

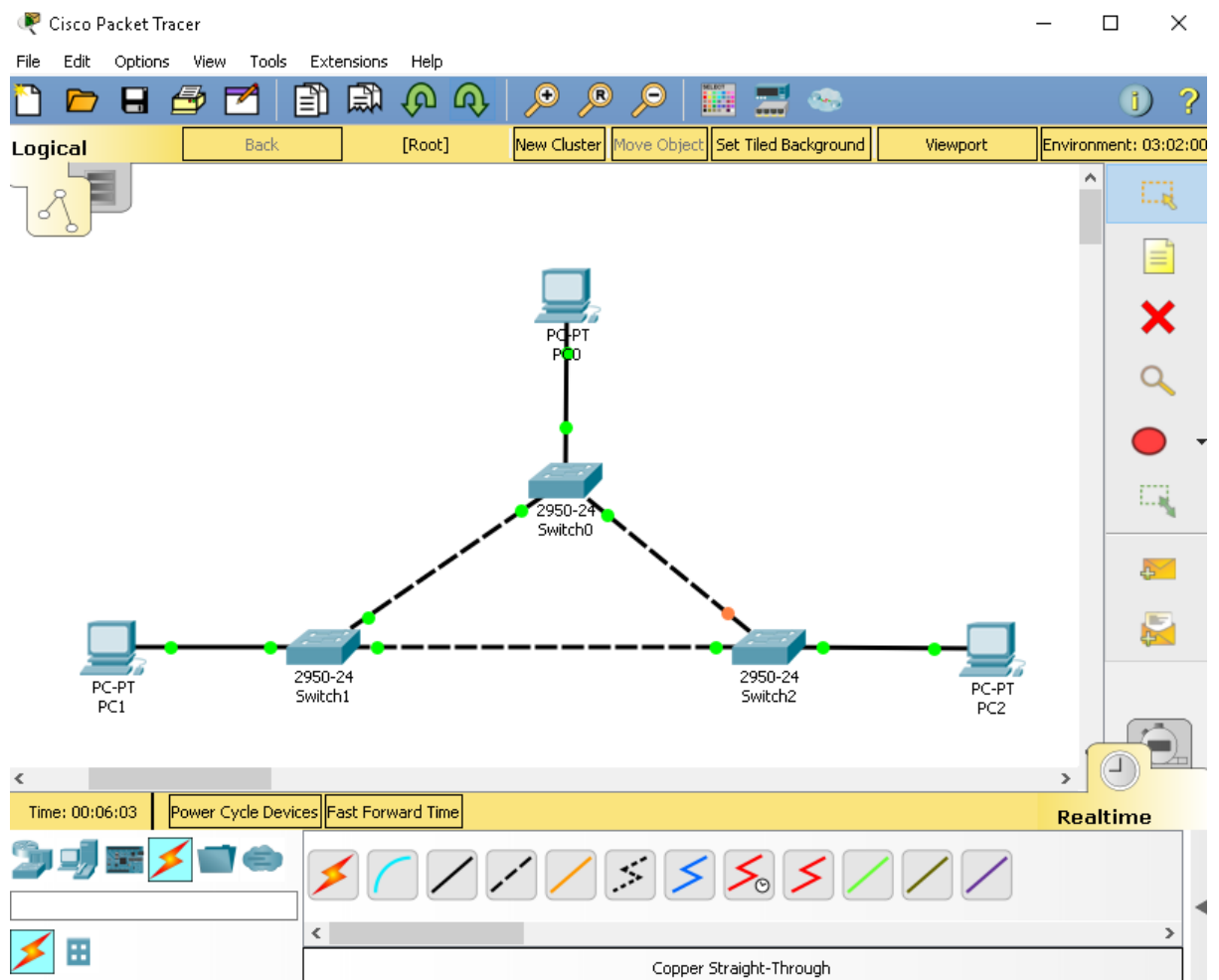
Nama : Robby Nugroho Setiawan.

