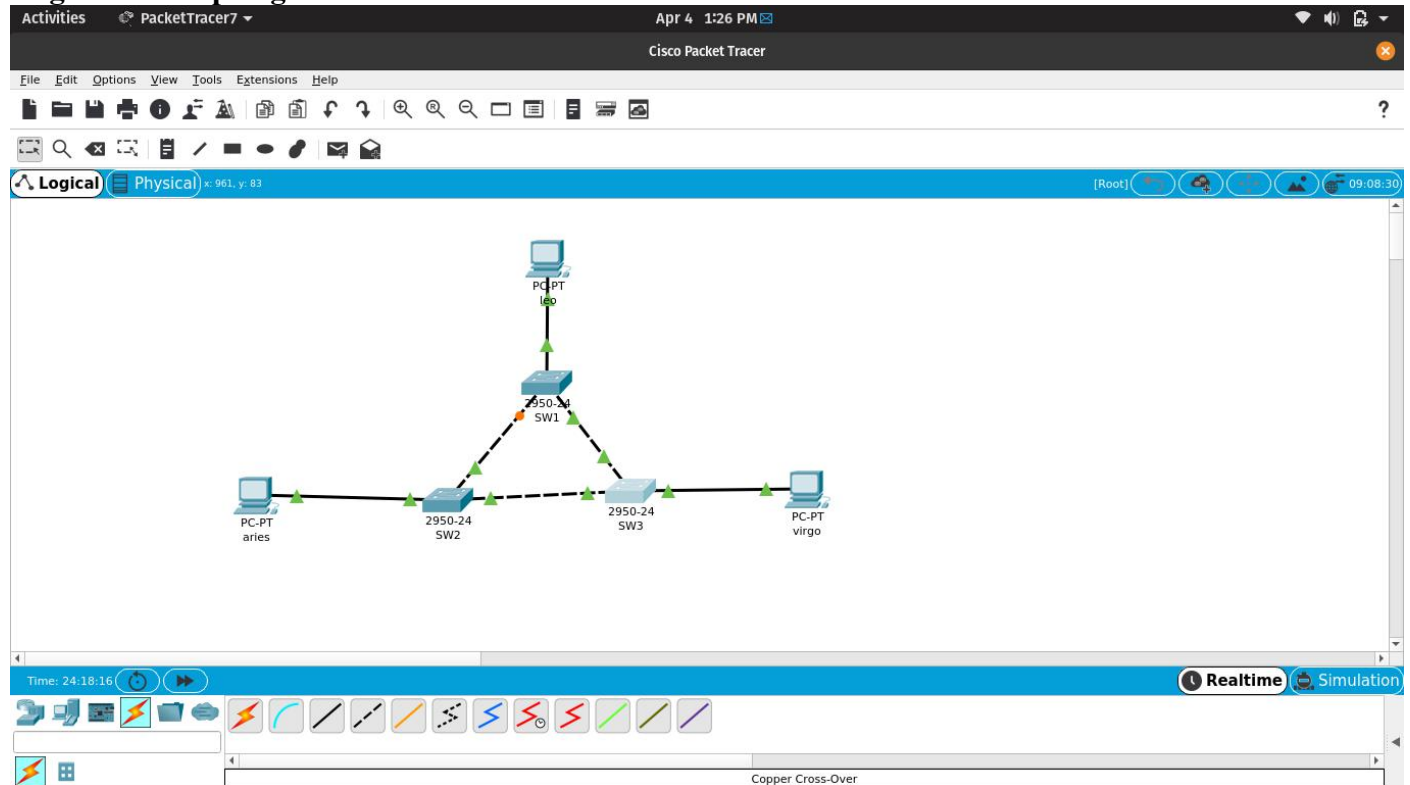**Nama   : Arga Dwi Ardinata**
NIM   : L200180114
Kelas : C

Kegiatan 1. Topologi 1

Tugas 1A:
Buat topologi dengan menggukan switch Catalyst 2950. Kemudian beri nama masing-masing switch dengan
SW1, SW2, dan SW3.

