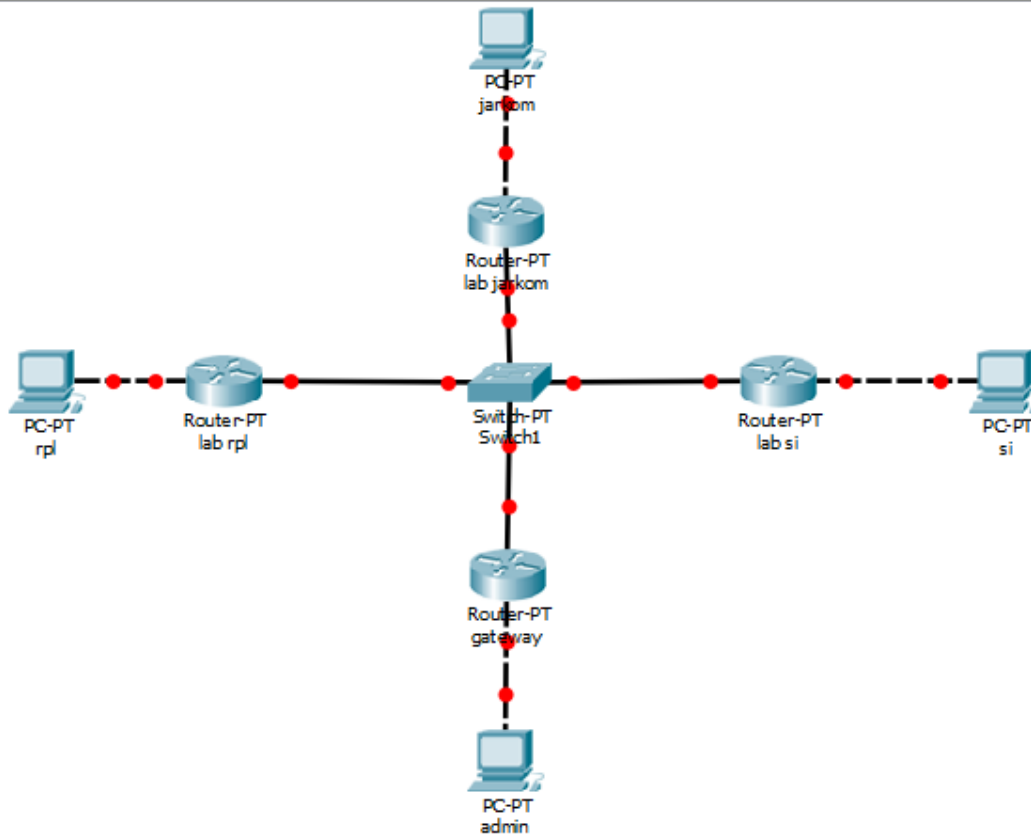
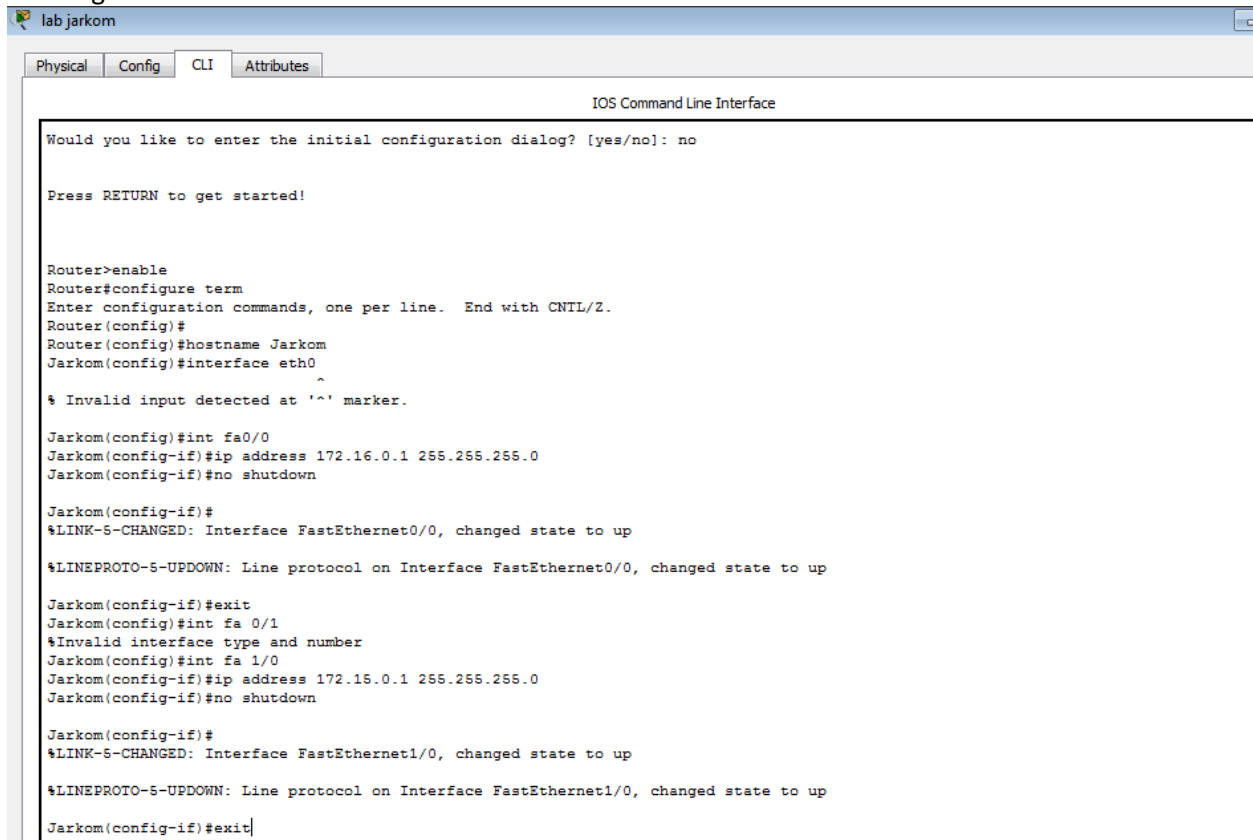