Kelas : D – Prak.Jarkom

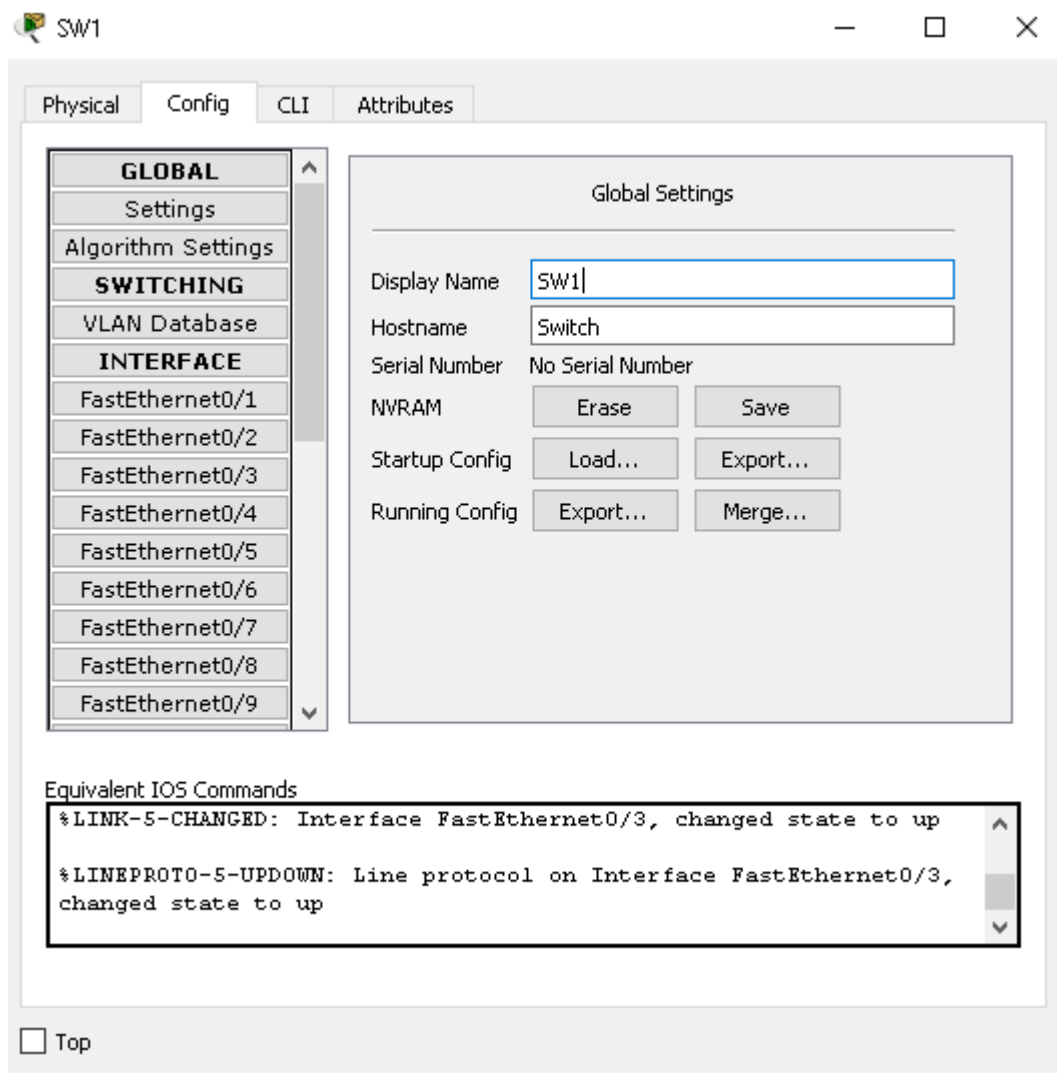
Nim : L200170179

TUGAS MODUL 6

1. Dalam Packet Tracer buat Topologi dengan menggunakan 3 buah Switch Catalyst 2950 dan 3 PC.



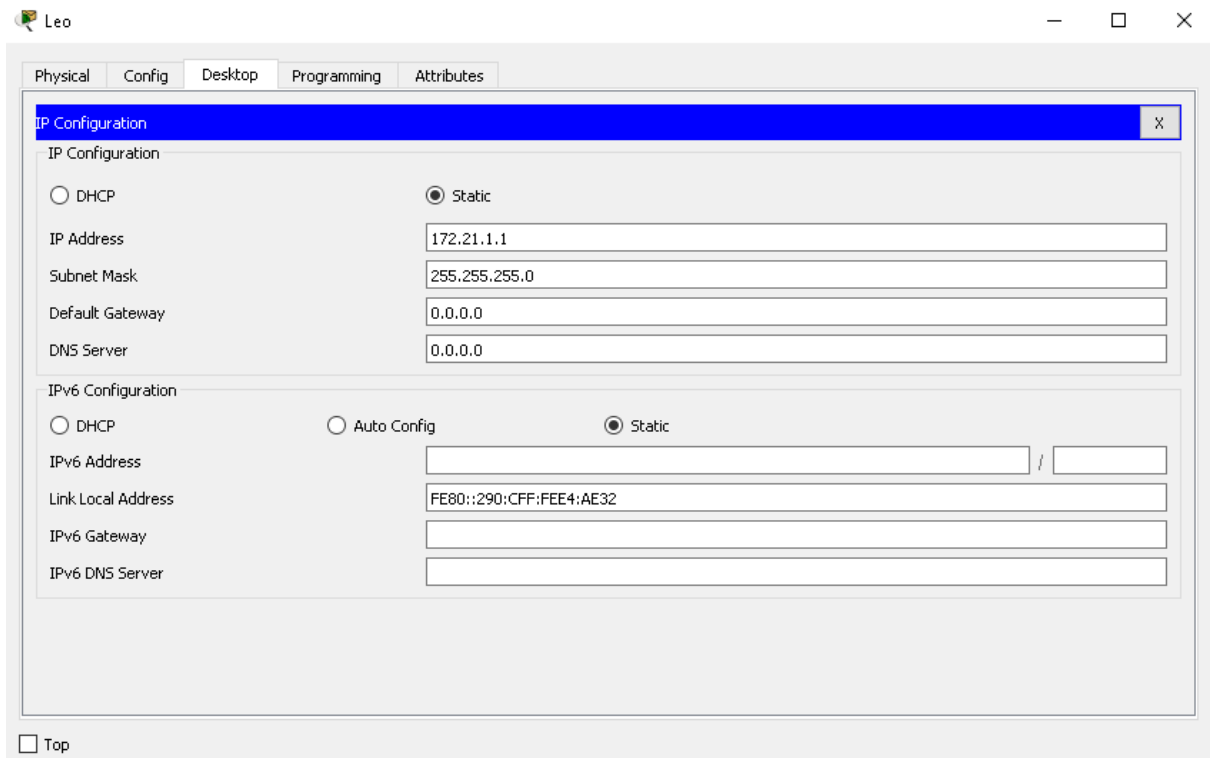
