

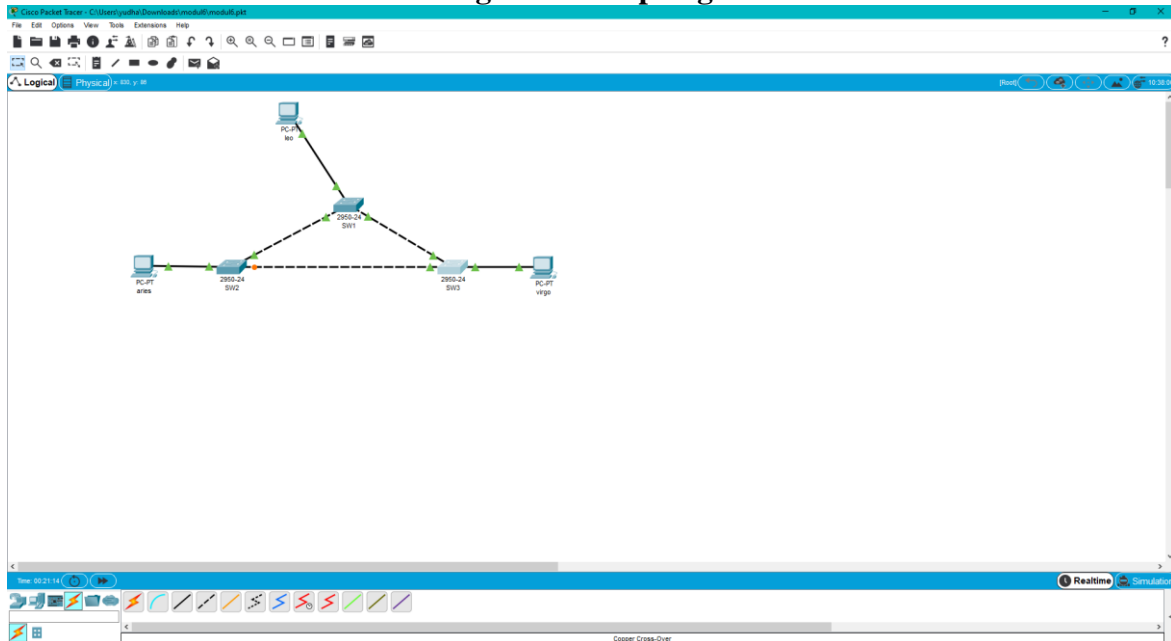
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**Nim : L200180150**

**Kelas : D**

## **Modul 6**

### **Kegiatan 1. Topologi 1**



#### **Tugas 1A:**

Pertama kita beri 3 Switch 2950-24 lalu kita beri masing-masing PC per Switch dan sambungkan antar peripheral dengan media transmisi kabel

#### **Tugas 2A:**

##### **SW1**

*Switch>en*

*Switch#conf t*

*Enter configuration commands, one per line. End with CNTL/Z.*

*Switch(config)#hostname SW1*

*SW1(config)#end*

##### **SW2**

*Switch>en*

*Switch#conf t*

*Enter configuration commands, one per line. End with CNTL/Z.*

*Switch(config)#hostname SW2*

*SW2(config)#end*

### SW3

Switch>en

Switch#conf t

Enter configuration commands, one per line. End with CNTL/Z.

Switch(config)#hostname SW3

SW3(config)#end

### Tugas 4A:

#### SW1

The screenshot shows the CLI interface of a switch named SW1. The 'CLI' tab is selected. The command 'show spanning-tree' has been executed, displaying the following output:

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

SW1>en
SW1#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0040.0B33.4D1A
             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     0040.0B33.4D1A
             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

SW1#
```

Below the output, there is a 'Ctrl+F6 to exit CLI focus' message and 'Copy' and 'Paste' buttons. At the bottom left, there is a 'Top' button.

## SW2

 SW2

Physical Config **CLI** Attributes

IOS Command Line Interface

```
SW2>en
SW2#show snipping-tree
^
% Invalid input detected at '^' marker.

