Nama : Dhimas Muhammad

NIM : L200180148

Kelas : D
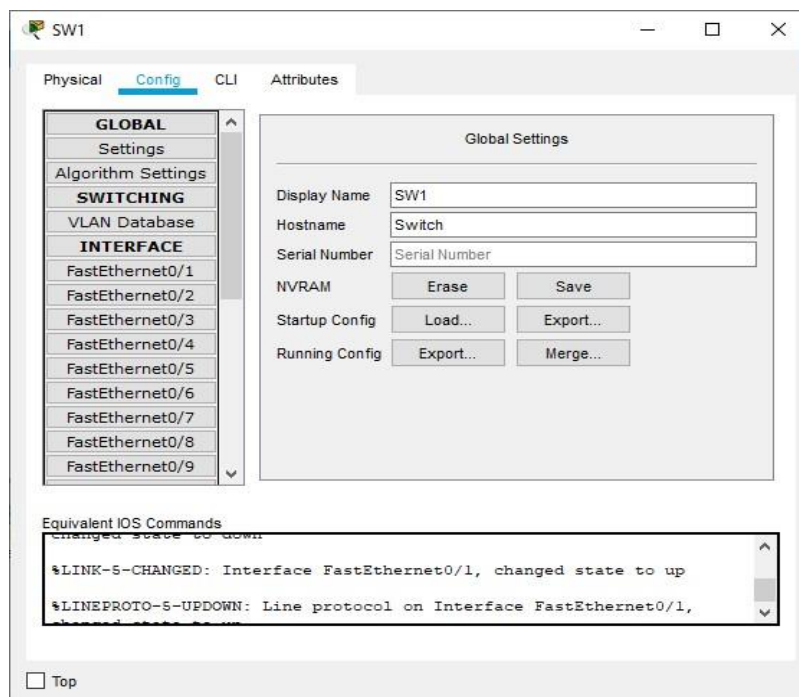
Praktikum Jaringan Komputer
Modul 6

Kegiatan 1. Topologi 1

1A :
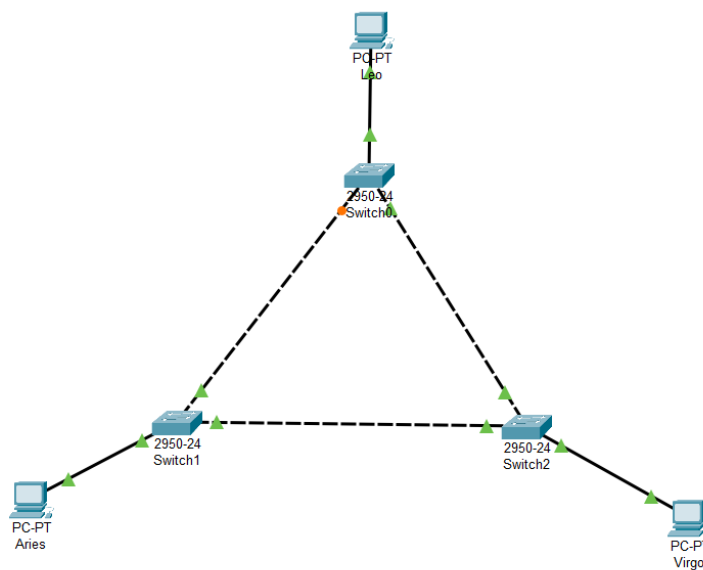
2A :

SW2

Physical | Config | CLI | Attributes

GLOBAL
Settings
Algorithm Settings
SWITCHING
VLAN Database
INTERFACE
FastEthernet0/1
FastEthernet0/2
FastEthernet0/3
FastEthernet0/4
FastEthernet0/5
FastEthernet0/6
FastEthernet0/7
FastEthernet0/8
FastEthernet0/9

Global Settings

Display Name	SW2
Hostname	Switch
Serial Number	Serial Number
NVRAM	Erase	Save
Startup Config	Load...	Export...
Running Config	Export...	Merge...