2. Memberi Nama masing-masing SW, misal saja switch0 adalah SW1.



3. Konfigurasi masing-masing PC dengan IP Address.

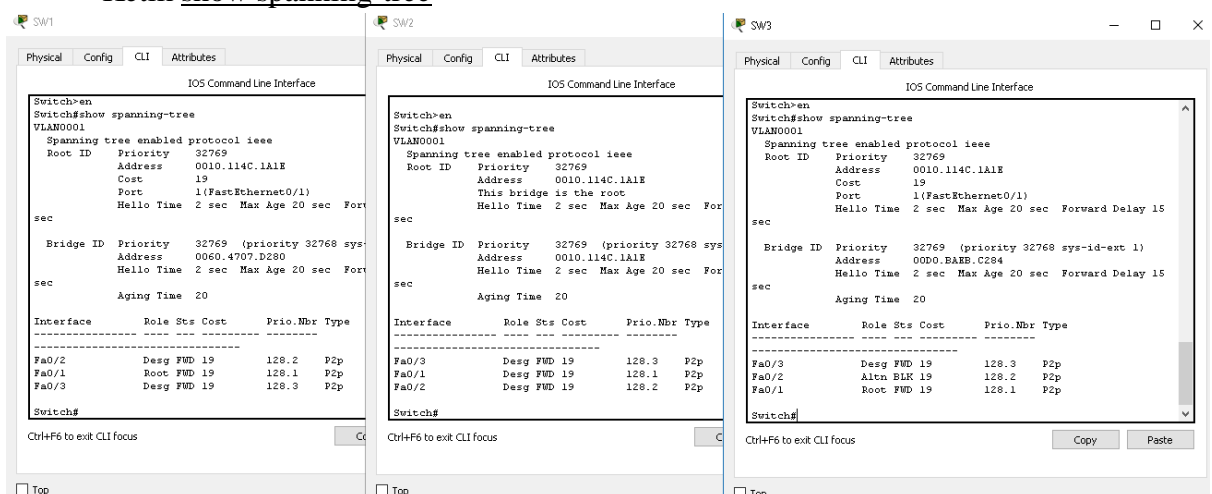
- Leo = 172.21.1.1 / 24
- Aries = 172.21.1.2 / 24
- Virgo = 172.21.1.3 / 24

