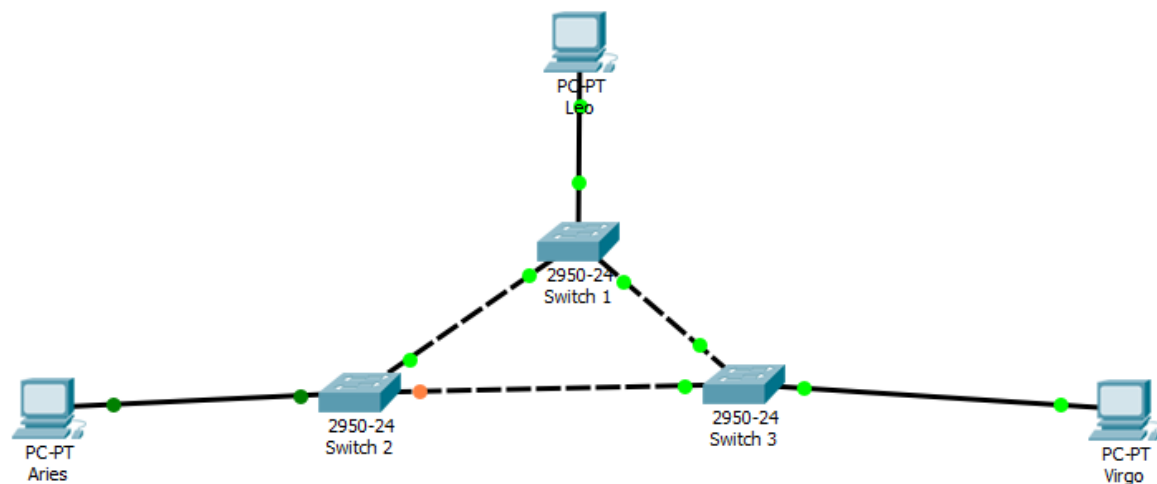NAMA : WINDI SAPUTRI

NIM : L200170115

KELAS : C

MODUL 6

KEGIATAN 1

TUGAS 1A :

Tugas 1A : langkah pembuatan topologi

Drag 3 switch catalyst 2950 yang diambil dari network devices dan drop ke lembar kerja. Lalu drag 3 PC yang diambil di end devices dan drop ke lembar kerja . lalu hubungkan switch dengan switch dan switch dengan PC dengan connections.

Tugas 2A : langkah pemberian nama

Switch 1

```
Switch>en
Switch#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#hostname SW1
SW1(config)#exit
SW1#
%SYS-5-CONFIG_I: Configured from console by console

SW1#
```

Switch 2

```
Switch>en
Switch#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#hostname SW2
SW2(config)#exit
SW2#
%SYS-5-CONFIG_I: Configured from console by console
```

Switch 3

```
Switch>en
Switch#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#hostname SW3
SW3(config)#exit
SW3#
%SYS-5-CONFIG_I: Configured from console by console

SW3#
```

3. konfigurasi IP :

ARIES

Physical | Config | Desktop | Programming | Attributes

IP Configuration

IP Configuration

◯ DHCP   ◉ Static

IP Address: 172.21.1.2

Subnet Mask: 255.255.0.0

Default Gateway: 0.0.0.0

DNS Server: 0.0.0.0

IPv6 Configuration

◯ DHCP   ◯ Auto Config   ◉ Static

IPv6 Address: _____ / _____

Link Local Address: FE80::2D0:BAFF:FED5:BB62

IPv6 Gateway: _____

IPv6 DNS Server: _____

☐ Top

VIRGO

Physical | Config | Desktop | Programming | Attributes

IP Configuration

IP Configuration

◯ DHCP   ◉ Static

IP Address: 172.21.1.3

Subnet Mask: 255.255.0.0

Default Gateway: 0.0.0.0

DNS Server: 0.0.0.0

IPv6 Configuration

◯ DHCP   ◯ Auto Config   ◉ Static

IPv6 Address: _____ / _____

Link Local Address: FE80::2E0:B0FF:FE12:5887

IPv6 Gateway: _____

IPv6 DNS Server: _____

☐ Top

TUGAS 4A :

