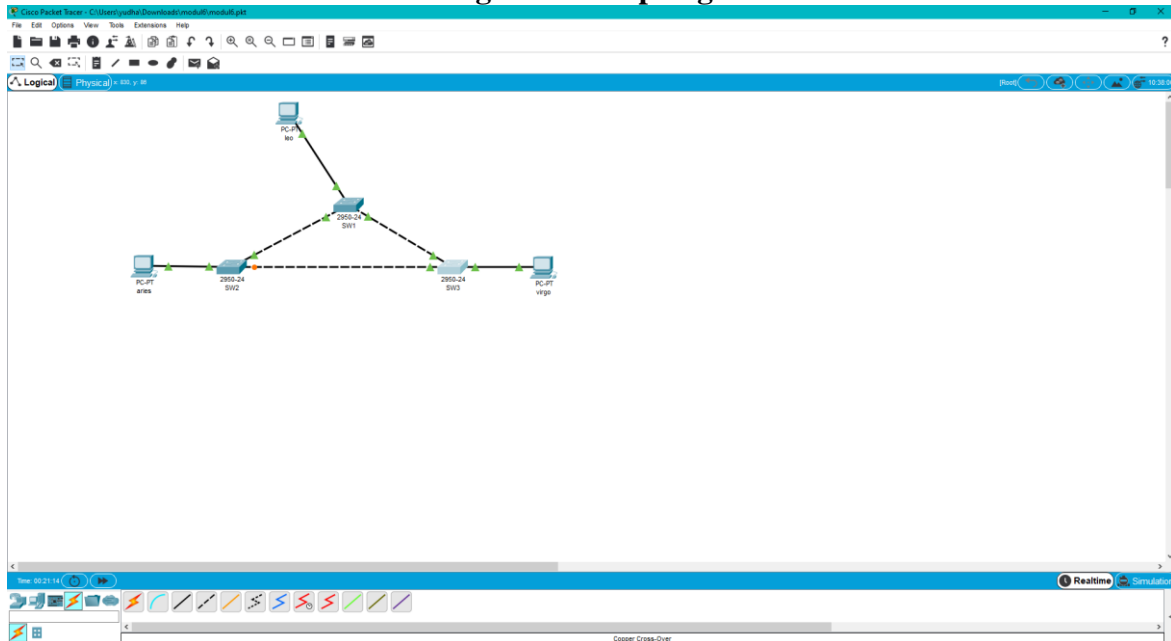**Nama : Maulana Alhif Ikhsan**

Nim : L200180120

Kelas : C

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:

<div align="center">

SW1

</div>

```
SW1                                              —    □    ✕

  Physical   Config   CLI   Attributes

                   IOS Command Line Interface

  %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#

  Ctrl+F6 to exit CLI focus                    Copy        Paste


  ☐ Top
```

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

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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

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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