Misal gambar dibawah contohnya adalah PC Leo



4. a) Melihat status STP pada masing-masing Switch

- Tekan Enter
- Masukkan *Mode Privileged* "en"
- Ketik show spanning-tree



- Ketik lagi show mac-address-table

b) Tabel dari tiap Switch

SW1

No	Variabel	Nilai
1	Root ID	32769.0010.114c.1A1E
2	Priority	32769
3	MAC Address	00d0.97de.2701 & 00d0.d331.bb02
4	Bridge ID	32769.0060.4707.D280
5	Cost (0/1; 0/2; 0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

SW2

No	Variabel	Nilai
1	Root ID	32769.0010.114c.1A1E
2	Priority	32769
3	MAC Address	0001.4273.3b01 & 00d0.d331.bb01
4	Bridge ID	32769.0010.114c.1A1E
5	Cost (0/1; 0/2; 0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

SW3

No	Variabel	Nilai
1	Root ID	32769.0010.114c.1A1E
2	Priority	32769
3	MAC Address	00d0.97de.2702
4	Bridge ID	32769.00D0.BAEB.C284
5	Cost (0/1; 0/2; 0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

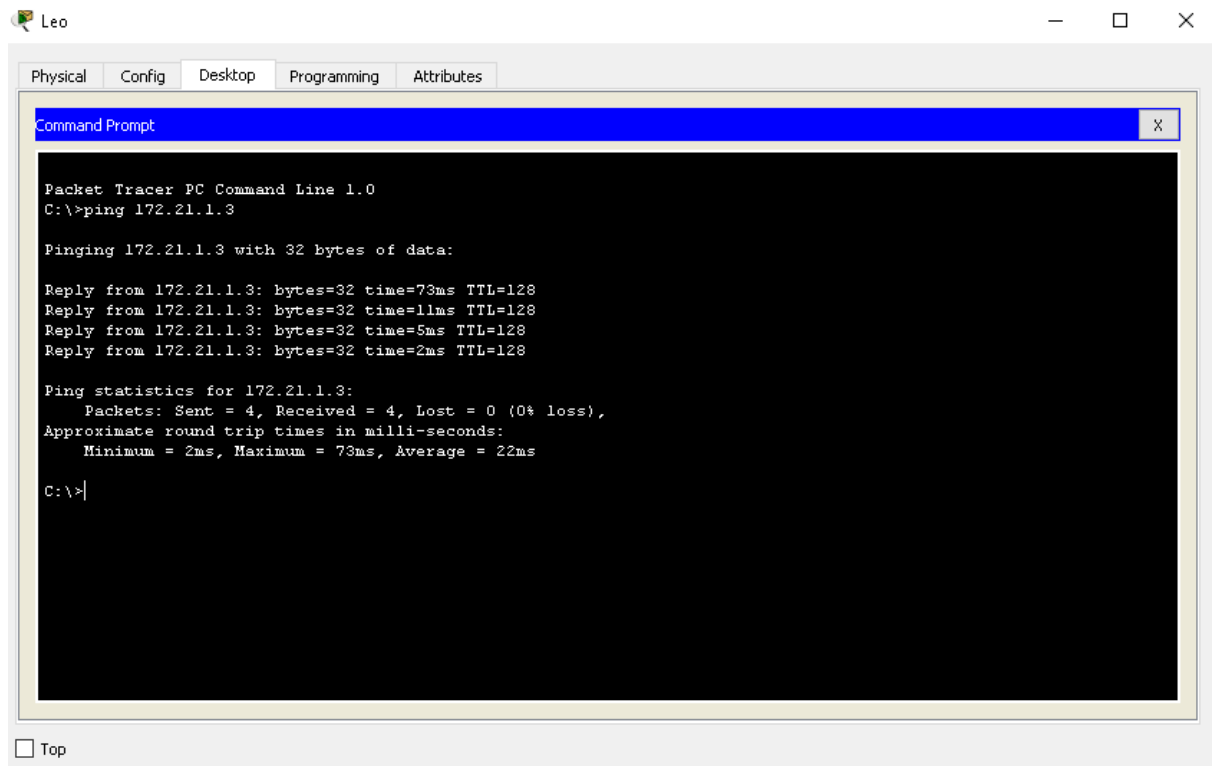
c) Pada kondisi *default*, SW dan port mana saja yang :