SW2#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
    Root ID    Priority    32769
              Address     0040.0B33.4D1A
              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.A3CC.2698
              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
Fa0/3          Altn BLK 19        128.3    P2p
Fa0/2          Root FWD 19        128.2    P2p

SW2#
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

## SW3

SW3

Physical Config CLI Attributes

IOS Command Line Interface

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3,
changed state to up

SW3>en
SW3#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
            Address     0040.0B33.4D1A
            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     00D0.BC10.D51E
            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              Root FWD 19           128.3   P2p

SW3#
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

**Tugas 4B:****SW1**

No	Variabel	Nilai
1	Root ID	0040.0B33.4D1A
2	Priority	32769
3	Mac Address	0040.0B33.4D1A
4	Bridge ID	0040.0B33.4D1A
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

**SW2**

No	Variabel	Nilai
1	Root ID	0040.0B33.4D1A
2	Priority	32769
3	Mac Address	00E0.A3CC.2698
4	Bridge ID	00E0.A3CC.2698
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	0040.0B33.4D1A
2	Priority	32769
3	Mac Address	00D0.BC10.D51E
4	Bridge ID	00D0.BC10.D51E
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:

*Root bridge* : SW1

*Designated bridge* : SW3

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

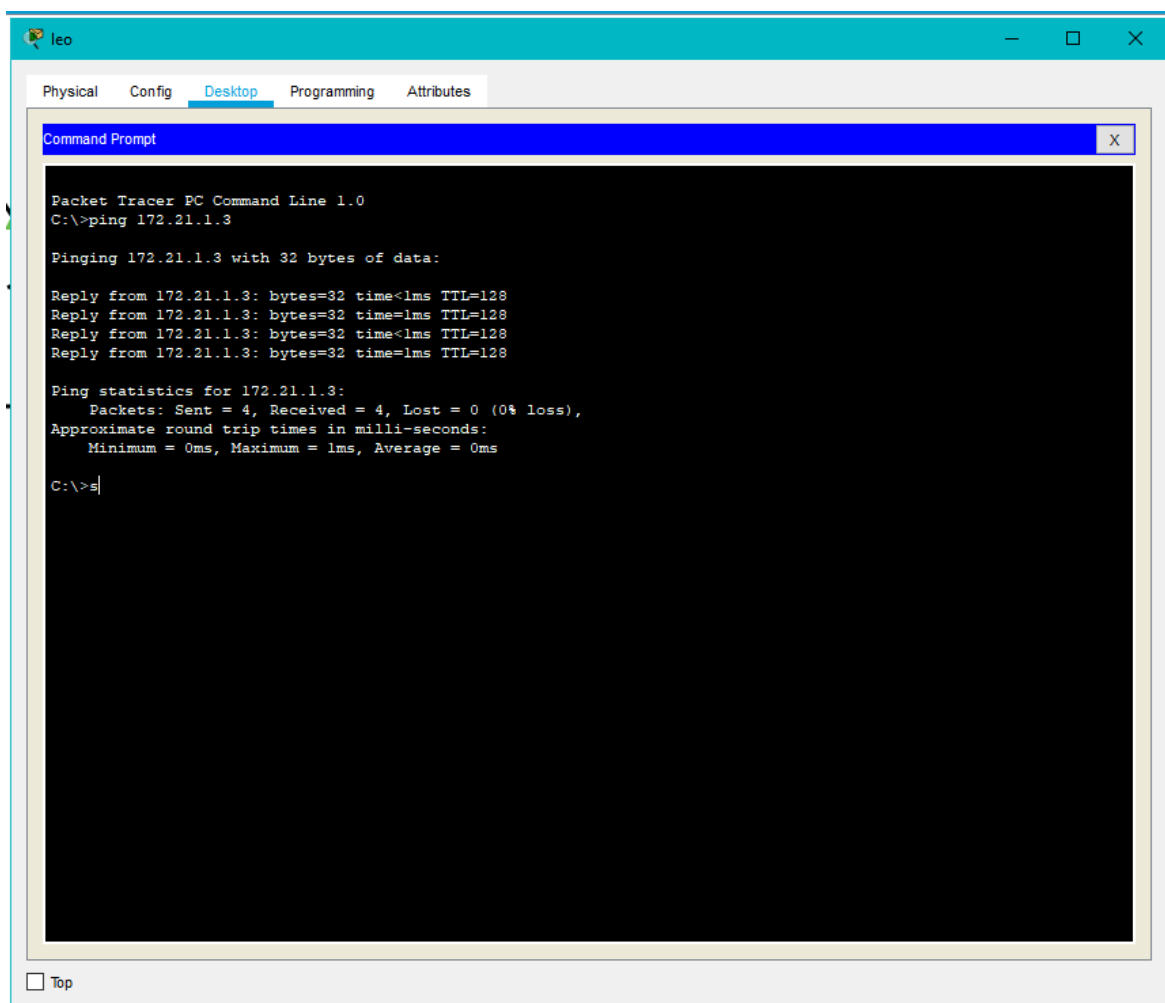
*Designated port* : SW1(Fa0/1;Fa0/2;Fa0/3), SW2(Fa0/1), SW3(Fa0/1;Fa0/3)