Equivalent IOS Commands

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

%LINK-5-CHANGED: Interface FastEthernet0/3, changed state to up
```

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SW3

Physical | Config | CLI | Attributes

GLOBAL
Settings
Algorithm Settings
SWITCHING
VLAN Database
INTERFACE
FastEthernet0/1
FastEthernet0/2
FastEthernet0/3
FastEthernet0/4
FastEthernet0/5
FastEthernet0/6
FastEthernet0/7
FastEthernet0/8
FastEthernet0/9

Global Settings

Display Name	SW3
Hostname	Switch
Serial Number	Serial Number
NVRAM	Erase	Save
Startup Config	Load...	Export...
Running Config	Export...	Merge...

Equivalent IOS Commands

```
%LINK-5-CHANGED: Interface FastEthernet0/3, changed state to up

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

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Langkah-langkah :

    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
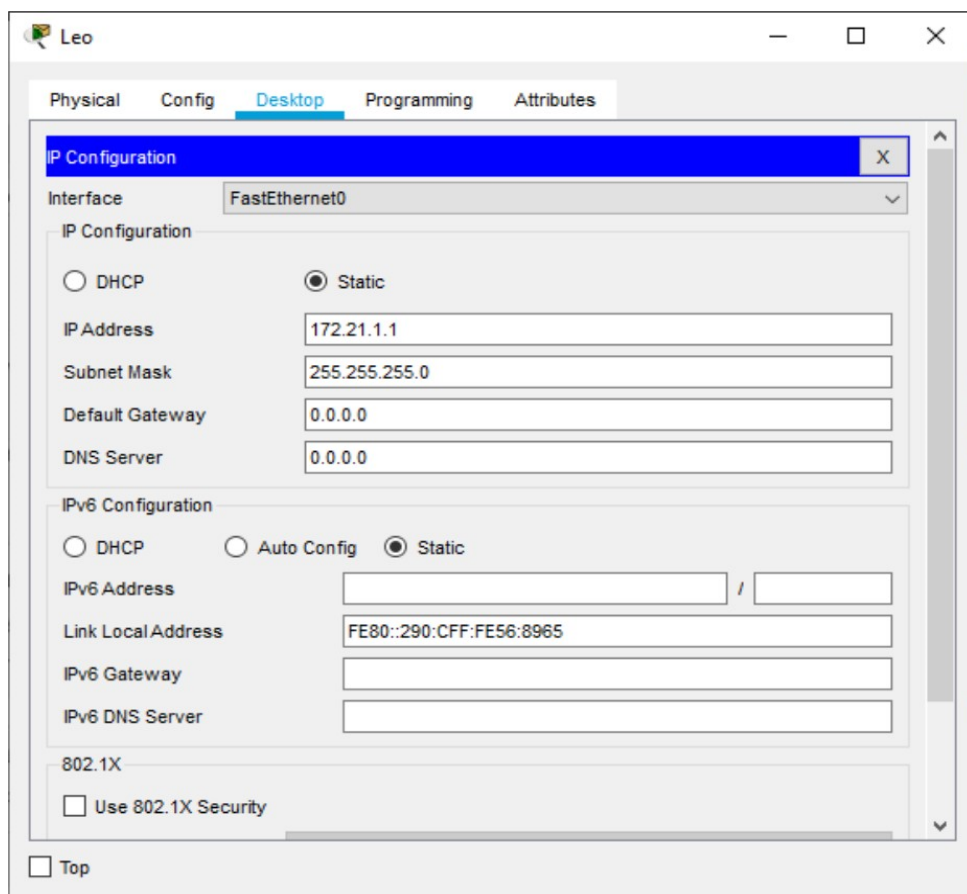
    SW2(config)#end

    SW3

Switch>en

Switch#conf t

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

    Switch(config)#hostname SW3

    SW3(config)#end

Konfigurasi IP tiap PC

Aries — □ ✕

Physical   Config   **Desktop**   Programming   Attributes

IP Configuration   [X]