- ✓ Menjadi *root bridge* : SW1,
- ✓ Menjadi *designated bridge* : SW3,
- ✓ Menjadi *root port* : SW 3 Fa 0/1 dan SW2 Fa 0/2
- ✓ Menjadi *designated port* : SW 3 Fa 0/2, SW1 (Fa 0/1; 0/2; 0/3) dan SW2 (Fa 0/1; 0/2)

d) Pada kondisi default, port mana saja yang :

- ✓ Berada *forwarding* : SW1(Fa 0/1; 0/2; 0/3), SW2(Fa 0/1; 0/2; 0/3), SW3(Fa 0/1; 0/2; 0/3)
- ✓ Berada *blocking* : SW3 (Fa 0/2)

5. Tes Ping terhadap PC Leo dan PC Virgo



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

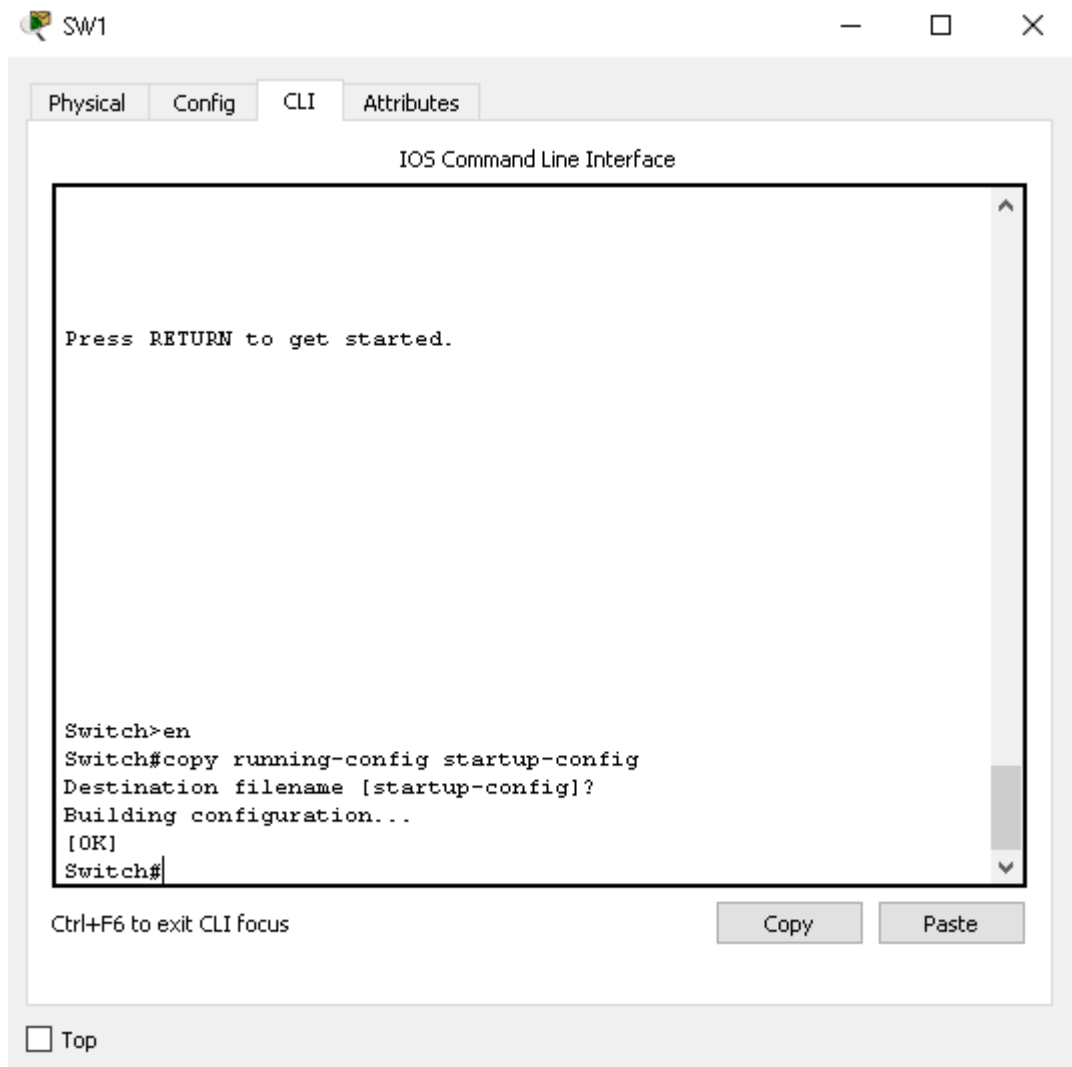
Pinging 172.21.1.3 with 32 bytes of data:

Reply from 172.21.1.3: bytes=32 time=73ms TTL=128
Reply from 172.21.1.3: bytes=32 time=11ms TTL=128
Reply from 172.21.1.3: bytes=32 time=5ms TTL=128
Reply from 172.21.1.3: bytes=32 time=2ms TTL=128

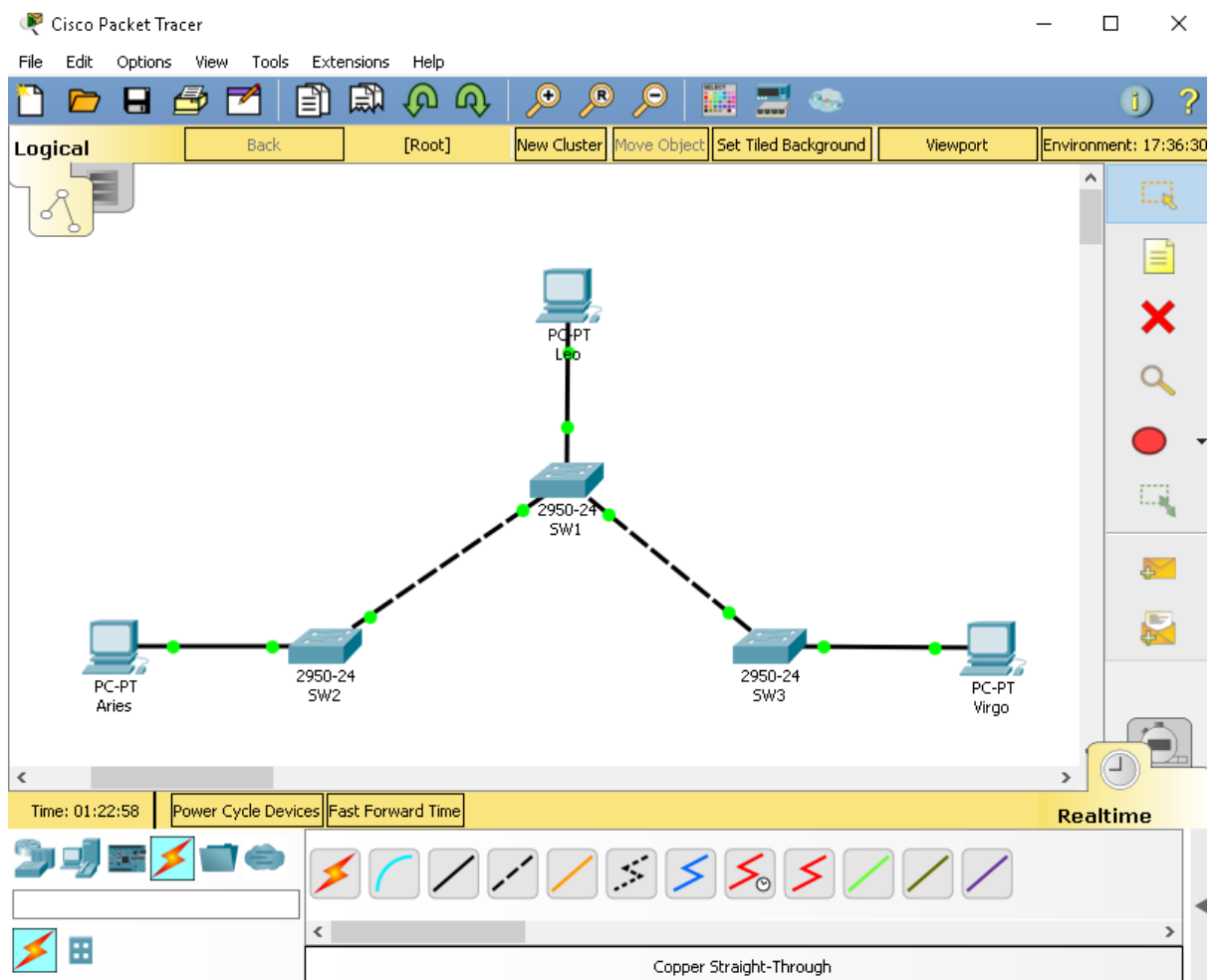
Ping statistics for 172.21.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 2ms, Maximum = 73ms, Average = 22ms