Switch 1

| Physical | Config | CLI | Attributes |

```
%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


Switch>enable
Switch#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#hostname SW1
SW1(config)#exit
SW1#
%SYS-5-CONFIG_I: Configured from console by console

SW1#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0050.0FAD.0B5C
             Cost        19
             Port        2(FastEthernet0/2)
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    32769  (priority 32768 sys-id-ext 1)
             Address     00E0.8F95.1812
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
             Aging Time  20

Interface        Role Sts Cost      Prio.Nbr Type
---------------- ---- --- --------- -------- --------------------------------
Fa0/3            Altn BLK 19        128.3    P2p
Fa0/1            Desg FWD 19        128.1    P2p
Fa0/2            Root FWD 19        128.2    P2p

SW1#
```

Physical | Config | CLI | Attributes

```
%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 FastEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up


Switch>enable
Switch#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#hostname SW2
SW2(config)#exit
SW2#
%SYS-5-CONFIG_I: Configured from console by console

SW2#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     00D0.971A.E72A
             Cost        19
             Port        2(FastEthernet0/2)
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    32769  (priority 32768 sys-id-ext 1)
             Address     00D0.D38D.ED5C
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
             Aging Time  20

Interface        Role Sts Cost      Prio.Nbr Type
---------------- ---- --- --------- -------- --------------------------------
Fa0/3            Desg FWD 19        128.3    P2p
Fa0/1            Desg FWD 19        128.1    P2p
Fa0/2            Root FWD 19        128.2    P2p

SW2#
```

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
%LINK-5-CHANGED: Interface FastEthernet0/2, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to down

%LINK-5-CHANGED: Interface FastEthernet0/2, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to up


Switch>enable
Switch#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#hostname SW3
SW3(config)#exit
SW3#
%SYS-5-CONFIG_I: Configured from console by console

SW3#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     00D0.971A.E72A
             This bridge is the root
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    32769  (priority 32768 sys-id-ext 1)
             Address     00D0.971A.E72A
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
             Aging Time  20

Interface        Role Sts Cost      Prio.Nbr Type
---------------- ---- --- --------- -------- --------------------------------
Fa0/1            Desg FWD 19        128.1    P2p
Fa0/2            Desg FWD 19        128.2    P2p
Fa0/3            Desg FWD 19        128.3    P2p