Interface   FastEthernet0   ⌄

IP Configuration

○ DHCP   ● Static

IP Address   172.21.1.2

Subnet Mask   255.255.255.0

Default Gateway   0.0.0.0

DNS Server   0.0.0.0

IPv6 Configuration

○ DHCP   ○ Auto Config   ● Static

IPv6 Address   /

Link Local Address   FE80::230:A3FF:FEEA:C3E2

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

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Virgo — □ ✕

Physical   Config   **Desktop**   Programming   Attributes

IP Configuration   [X]

Interface   FastEthernet0   ⌄

IP Configuration

○ DHCP   ● Static

IP Address   172.21.1.3

Subnet Mask   255.255.255.0

Default Gateway   0.0.0.0

DNS Server   0.0.0.0

IPv6 Configuration

○ DHCP   ○ Auto Config   ● Static

IPv6 Address   /

Link Local Address   FE80::202:4AFF:FE3B:BCD0

IPv6 Gateway

IPv6 DNS Server

802.1X

☐ Use 802.1X Security

☐ Top

4.A

SW1 — □ ×

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
% Invalid input detected at '^' marker.

Switch>enable
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     000D.BD22.8A0D
             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     00D0.9755.351E
             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
Fa0/3             Altn BLK 19        128.3    P2p
Fa0/1             Desg FWD 19        128.1    P2p

Switch#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

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SW2 — □ ×

Physical   Config   CLI   Attributes

IOS Command Line Interface

```
changed state to up


Switch>enable
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     000D.BD22.8A0D
             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     000D.BD22.8A0D
             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

Switch#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

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```
SW3                                            —   □   ×

Physical   Config   CLI   Attributes

               IOS Command Line Interface

  Switch>enable
  Switch#show spanning-tree
  VLAN0001
    Spanning tree enabled protocol ieee
    Root ID    Priority    32769
               Address     000D.BD22.8A0D
               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     0060.2F20.4A55
               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
  Fa0/3            Desg FWD 19         128.3    P2p
  Fa0/1            Desg FWD 19         128.1    P2p

  Switch#

Ctrl+F6 to exit CLI focus                    Copy      Paste

□ Top
```

4B :
SW1

No	Variabel	Nilai
1	Root ID	
2	Priority	32769
3	Mac Address	0001.9633.4035
4	Bridge ID	
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	
2	Priority	32769
3	Mac Address	0003.E4C0.6B85
4	Bridge ID	
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	
2	Priority	32769
3	Mac Address	00E0.8F44.52D6
4	Bridge ID	
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

4C :