Tugas 2A:
SW1
Switch>en
Swicth#conf t
Enter configuration commands, one per line. End with CNTL/Z
Swicth(config)#hostname SW1
SW1(config)#end

SW2
Switch>en
Swicth#conf t
Enter configuration commands, one per line. End with CNTL/Z
Swicth(config)#hostname SW2
SW2(config)#end

SW3
Switch>en
Swicth#conf t
Enter configuration commands, one per line. End with CNTL/Z
Swicth(config)#hostname SW3
SW3(config)#end

Tugas 4A
SW1

SW1   ✕

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Press RETURN to get started.




SW1>show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0009.7C8D.7533
             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.F790.B021
             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            Altn BLK 19        128.1    P2p
Fa0/2            Root FWD 19        128.2    P2p

SW1>
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

SW2

SW2   ✕

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Press RETURN to get started.




SW2>en
SW2#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0009.7C8D.7533
             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     0060.2FEE.ED13
             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            Root FWD 19        128.2    P2p
Fa0/3            Desg FWD 19        128.3    P2p

SW2#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

SW3

SW3

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Press RETURN to get started.




SW3>en
SW3#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0009.7C8D.7533
             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     0009.7C8D.7533
             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
Fa0/3            Desg FWD 19        128.3    P2p
Fa0/1            Desg FWD 19        128.1    P2p

SW3#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

Tugas 4B

SW1

No	Variabel	Nilai
1	Root ID	009.7C8D.7533
2	Priority	32769
3	MAC Addrress	00E0.F790.B021
4	Bridge ID	00E0.F790.B021
5	Cost (0/3;0/1;0/2)	19/19/19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

SW2

No	Variabel	Nilai
1	Root ID	009.7C8D.7533
2	Priority	32769
3	MAC Addrress	0060.2FEE.ED13
4	Bridge ID	0060.2FEE.ED13
5	Cost (0/1;0/2;0/3)	19/19/19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

SW3

No	Variabel	Nilai
1	Root ID	009.7C8D.7533
2	Priority	32769
3	MAC Addrress	009.7C8D.7533
4	Bridge ID	009.7C8D.7533
5	Cost (0/2;0/3;0/1)	19/19/19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