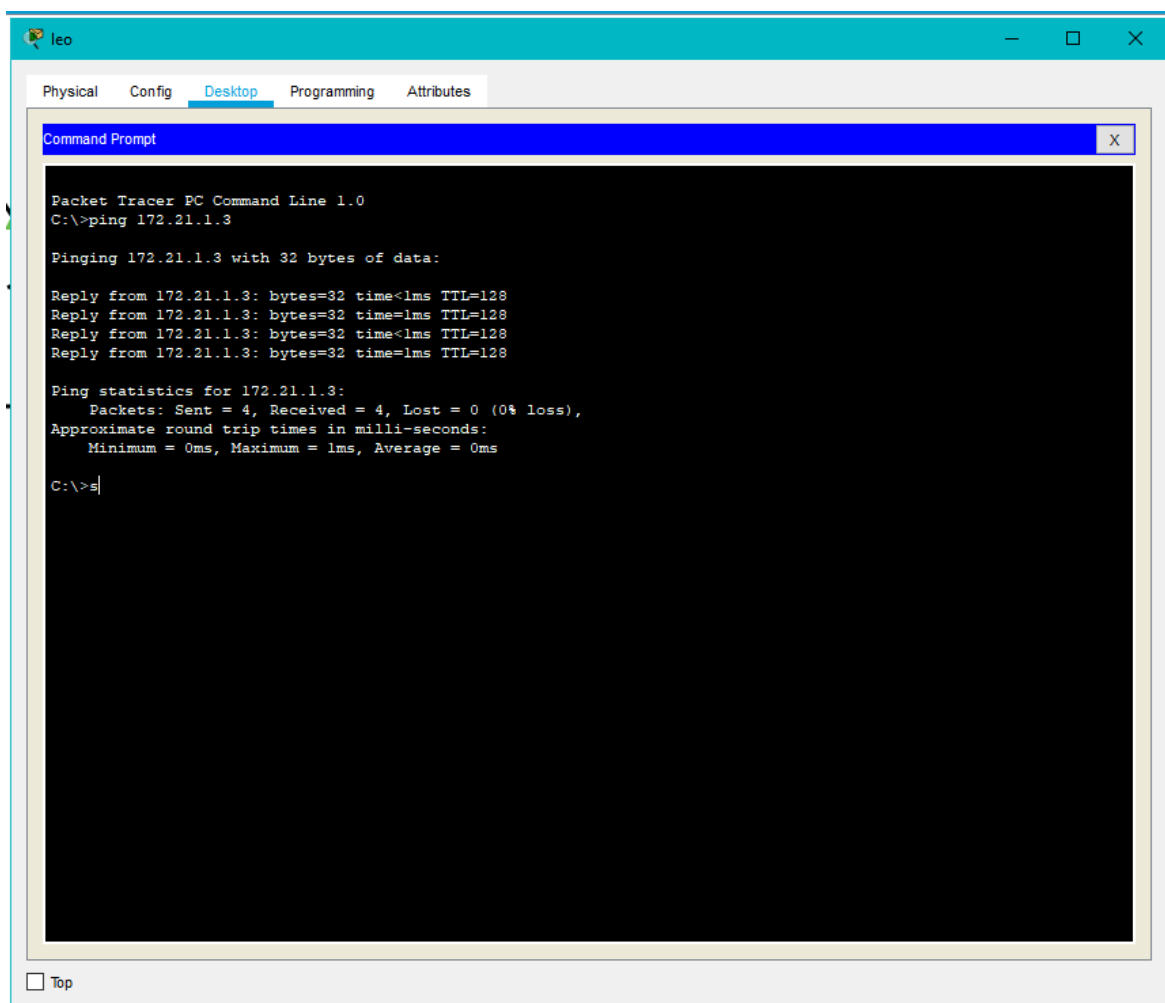*Root port :* SW2 (Fa0/2), SW3(Fa0/3)

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:

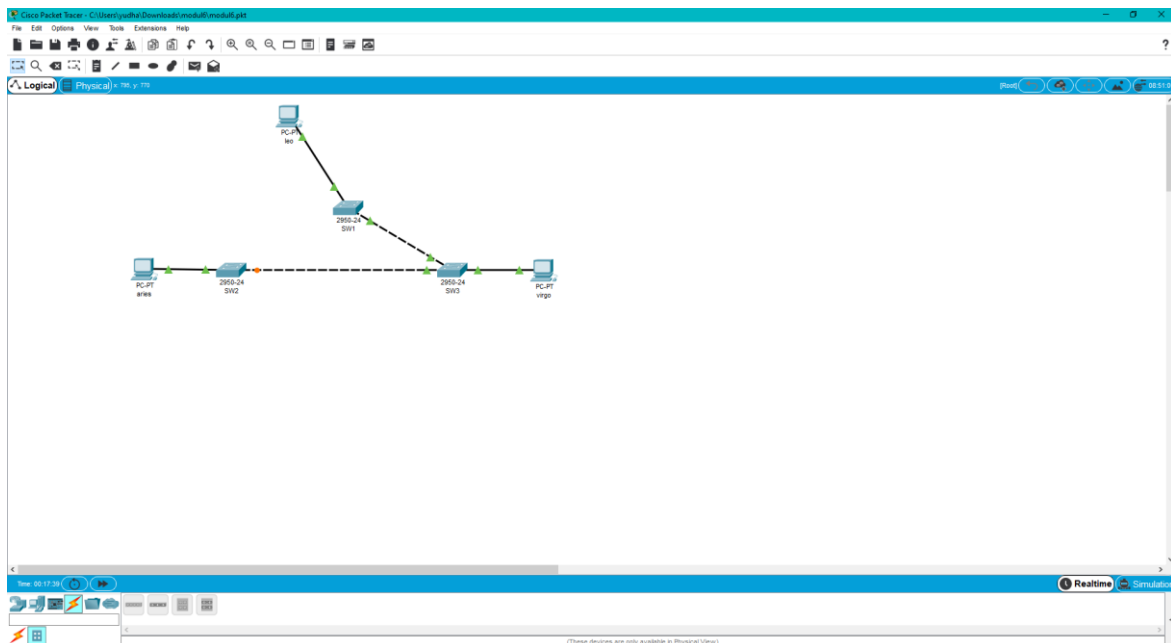Lakukan perintah dibawah untuk setiap switch :
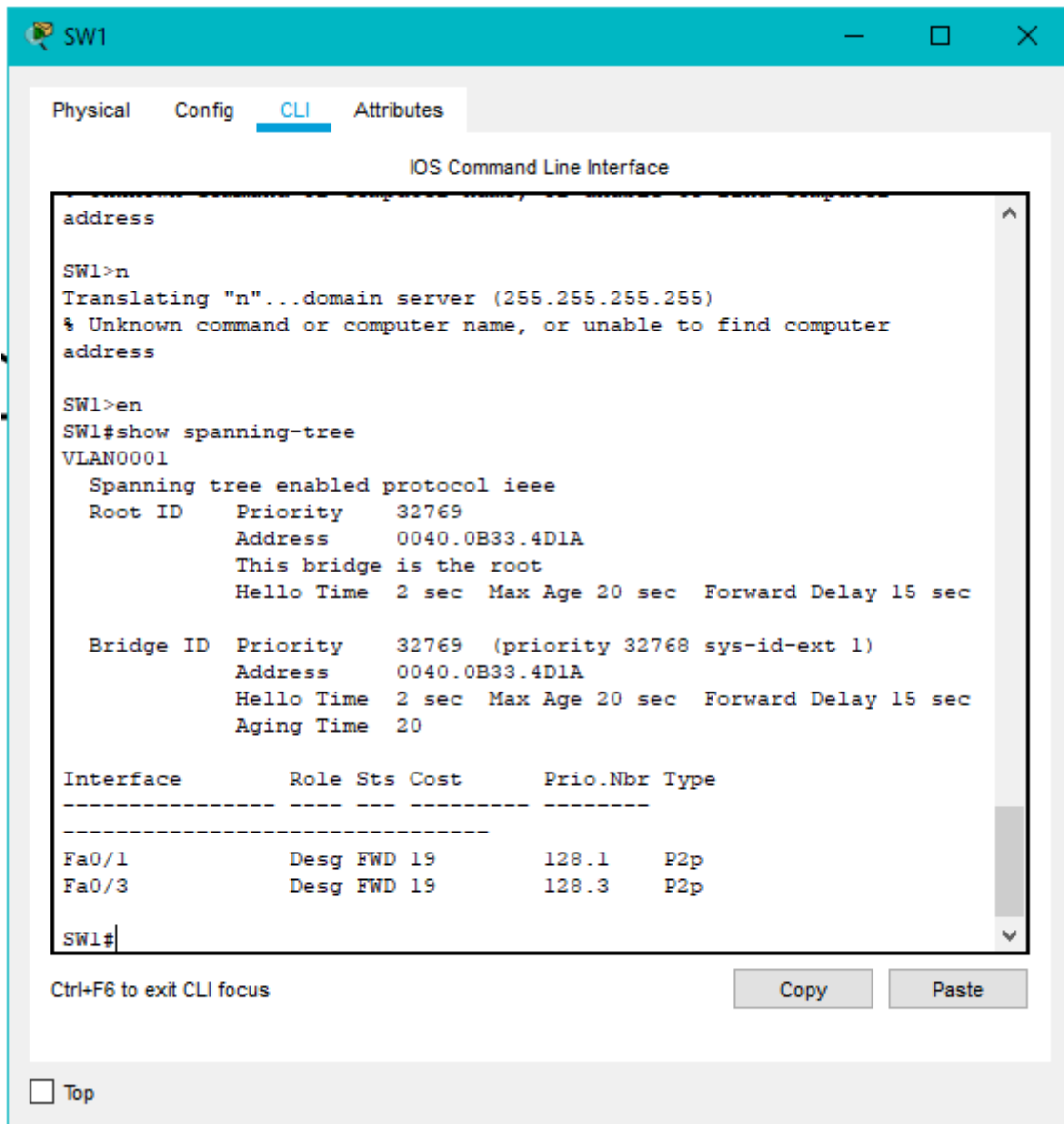
SW1>en
SW1#write
Building configuration...
[OK]