Name : Muhammad Rafi
NIM : L200174138
Class : X

Modul 11



1. Konfigurasi Semua Router



```
lab jarkom

Physical Config CLI Attributes

IOS Command Line Interface

Would you like to enter the initial configuration dialog? [yes/no]: no

Press RETURN to get started!

Router>enable
Router#configure term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#
Router(config)#hostname Jarkom
Jarkom(config)#interface eth0
^
% Invalid input detected at '^' marker.

Jarkom(config)#int fa0/0
Jarkom(config-if)#ip address 172.16.0.1 255.255.255.0
Jarkom(config-if)#no shutdown

Jarkom(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

Jarkom(config-if)#exit
Jarkom(config)#int fa 0/1
%Invalid interface type and number
Jarkom(config)#int fa 1/0
Jarkom(config-if)#ip address 172.15.0.1 255.255.255.0
Jarkom(config-if)#no shutdown

Jarkom(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up

Jarkom(config-if)#exit
```

```
2. Low speed serial(sync/async) network interface(s).  
32K bytes of non-volatile configuration memory.  
63488K bytes of ATA CompactFlash (Read/Write)
```

--- System Configuration Dialog ---

Would you like to enter the initial configuration dialog? [yes/no]: no

Press RETURN to get started!

Router>en

Router#conf term

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

Router(config)#hostname SistemInformasi

SistemInformasi(config)#int fa 0/0