#### Tugas 4D:

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

*Blocking* : SW2(Fa0/3)

#### Tugas 5A:



Masuk ke PC >> Desktop >> Command Prompt

Lalu ketik “ping 172.21.1.3”

## Tugas 6A:

Lakukan perintah dibawah untuk setiap switch :

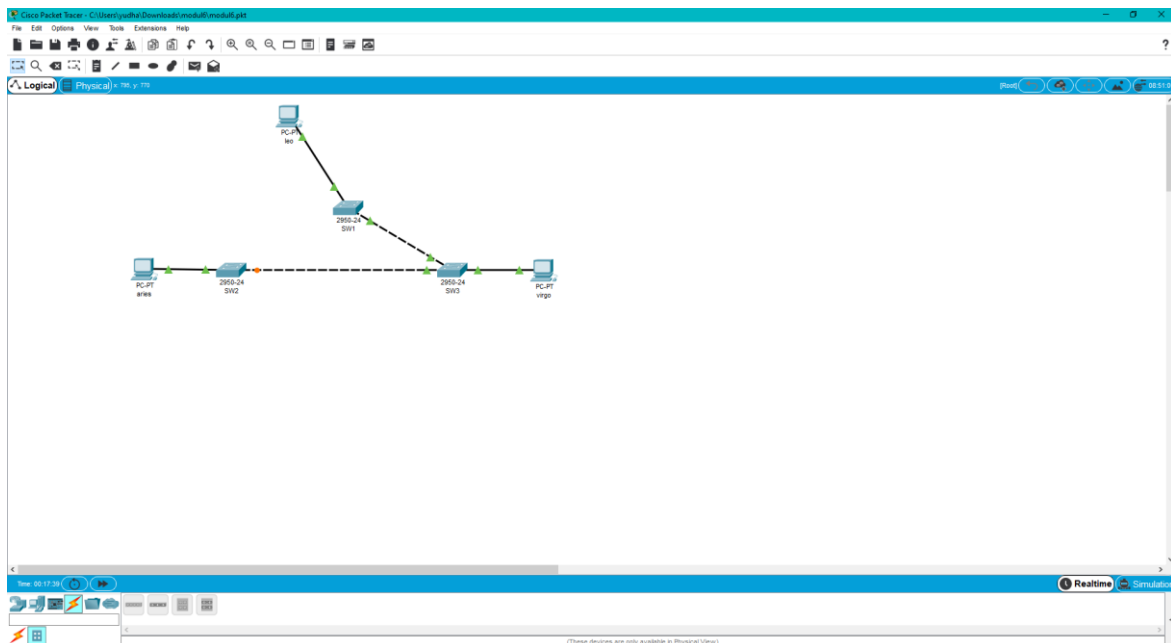
*SW1>en*

*SW1#write*

*Building configuration...*

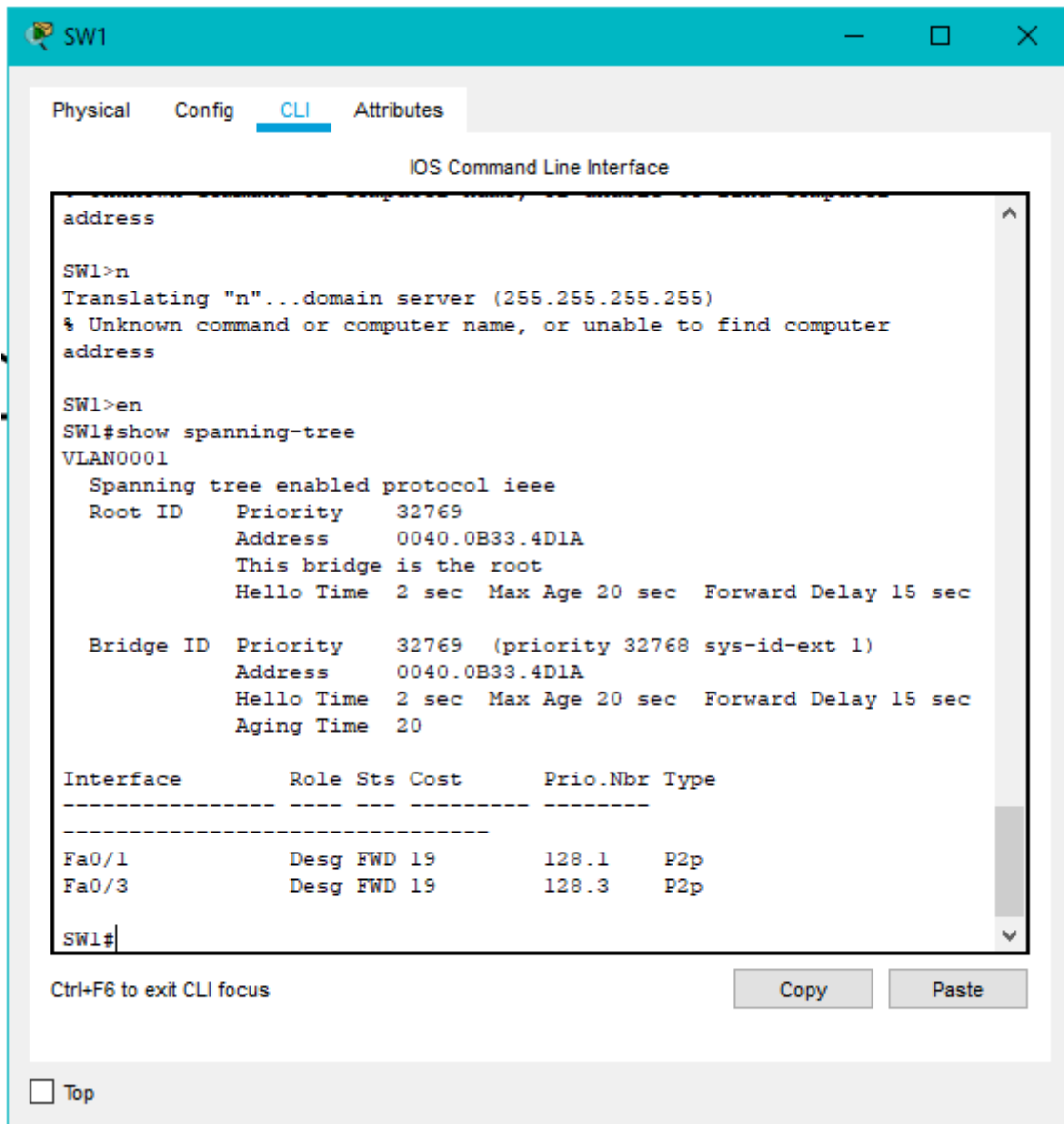
*[OK]*

## Kegiatan 2. Topologi 2



## Tugas 9A:

### SW1



The screenshot shows the SW1 CLI interface with the following content:

Physical Config **CLI** Attributes

IOS Command Line Interface

```
address

SW1>n
Translating "n"...domain server (255.255.255.255)
% Unknown command or computer name, or unable to find computer
address

SW1>en
SW1#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0040.0B33.4D1A
             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     0040.0B33.4D1A
             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
Fa0/3              Desg FWD 19       128.3    P2p

SW1#
```


Ctrl+F6 to exit CLI focus

Copy Paste

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## SW2

 SW2

Physical

Config

CLI

Attributes

IOS Command Line Interface

```
SW2>en
SW2#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
            Address     0040.0B33.4D1A
            Cost        38
            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     00E0.A3CC.2698
            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
Fa0/3          Root FWD 19        128.3    P2p


SW2#
```

Ctrl+F6 to exit CLI focus

CopyPaste

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## SW3

 SW3

Physical

Config

CLI

Attributes

IOS Command Line Interface

```
SW3>en
SW3#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     0040.0B33.4D1A
             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     00D0.BC10.D51E
             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          Root FWD 19        128.3    P2p

SW3#
```

Ctrl+F6 to exit CLI focus

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**SW1**

No	Variabel	Nilai
1	Root ID	0001.9633.4035
2	Priority	32769
3	Mac Address	0001.9633.4035
4	Bridge ID	0001.9633.4035
5	Cost(0/2;0/3)	19/19/19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

**SW2**

No	Variabel	Nilai
1	Root ID	0001.9633.4035
2	Priority	32769
3	Mac Address	0003.E4C0.6B85
4	Bridge ID	0003.E4C0.6B85
5	Cost(0/2;0/3)	19/19
6	Hello Time	2 sec
7	MaxAge	20 sec
8	Forward Delay	15 sec