Root bridge = Switch SW2
Designated bridge = Switch SW1 dan Switch SW3
Root port = 2(FastEthernet0/2)
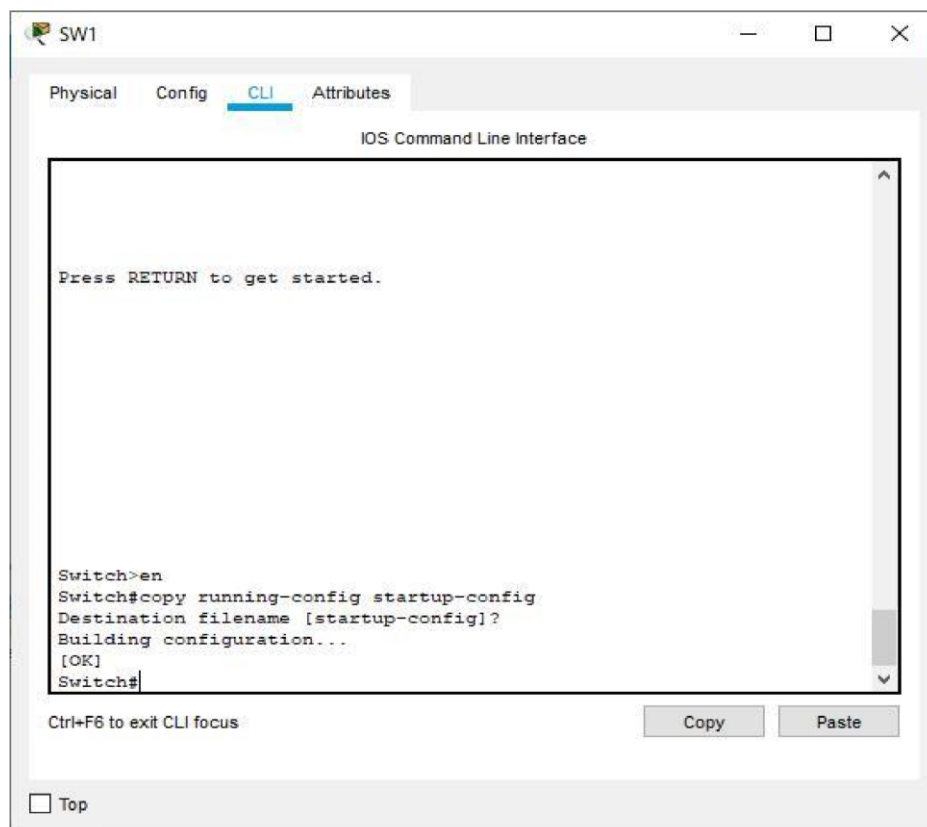Designated port = 1(FastEthernet0/1) dan 3(FastEthernet0/3)

4D :

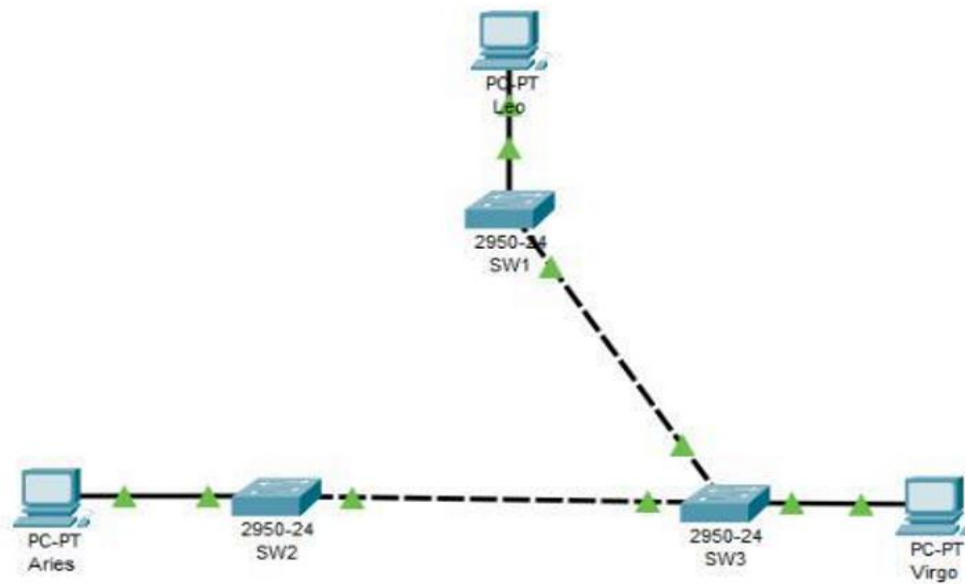Forwarding = 1(FastEthernet0/1) dan 2(FastEthernet0/2)
Blocking = 3(FastEthernet0/3)