Kegiatan 2. Topologi 2

Tugas 9A:

SW1


```
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#
```

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   Copy   Paste

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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   Copy   Paste

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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

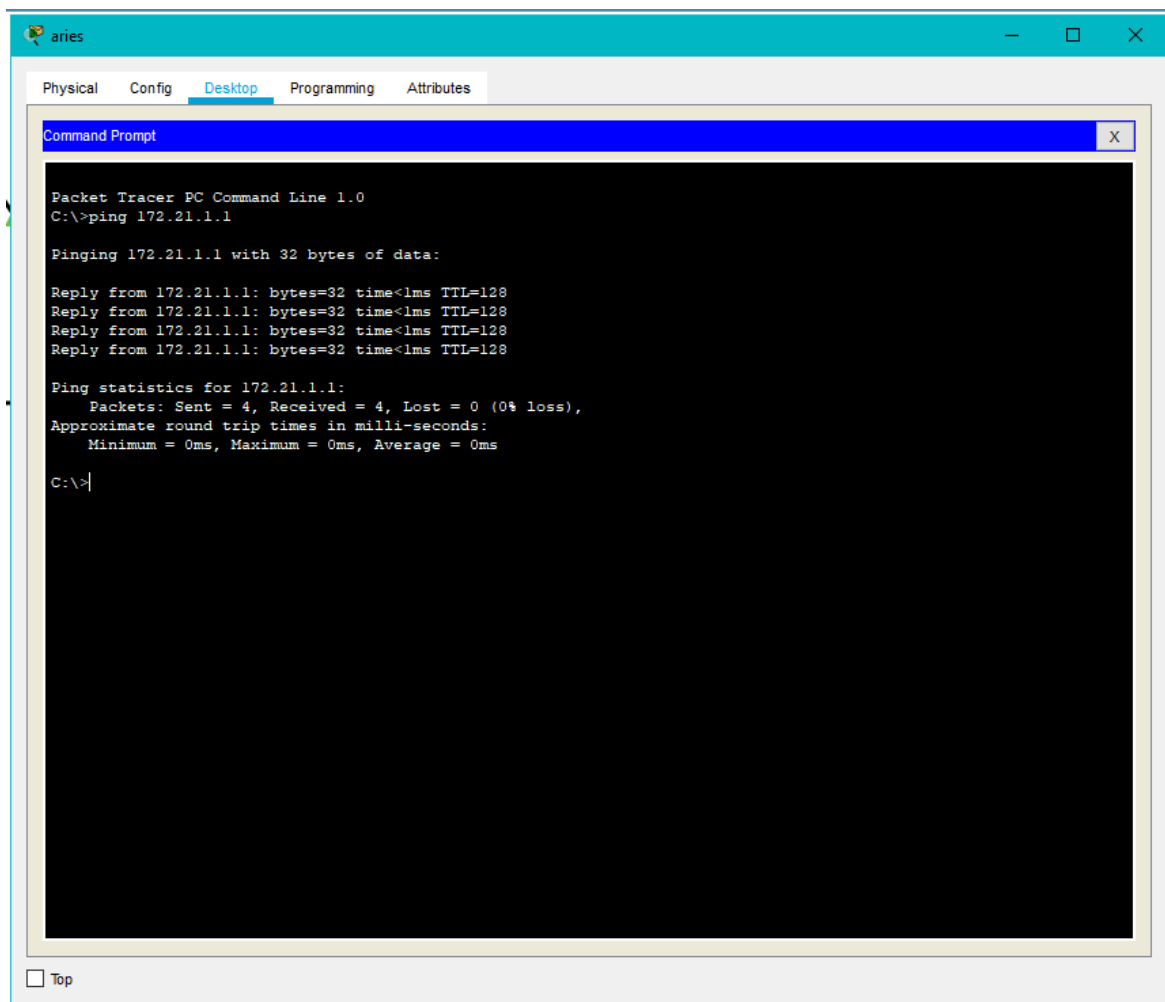*Root bridge :* SW1

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]