C:\>
```

6. Menyimpan konfigurasi jaringan dengan nama *lab2.nwc*



7. Coba memutuskan 1 sambungan terhadap SW lain.



8. a) Lihat status STP tiap SW

SW1

No	Variabel	Nilai
1	Root ID	32769.0010.114c.1A1E
2	Priority	32769
3	MAC Address	00d0.97de.2701 & 00d0.d331.bb02
4	Bridge ID	32769.0060.4707.D280
5	Cost (0/1; 0/2; 0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

SW2

No	Variabel	Nilai
1	Root ID	32769.0010.114c.1A1E
2	Priority	32769
3	MAC Address	0001.4273.3b01
4	Bridge ID	32769.0010.114c.1A1E
5	Cost (0/1; 0/2; 0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

SW3

No	Variabel	Nilai
1	Root ID	32769.0010.114c.1A1E
2	Priority	32769
3	MAC Address	00d0.97de.2702
4	Bridge ID	32769.00D0.BAEB.C284
5	Cost (0/1; 0/2; 0/3)	19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

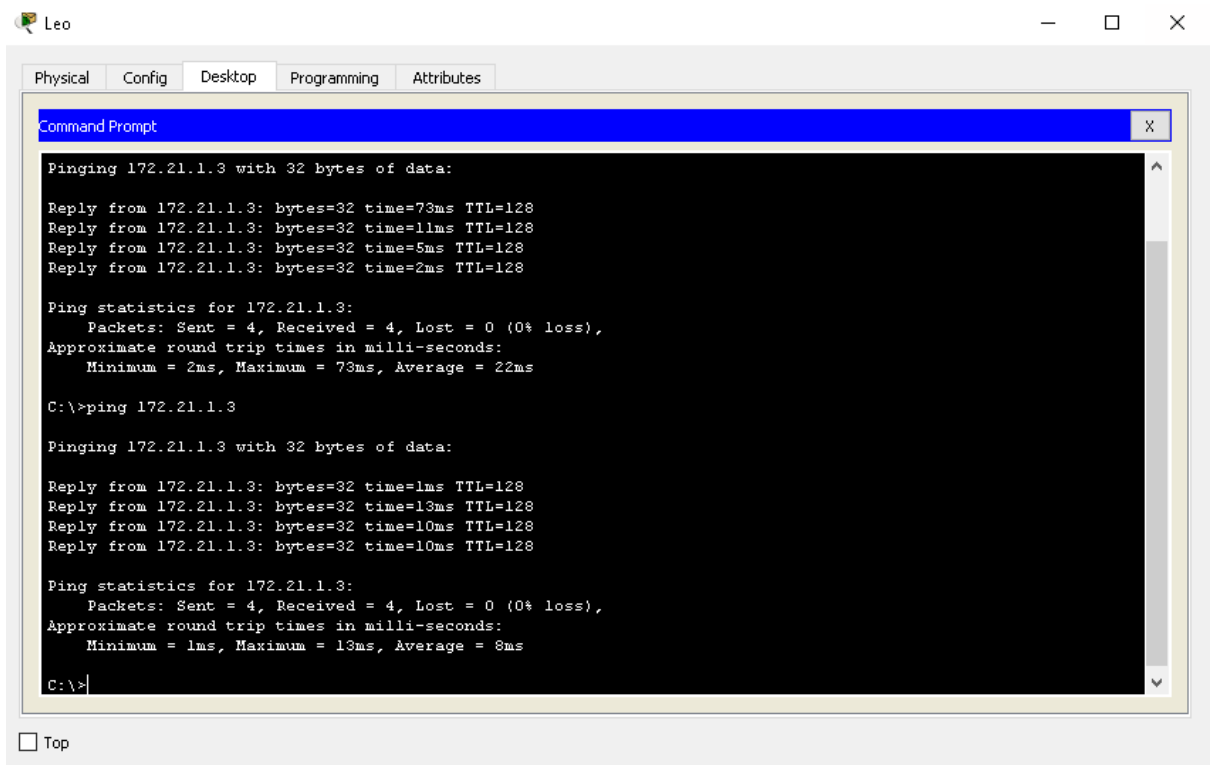
b) Pada kondisi *default*, SW dan port mana saja yang :

- ✓ Menjadi *root bridge* : SW1,
- ✓ Menjadi *designated bridge* : SW3 dan SW2,
- ✓ Menjadi *root port* : SW 3 Fa 0/2 dan SW2 Fa 0/1
- ✓ Menjadi *designated port* : SW 3 Fa 0/1, SW1 (Fa 0/1; 0/2) dan SW2 (Fa 0/1)

c) Pada kondisi *default*, port mana saja yang :

- ✓ Berada *forwarding* : SW1(Fa 0/1; 0/2; 0/3), SW2(Fa 0/1; 0/3), SW3(Fa 0/2; 0/3)
- ✓ Berada *blocking* : ---

9. Test Ping PC Leo dan PC Virgo



