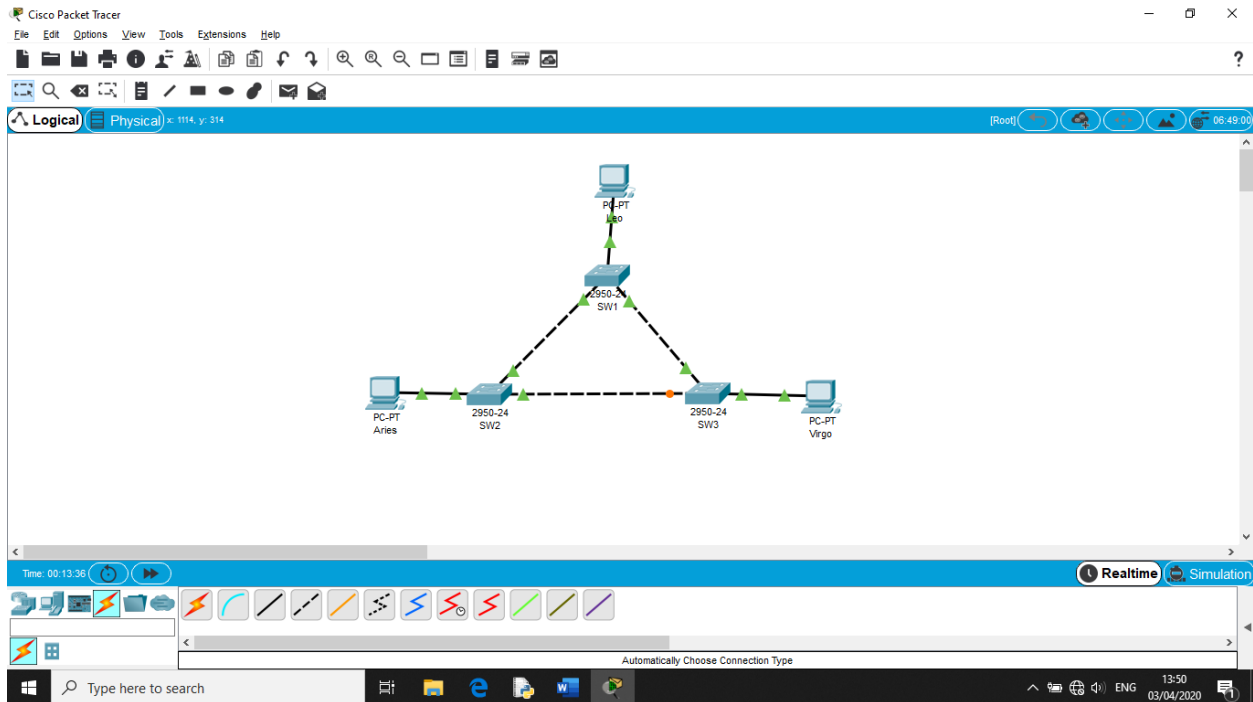**Nama** : **Pasha Bhimasty**

NIM : **L200180123**

Modul : **6**

Topologi 1

Tugas 1A: Tulis langkah pembuatan topologi

1. Tambahkan 3 buah Switch Catalyst 2950
2. Ganti nama pada switch menjadi SW1, SW2, dan SW3
3. Tambahkan 3 buah PC
4. Hubungkan PC dengan switch
5. Hubungkan switch dengan switch

Tugas 2A: Tulis langkah pemberian nama switch mulai dari *mode user*

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

SW1 :

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

SW2 :

```
Switch>enable
Switch#conf t
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#hostname SW3
SW3(config)#ens
              ^
% Invalid input detected at '^' marker.

SW3(config)#end
SW3#
%SYS-5-CONFIG_I: Configured from console by console
```

SW3 :

Tugas 4A: Capture status STP switch

SW2

IOS Command Line Interface

```
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     0009.7C80.6947
             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     0010.11C9.6EC7
             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
Fa0/2             Root FWD 19       128.2    P2p
Fa0/1             Desg FWD 19       128.1    P2p

SW2#
```

Ctrl+F6 to exit CLI focus

Copy   Paste

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SW3

IOS Command Line Interface

```
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     0009.7C80.6947
             Cost        19
             Port        3(FastEthernet0/3)
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    32769  (priority 32768 sys-id-ext 1)
             Address     0060.476E.B129
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
             Aging Time  20

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

SW3#
```

Ctrl+F6 to exit CLI focus

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Tugas 4B: Mengisi Tabel

No.	Variabel	Nilai
1	Root ID	0009.7C80.6947
2	Priority	32769
3	MAC Address	0009.7C80.6947
4	Bridge ID	0009.7C80.6947
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