Tugas 4C
root bridge: **SW3**
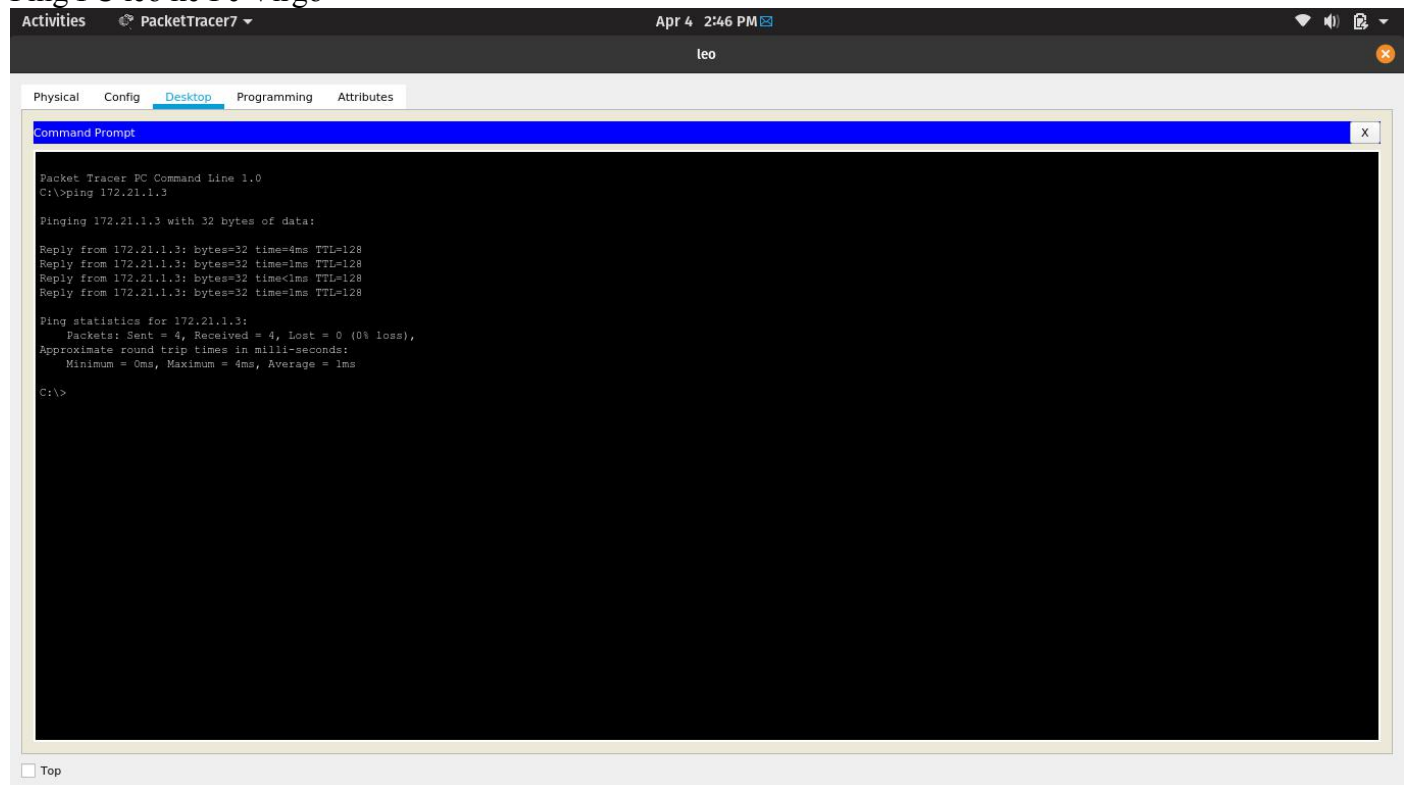designated bridge: **SW2**
root port: **SW2(Fa0/2), SW3(Fa0/2)**
designet port: **SW3(Fa0/1;Fa2;Fa3), SW2(Fa1; Fa3), SW(Fa3)**

Tugas 4D
Forwording: **SW3(Fa0/1;Fa0/2;Fa0/3), SW2(Fa0/1;Fa0/2;Fa0/3), SW1(Fa0/2;Fa0/3)**
Blocking: **SW1(Fa0/1)**