SistemInformasi(config-if)#ip address 172.17.0.1 255.255.255.0

SistemInformasi(config-if)#no shutdown

SistemInformasi(config-if)#

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

SistemInformasi(config-if)#exit

SistemInformasi(config)#int fa 1/0

SistemInformasi(config-if)#ip address 172.15.0.2 255.255.255.0

SistemInformasi(config-if)#no shutdown

SistemInformasi(config-if)#

%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up

SistemInformasi(config-if)#exit

SistemInformasi(config)#

```
2 Low speed serial(sync/async) network interface(s)
32K bytes of non-volatile configuration memory.
63488K bytes of ATA CompactFlash (Read/Write)

    --- System Configuration Dialog ---

Would you like to enter the initial configuration dialog? [yes/no]: no

Press RETURN to get started!

Router>en
Router#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#hostname RPL
RPL(config)#int fa 0/0
RPL(config-if)#ip address 172.18.0.1 255.255.255.0
RPL(config-if)#no shutdown

RPL(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

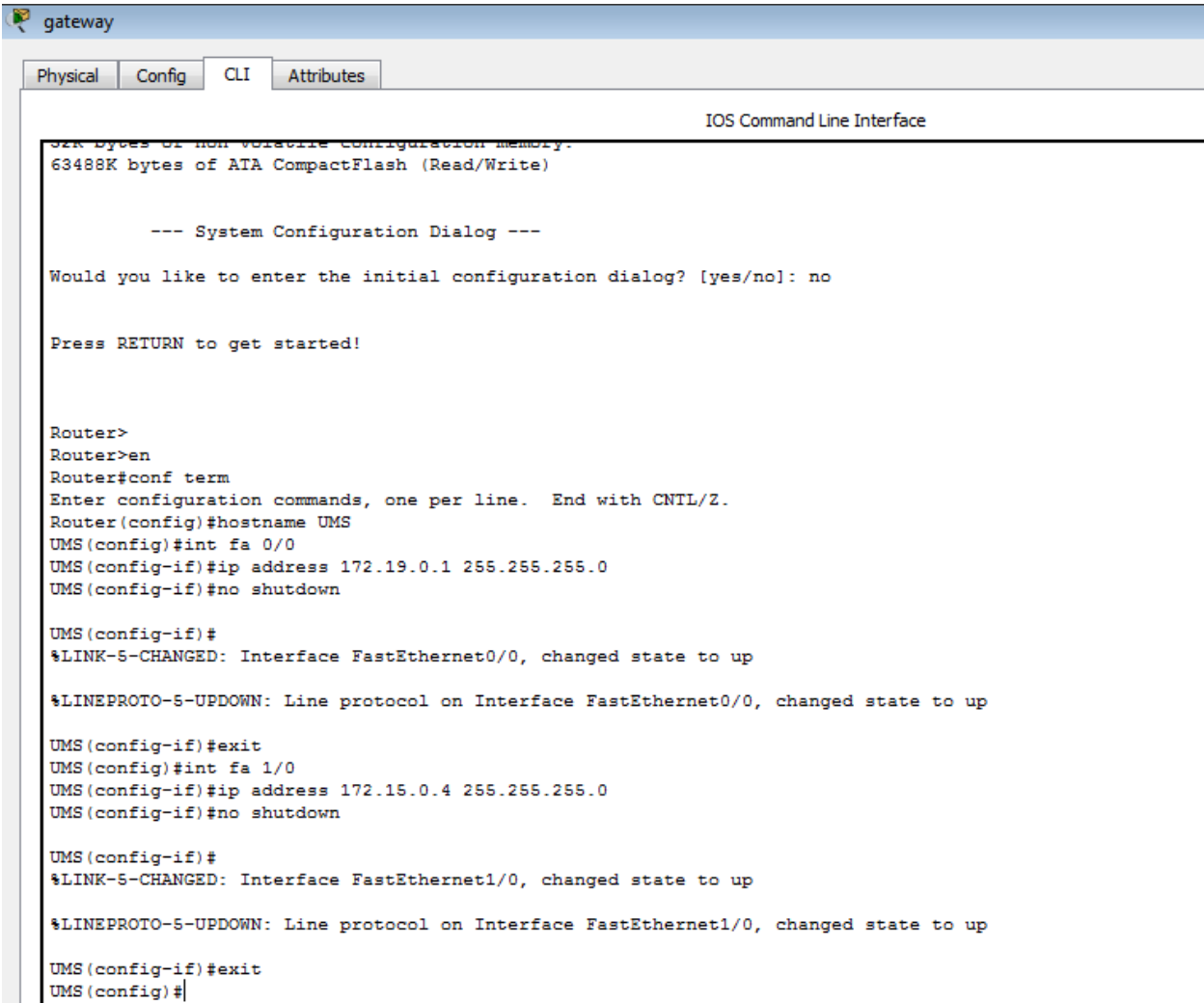
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

RPL(config-if)#exit
RPL(config)#int fa 1/0
RPL(config-if)#ip address 172.15.0.3 255.255.255.0
RPL(config-if)#no shutdown

RPL(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up

RPL(config-if)#exit
RPL(config)#
```