No.	Variabel	Nilai
1	Root ID	0009.7C80.6947
2	Priority	32769
3	MAC Address	0010.11C9.6EC7
4	Bridge ID	0010.11C9.6EC7
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

No.	Variabel	Nilai
1	Root ID	0009.7C80.6947
2	Priority	32769
3	MAC Address	0060.476E.B129
4	Bridge ID	0060.476E.B129
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

Tugas 4C:

Rootbridge : SW1

Designatedbridge : SW2
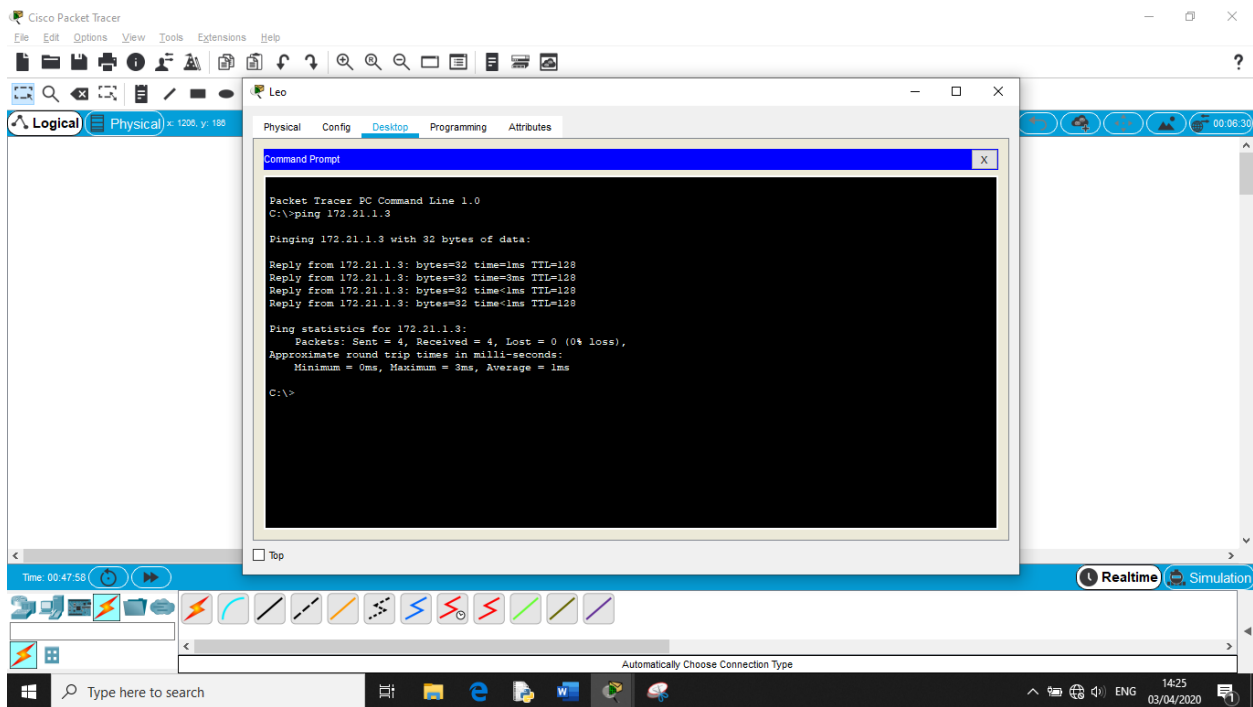
Rootport : SW2 (Fa0/3), SW3 (Fa0/3)

Designatedport : SW1 (Fa0/1; Fa0/2; Fa0/3), SW2 (Fa0/1; Fa0/2), SW3 (Fa0/1)

Tugas 4D:

Forwarding : SW1 (Fa0/1; Fa0/3), SW2 (Fa0/1; Fa0/2; Fa0/3), SW3 (Fa0/1; Fa0/3)

Blocking : SW3 (Fa0/2)