Ping PC leo ke Pc Virgo

Tugas 5A
Masuk ke PC > Desktop > Command Prompt
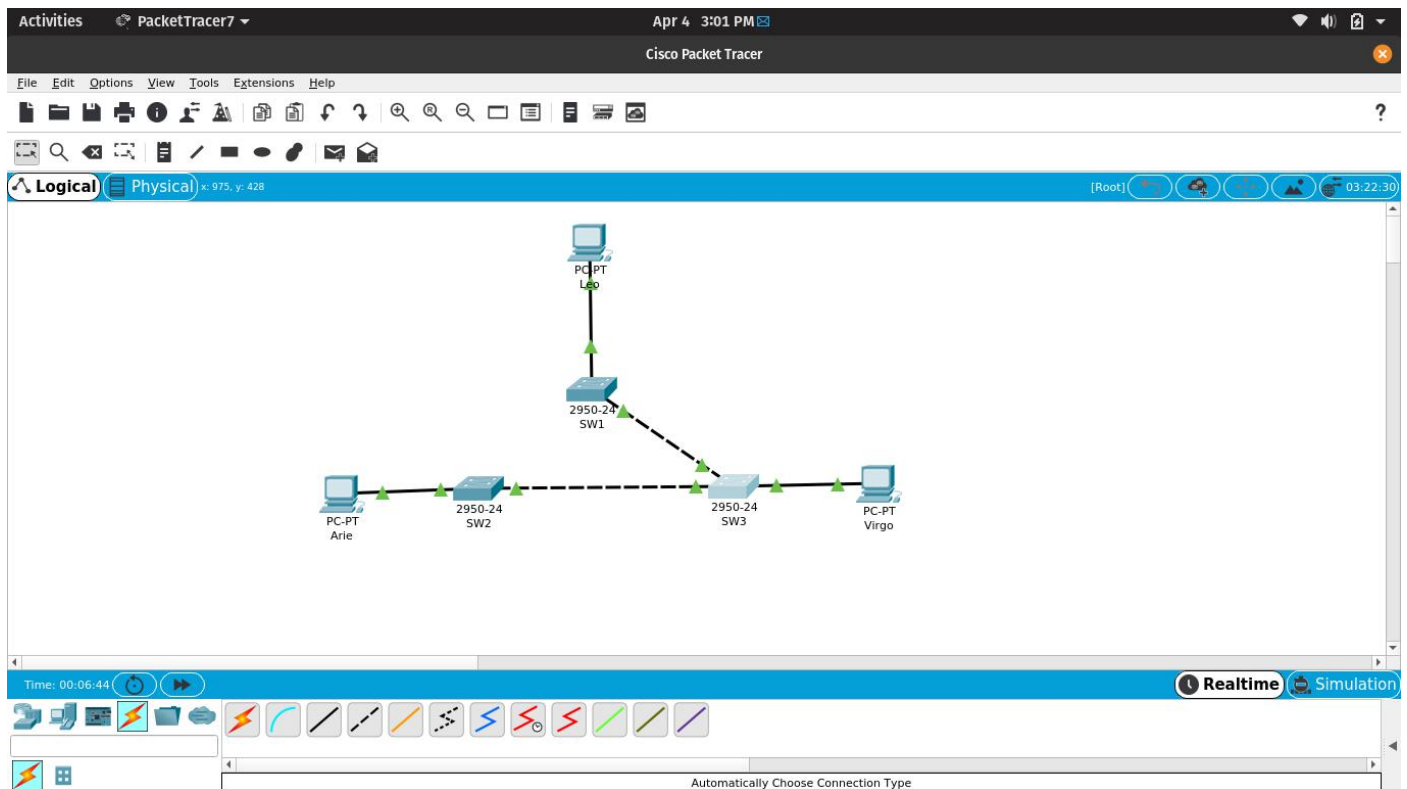Ketik "ping 172.21.1.3"

Tugas 6A
Lakukan pada setiap switch:
SW1>en
SW1#write
Building configuration...
[OK]

Kegiatan 2. Topologi 2

Tugas 9A
SW1


```
SW1>en
SW1#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0003.E401.334D
             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     0090.0C92.4657
             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

SW1#
```

SW2

SW2   ⊗

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Press RETURN to get started.




SW2>en
SW2#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0003.E401.334D
             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     0009.7CD2.CE4A
             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

SW2#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

☐ Top

SW3

SW3   ⊗

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
Press RETURN to get started.




SW3>en
SW3#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0003.E401.334D
             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     0003.E401.334D
             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   Copy   Paste

☐ Top

SW1

No	Variabel	Nilai
1	Root ID	0003.E401.334D
2	Priority	32769
3	MAC Addrress	0090.0C92.4657
4	Bridge ID	0090.0C92.4657
5	Cost (0/1;0/2)	19/19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

SW2

No	Variabel	Nilai
1	Root ID	0003.E401.334D
2	Priority	32769
3	MAC Addrress	009.7CD2.CE4A
4	Bridge ID	009.7CD2.CE4A
5	Cost (0/2;0/1)	19/19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

SW3

No	Variabel	Nilai
1	Root ID	0003.E401.334D
2	Priority	32769
3	MAC Addrress	0003.E401.334D
4	Bridge ID	0003.E401.334D
5	Cost (0/1;0/2;0/3)	19/19/19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

Root bridge : SW3
Designated brige : SW1
Root port : SW2(Fa0/1), SW1(Fa0/1)
Designated port : SW(Fa0/1;Fa0/2;Fa0/3), SW2(Fa0/2), SW1(Fa0/2;Fa0/1)
Forwarding: SW1(Fa0/1;Fa0/2;Fa0/3), SW2(Fa0/1;Fa/02;Fa0/3), SW3(Fa0/1;Fa0/2;Fa0/3)
Blocking: None