2. Konfigurasi Routing table pada 4 router

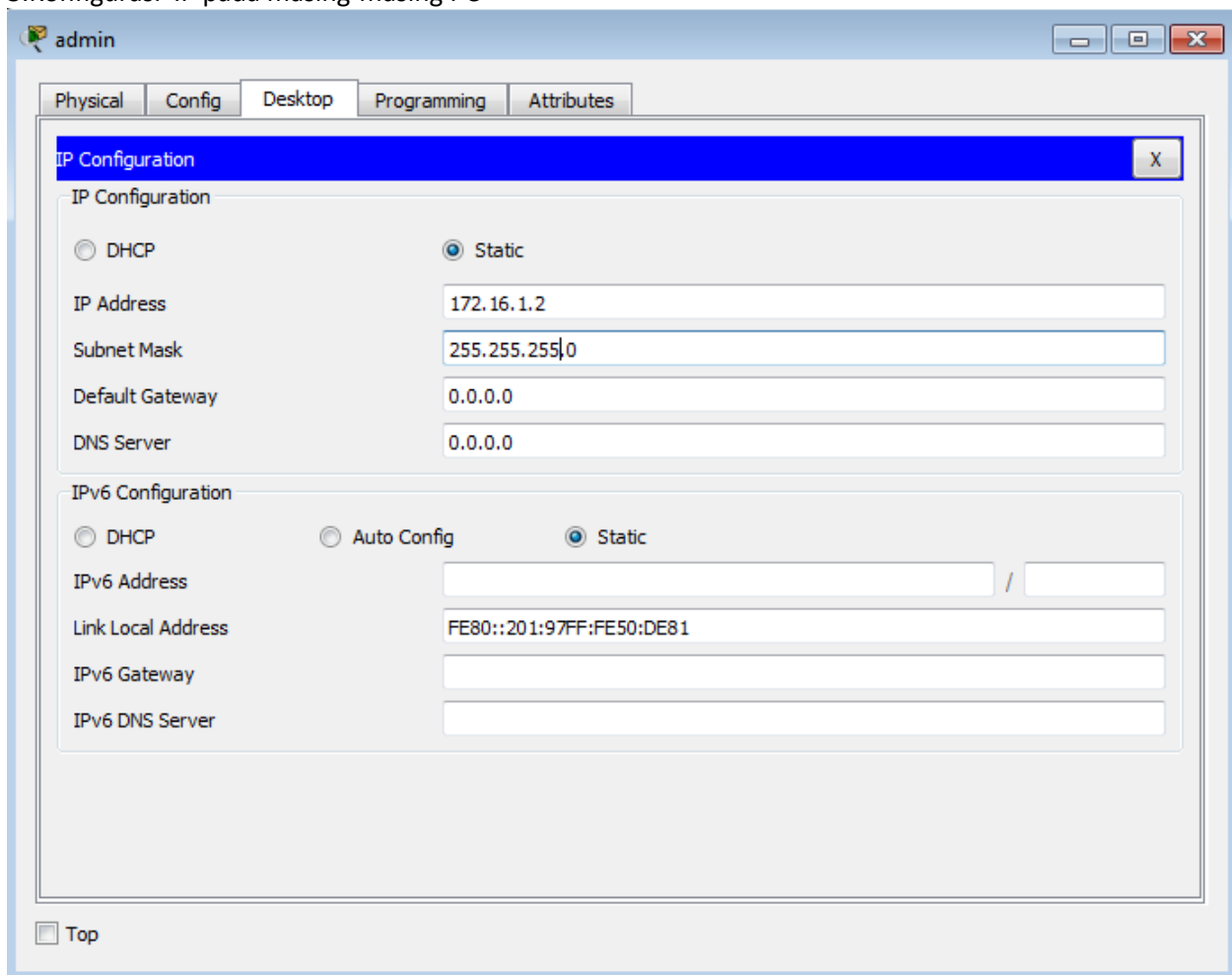
```
UMS(config-if)#exit
UMS(config)#router rip
UMS(config-router)#network 172.15.0.0
UMS(config-router)#network 172.16.0.0
UMS(config-router)#network 172.17.0.0
UMS(config-router)#network 172.18.0.0
UMS(config-router)#network 172.19.0.0
UMS(config-router)#
```

```
Jarkom(config-if)#exit
Jarkom(config)#router rip
Jarkom(config-router)#network 172.15.0.0
Jarkom(config-router)#network 172.16.0.0
Jarkom(config-router)#network 172.17.0.0
Jarkom(config-router)#network 172.18.0.0
Jarkom(config-router)#network 172.19.0.0
Jarkom(config-router)#
```

```
RPL(config-if)#exit
RPL(config)#router rip
RPL(config-router)#network 172.15.0.0
RPL(config-router)#network 172.16.0.0
RPL(config-router)#network 172.17.0.0
RPL(config-router)#network 172.18.0.0
RPL(config-router)#network 172.19.0.0
RPL(config-router)#
```

```
SistemInformasi(config-if)#exit
SistemInformasi(config)#router rip
SistemInformasi(config-router)#network 172.15.0.0
SistemInformasi(config-router)#network 172.16.0.0
SistemInformasi(config-router)#network 172.17.0.0
SistemInformasi(config-router)#network 172.18.0.0
SistemInformasi(config-router)#network 172.19.0.0
SistemInformasi(config-router)#
```