**SW3**

No	Variabel	Nilai
1	Root ID	0001.9633.4035
2	Priority	32769
3	Mac Address	00E0.8F44.52D6
4	Bridge ID	00E0.8F44.52D6
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

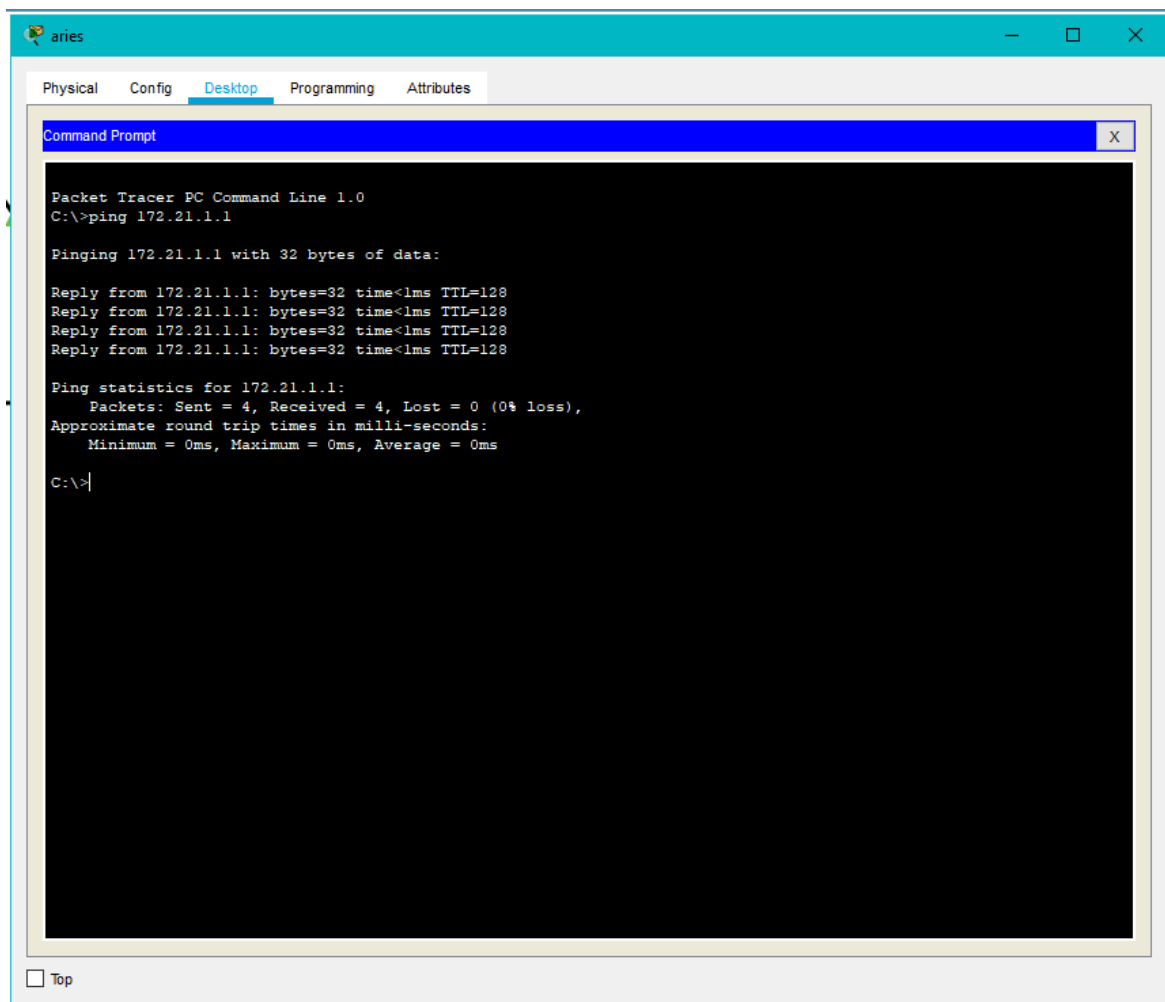
**Root port :** SW2 (Fa0/3), SW3(Fa0/3)

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

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

**Blocking :** None

## Tugas 5A:



Masuk ke PC >> Desktop >> Command Prompt

Lalu ketik “ping 172.21.1.1”

**Tugas 6A:**

Lakukan perintah dibawah untuk setiap switch :

*SW1>en*

*SW1#write*

*Building configuration...*

*[OK]*