5A : klik PC Leo lalu klik tab desktop lalu pilih command prompt, masukkan ping
172.21.1.3.
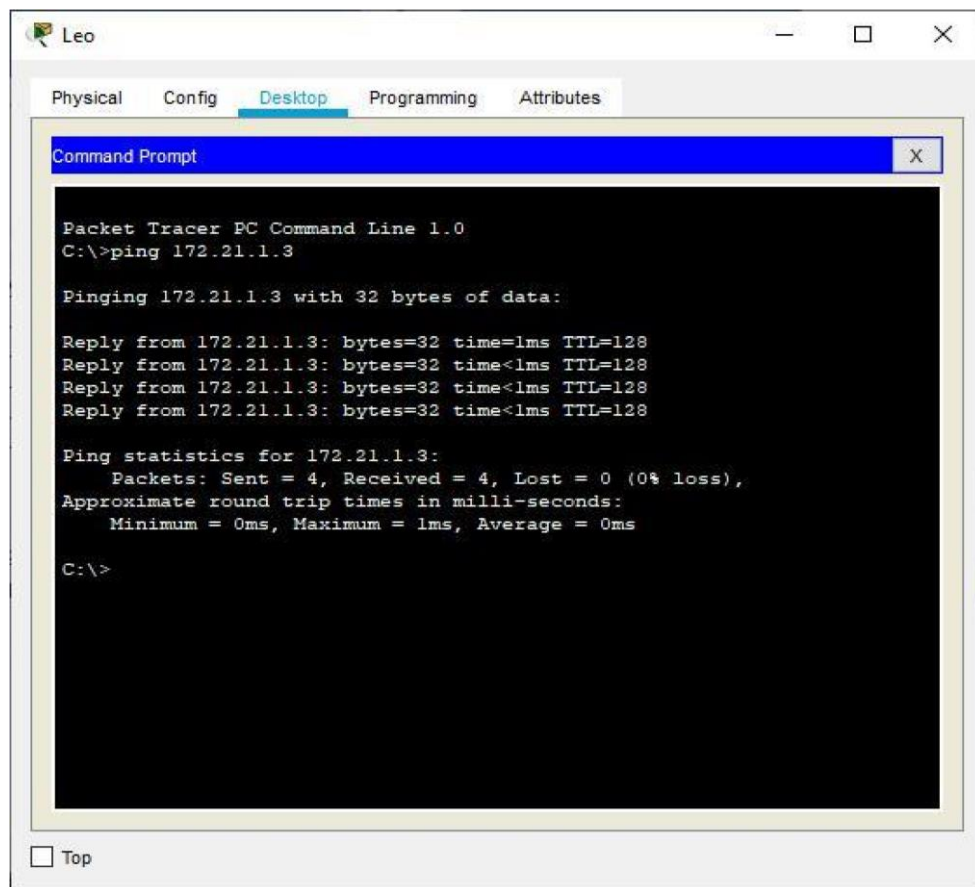
6A :

Kegiatan 2. Topologi 2

SW2

Physical Config CLI Attributes

IOS Command Line Interface

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


Switch>en
Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     000D.BD22.8A0D
             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     000D.BD22.8A0D
             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

Switch#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

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SW3

Physical Config CLI Attributes

IOS Command Line Interface

```
% Invalid input detected at '^' marker.

Switch#show spanning-tree
VLAN0001
  Spanning tree enabled protocol ieee
  Root ID    Priority    32769
             Address     000D.BD22.8A0D
             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     0060.2F20.4A55
             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
Fa0/3            Desg FWD 19        128.3    P2p
Fa0/1            Desg FWD 19        128.1    P2p

Switch#
```

Ctrl+F6 to exit CLI focus   Copy   Paste

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SW1

No	Variabel	Nilai
1	Root ID	
2	Priority	32769
3	Mac Address	0001.9633.4035
4	Bridge ID	
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	
2	Priority	32769
3	Mac Address	0003.E4C0.6B85
4	Bridge ID	
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	
2	Priority	32769
3	Mac Address	00E0.8F44.52D6
4	Bridge ID	
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	= Switch SW2
Designated bridge	= Switch SW1 dan Switch SW3
Root port	= SW1: Fa0/3, SW3: Fa0/2
Designated port	= SW1: Fa0/1, SW2 & SW3: Fa0/1, Fa0/3
Forwarding	= 1(FastEthernet0/1), 2(FastEthernet0/2), 3(FastEthernet0/3)
Blocking	= -