The screenshot shows a virtual machine window titled "Leo" with a standard Windows interface. Inside the VM, a "Command Prompt" window is open, displaying the results of a ping test to the IP address 172.21.1.3. The window has tabs for "Physical", "Config", "Desktop", "Programming", and "Attributes", with "Desktop" currently selected. The Command Prompt output shows two successful ping attempts, each with four replies and associated statistics. The first attempt shows higher latency (up to 73ms), while the second attempt shows significantly lower latency (up to 13ms). A "Top" button is visible at the bottom left of the VM window.

```
Pinging 172.21.1.3 with 32 bytes of data:

Reply from 172.21.1.3: bytes=32 time=73ms TTL=128
Reply from 172.21.1.3: bytes=32 time=11ms TTL=128
Reply from 172.21.1.3: bytes=32 time=5ms TTL=128
Reply from 172.21.1.3: bytes=32 time=2ms 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 = 2ms, Maximum = 73ms, Average = 22ms

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=1ms TTL=128
Reply from 172.21.1.3: bytes=32 time=13ms TTL=128
Reply from 172.21.1.3: bytes=32 time=10ms TTL=128
Reply from 172.21.1.3: bytes=32 time=10ms 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 = 1ms, Maximum = 13ms, Average = 8ms

C:\>
```

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