3. Konfigurasi IP pada masing-masing PC



The screenshot shows a network management interface with a window titled "admin". The window has several tabs: "Physical", "Config", "Desktop", "Programming", and "Attributes". The "Config" tab is selected, and within it, the "IP Configuration" sub-tab is active. The "IP Configuration" section contains two main parts: "IP Configuration" and "IPv6 Configuration".

IP Configuration

- ☐ DHCP
- ☒ Static
- IP Address: 172.16.1.2
- 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: [Empty field] / [Empty field]
- Link Local Address: FE80::201:97FF:FE50:DE81
- IPv6 Gateway: [Empty field]
- IPv6 DNS Server: [Empty field]

At the bottom left of the window, there is a "Top" button.

jarkom

PhysicalConfigDesktopProgrammingAttributes

IP Configuration

X

IP Configuration

DHCP

Static

IP Address

172.16.1.2

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::260:70FF:FE5A:A1A0

IPv6 Gateway

IPv6 DNS Server

Top

rpl

PhysicalConfigDesktopProgrammingAttributes

IP Configuration

X

IP Configuration

DHCP

Static

IP Address

172.18.0.2

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::202:16FF:FE25:DAAE

IPv6 Gateway

IPv6 DNS Server

Top

si

PhysicalConfigDesktopProgrammingAttributes

IP Configuration

X

IP Configuration

☐ DHCP

☒ Static

IP Address

172.17.0.2

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

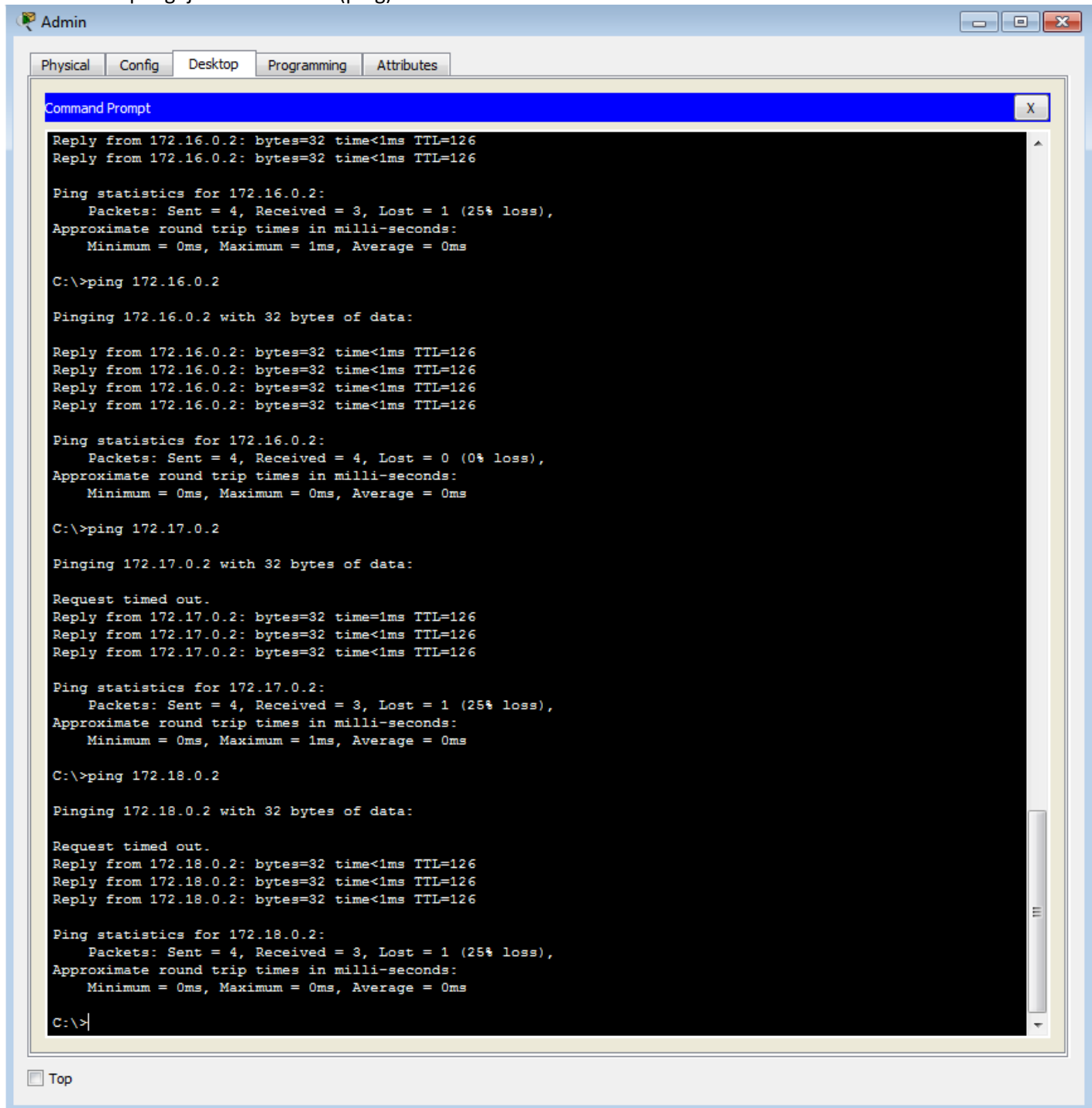
FE80::20A:41FF:FE4A:A097

IPv6 Gateway

IPv6 DNS Server

☐ Top

4. Melakukan pengujian ICMP request (ping) untuk test koneksi