SW3#
```

Ctrl+F6 to exit CLI focus

TUGAS 4B :

SWITCH 1

No	Variabel	Nilai
1	Root ID	32769
2	Priority	32768
3	MAC Adress	0050.0FAD.0B5C
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2
7	MaxAge	20
8	Forward Delay	16

SWITCH 2 :

No	Variabel	Nilai
1	Root ID	32769
2	Priority	32768
3	MAC Adress	00D0.971A.E72A
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2
7	MaxAge	20
8	Forward Delay	15

SWITCH 3 :

No	Variabel	Nilai
1	Root ID	32769
2	Priority	32768
3	MAC Adress	00D0.971A.E72A
4	Bridge ID	-
5	Cost(0/1;0/2;0/3)	-
6	Hello Time	2
7	MaxAge	20
8	Forward Delay	15

TUGAS 4C :

- Root bridge : SW3
- Designated bridge : SW2
- Root port : SW1 (fa 0/2) dan SW2 (fa 0/2)
- Designated port : SW1 (fa 0/1), SW2 (fa 0/3; fa 0/1) dan SW3 (fa 0/1;fa 0/2; fa 0/3)
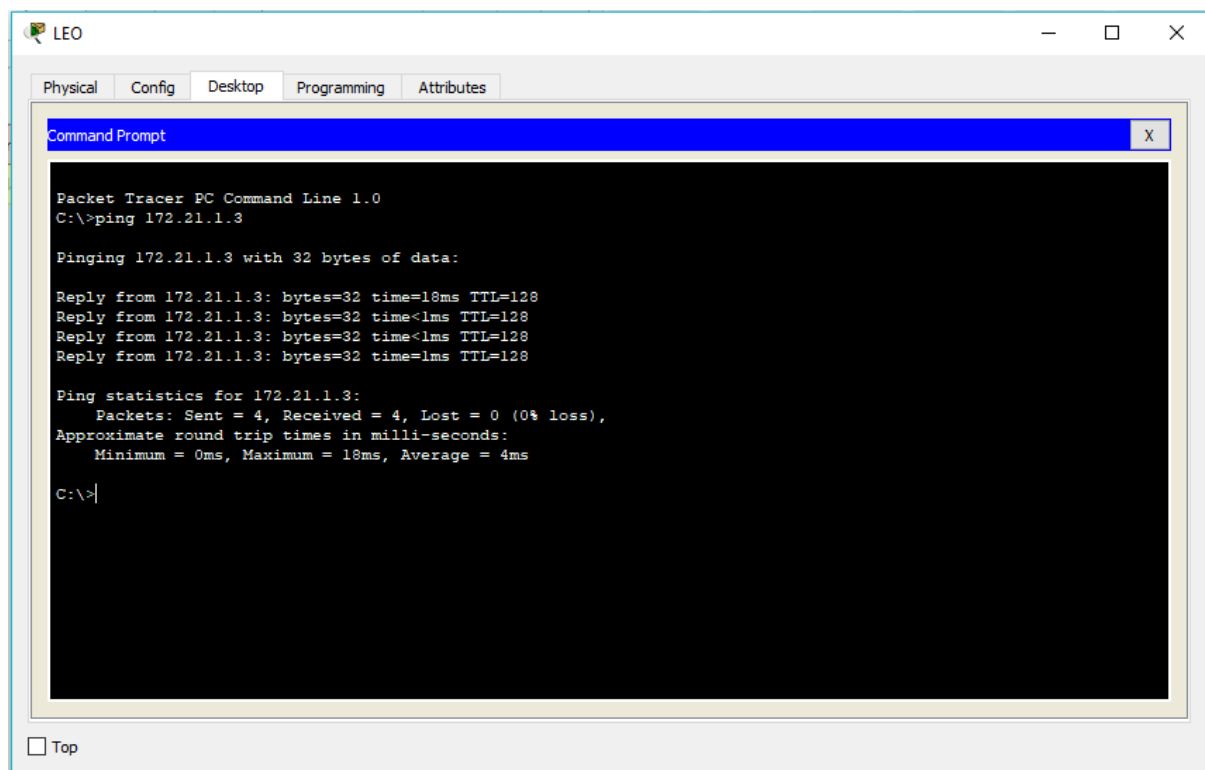
TUGAS 4D :

FORWARDING :

- SW1(fa 0/3; fa 0/1; fa 0/2)
- SW2(fa 0/3; fa 0/1; fa 0/2)
- SW3(fa 0/1; fa 0/2; fa 0/3)

BLOCKING: SW1 (fa 0/3)
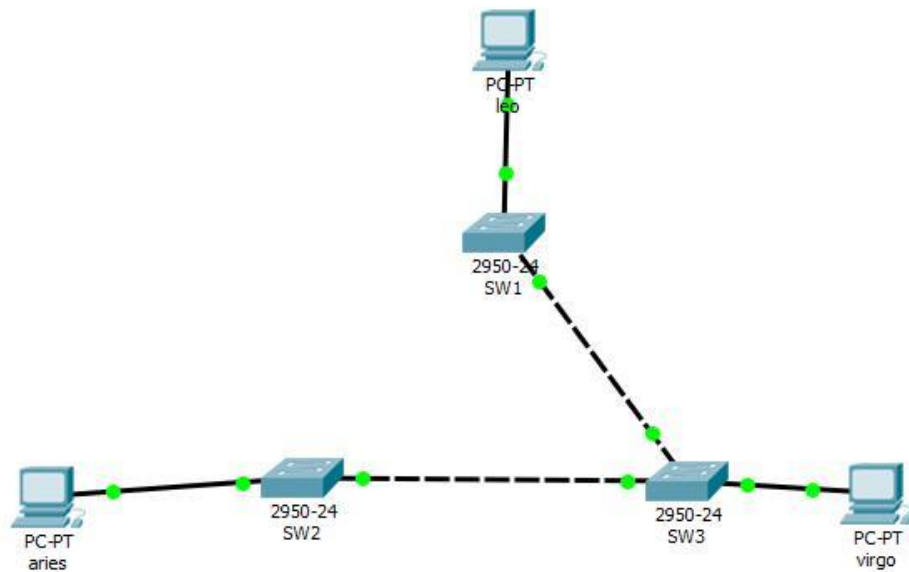

TUGAS 5 PC LEO PING KE PC VIRGO :

Klik pada pc leo > pilih tab desktop > pilih command prompt > tuliskan ping 172.21.13

TUGAS 6A :

Pilih file > save > beri nama lab2.txt berekstensi sesuai aplikasi

KEGIATAN 2 :

SWITCH 1