Ping PC Leo ke PC Virgo

Tugas 5A: Tulis langkah untuk melakukan perintah ping

1. Klik pada PC
2. Pilih tab Desktop lalu pilih Command Prompt
3. Ketikkan ping 172.21.1.3

Tugas 6A: Tulis langkah untuk menyimpan konfigurasi jaringan
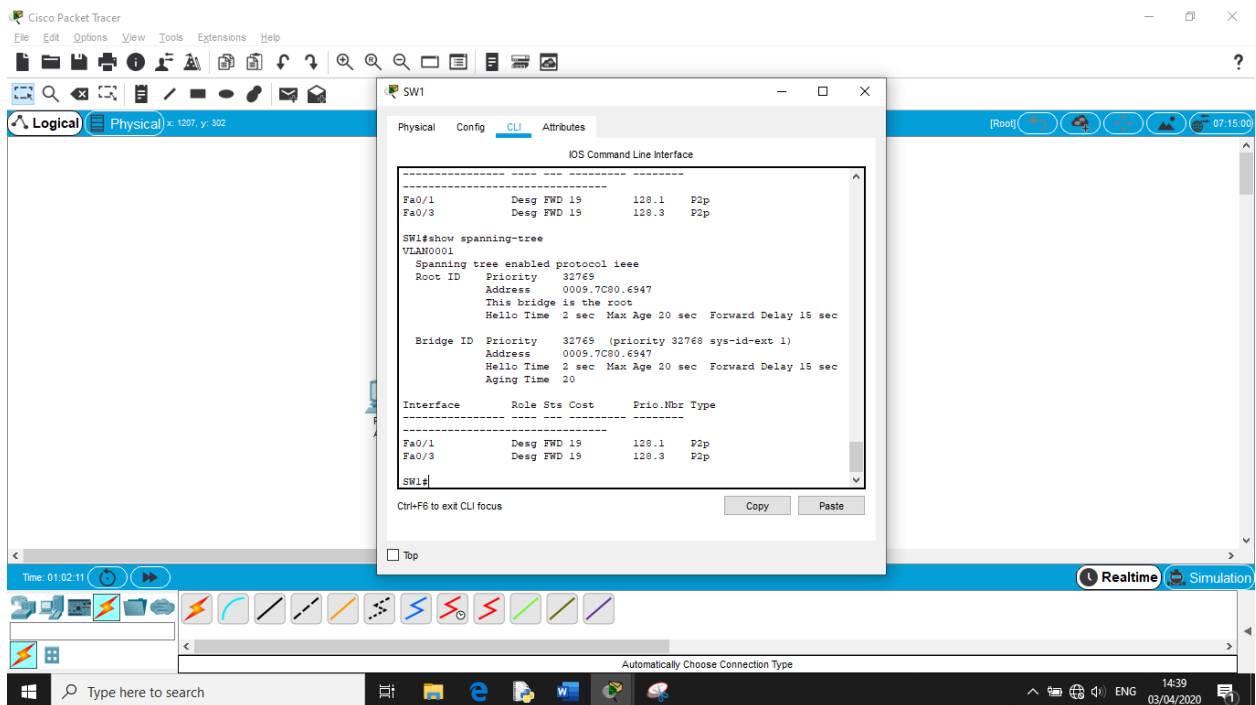
Lakukan perintah dibawah ini untuk setiap switch

```
SW1>enable
SW1#write
Building configuration...
[OK]
SW1#
```

```
SW2>enable
SW2#write
Building configuration...
[OK]
SW2#
```

```
SW3>enable
SW3#write
Building configuration...
[OK]
SW3#
```

Topologi 2

Tugas 9A:

SW2 — IOS Command Line Interface

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

SW2#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0009.7C80.6947
             Cost        38
             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     0010.11C9.6EC7
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
             Aging Time  20

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

SW2#
```

Ctrl+F6 to exit CLI focus

Time: 01:02:38

14:39
03/04/2020

SW3 — IOS Command Line Interface

```
SW3>enable
SW3#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0009.7C80.6947
             Cost        19
             Port        3(FastEthernet0/3)
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec

  Bridge ID  Priority    32769  (priority 32768 sys-id-ext 1)
             Address     0060.476E.B129
             Hello Time  2 sec  Max Age 20 sec  Forward Delay 15 sec
             Aging Time  20

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

SW3#
```

Ctrl+F6 to exit CLI focus

Time: 01:03:06

14:40
03/04/2020

No.	Variabel	Nilai
1	Root ID	0009.7C80.6947
2	Priority	32769
3	MAC Address	0009.7C80.6947
4	Bridge ID	0009.7C80.6947
5	Cost (0/1 ; 0/3)	19 / 19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

No.	Variabel	Nilai
1	Root ID	0009.7C80.6947
2	Priority	32769
3	MAC Address	0010.11C9.6EC7
4	Bridge ID	0010.11C9.6EC7
5	Cost (0/1 ; 0/2)	19 / 19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

No.	Variabel	Nilai
1	Root ID	0009.7C80.6947
2	Priority	32769
3	MAC Address	0060.476E.B129
4	Bridge ID	0060.476E.B129
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 : SW1

Designated bridge : SW3

Root port : SW2 (Fa0/2), SW3 (Fa0/3)

Designated port : SW1 (Fa0/1; Fa0/3), SW2 (Fa0/1), SW3 (Fa0/1; Fa0/2)

Forwarding : SW1 (Fa0/1; Fa0/3), SW2 (Fa0/1; Fa0/2), SW3 (Fa0/1; Fa0/2; Fa0/3)

Blocking : Tidak ada

Ping PC Leo ke PC Virgo