The screenshot shows a Windows XP desktop environment. At the top, there is a taskbar with the 'Admin' user name and standard window controls. Below the taskbar is a menu bar with tabs: 'Physical', 'Config', 'Desktop', 'Programming', and 'Attributes'. The 'Desktop' tab is active, displaying a 'Command Prompt' window. The Command Prompt has a blue title bar and a black background with white text. It shows the results of three ping commands executed from the C:\> prompt. The first command is 'ping 172.16.0.2', which shows a 25% loss. The second command is 'ping 172.17.0.2', which shows a 25% loss. The third command is 'ping 172.18.0.2', which also shows a 25% loss. The Command Prompt window has a scrollbar on the right side. At the bottom left of the desktop, there is a 'Top' button.

```
Admin
Physical Config Desktop Programming Attributes

Command Prompt

Reply from 172.16.0.2: bytes=32 time<1ms TTL=126
Reply from 172.16.0.2: bytes=32 time<1ms TTL=126

Ping statistics for 172.16.0.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>ping 172.16.0.2

Pinging 172.16.0.2 with 32 bytes of data:

Reply from 172.16.0.2: bytes=32 time<1ms TTL=126
Reply from 172.16.0.2: bytes=32 time<1ms TTL=126
Reply from 172.16.0.2: bytes=32 time<1ms TTL=126
Reply from 172.16.0.2: bytes=32 time<1ms TTL=126

Ping statistics for 172.16.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 172.17.0.2

Pinging 172.17.0.2 with 32 bytes of data:

Request timed out.
Reply from 172.17.0.2: bytes=32 time=1ms TTL=126
Reply from 172.17.0.2: bytes=32 time<1ms TTL=126
Reply from 172.17.0.2: bytes=32 time<1ms TTL=126

Ping statistics for 172.17.0.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>ping 172.18.0.2

Pinging 172.18.0.2 with 32 bytes of data:

Request timed out.
Reply from 172.18.0.2: bytes=32 time<1ms TTL=126
Reply from 172.18.0.2: bytes=32 time<1ms TTL=126
Reply from 172.18.0.2: bytes=32 time<1ms TTL=126

Ping statistics for 172.18.0.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>|
```

Top