```
Switch>en
Switch#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#hostname SW1
SW1(config)#exit
SW1#
%SYS-5-CONFIG_I: Configured from console by console

SW1#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0030.A3AA.6531
             This bridge is the root
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    32769  (priority 32768 sys-id-ext 1)
             Address     0030.A3AA.6531
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
             Aging Time  20

Interface        Role Sts Cost      Prio.Nbr Type
---------------- ---- --- --------- -------- --------------------------------
Fa0/1            Desg FWD 19        128.1    P2p
Fa0/2            Desg FWD 19        128.2    P2p

SW1#
```

SWITCH 2

```
Switch>en
Switch#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#hostname SW2
SW2(config)#exit
SW2#
%SYS-5-CONFIG_I: Configured from console by console

SW2#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0030.A3AA.6531
             Cost        38
             Port        1(FastEthernet0/1)
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    32769  (priority 32768 sys-id-ext 1)
             Address     00D0.BC83.E999
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
             Aging Time  20

Interface        Role Sts Cost      Prio.Nbr Type
---------------- ---- --- --------- -------- --------------------------------
Fa0/1            Root FWD 19        128.1    P2p
Fa0/2            Desg FWD 19        128.2    P2p

SW2#
```

SWITCH 3

```
Switch>en
Switch#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#hostname SW3
SW3(config)#exit
SW3#
%SYS-5-CONFIG_I: Configured from console by console

SW3#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0030.A3AA.6531
             Cost        19
             Port        1(FastEthernet0/1)
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    32769  (priority 32768 sys-id-ext 1)
             Address     00D0.9759.1ECE
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
             Aging Time  20

Interface        Role Sts Cost      Prio.Nbr Type
---------------- ---- --- --------- -------- --------------------------------
Fa0/2            Desg FWD 19        128.2    P2p
Fa0/1            Root FWD 19        128.1    P2p
Fa0/3            Desg FWD 19        128.3    P2p

SW3#
```

SWITCH 1

No	Variabel	Nilai
1	Root ID	32769
2	Priority	32768
3	MAC Adress	0030.A3AA.6531
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	-
6	Hello Time	2
7	MaxAge	20
8	Forward Delay	15

SWITCH 2

No	Variabel	Nilai
1	Root ID	32769
2	Priority	32768
3	MAC Adress	00D0.BC83.E999
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	38
6	Hello Time	2
7	MaxAge	20
8	Forward Delay	15

SWITCH 3

No	Variabel	Nilai
1	Root ID	32769
2	Priority	32768
3	MAC Adress	00D0.9759.1ECE
4	Bridge ID	32769
5	Cost(0/1;0/2;0/3)	19
6	Hello Time	2
7	MaxAge	20
8	Forward Delay	15

- Root bridge   : SW1
- Designated bridge : SW3
- Root port   : SW2 (fa 0/1) dan SW3 (fa 0/1)
- Designated port   : SW1(fa 0/1; fa 0/2) SW2(fa 0/2) SW3(fa 0/2; fa 0/3)

FORWARDING :

SW1 (fa 0/1; fa 0/2)

SW2 (fa 0/1; fa 0/2)

SW3 (fa 0/2; fa 0/1; fa 0/3)

BLOCKING : TIDAK ADA

PC LEO PING KE PC VIRGO :

LEO   — ☐ ✕

Physical   Config   Desktop   Programming   Attributes

Command Prompt   X

```
Packet Tracer PC Command Line 1.0
C:\>ping 172.21.1.3

Pinging 172.21.1.3 with 32 bytes of data:

Reply from 172.21.1.3: bytes=32 time=18ms TTL=128
Reply from 172.21.1.3: bytes=32 time<1ms TTL=128
Reply from 172.21.1.3: bytes=32 time<1ms TTL=128
Reply from 172.21.1.3: bytes=32 time=1ms TTL=128

Ping statistics for 172.21.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 18ms, Average = 4ms

C:\>
```

☐ Top