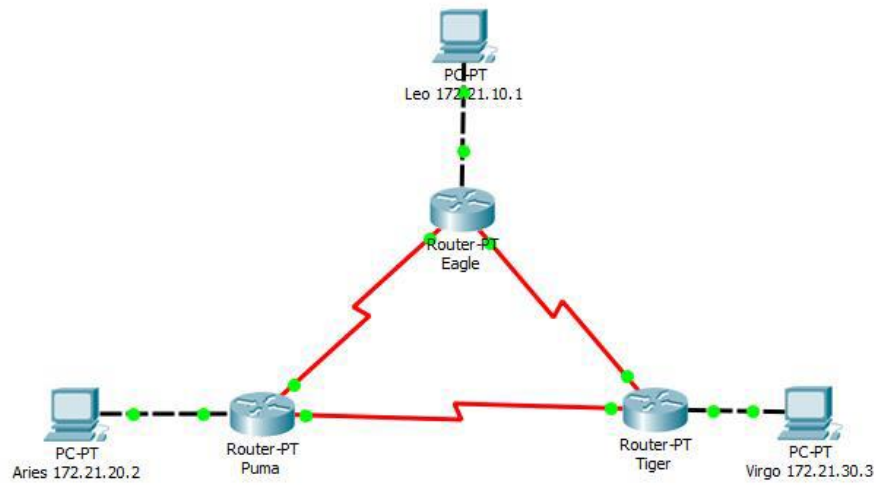


Nama : Puji Nugroho

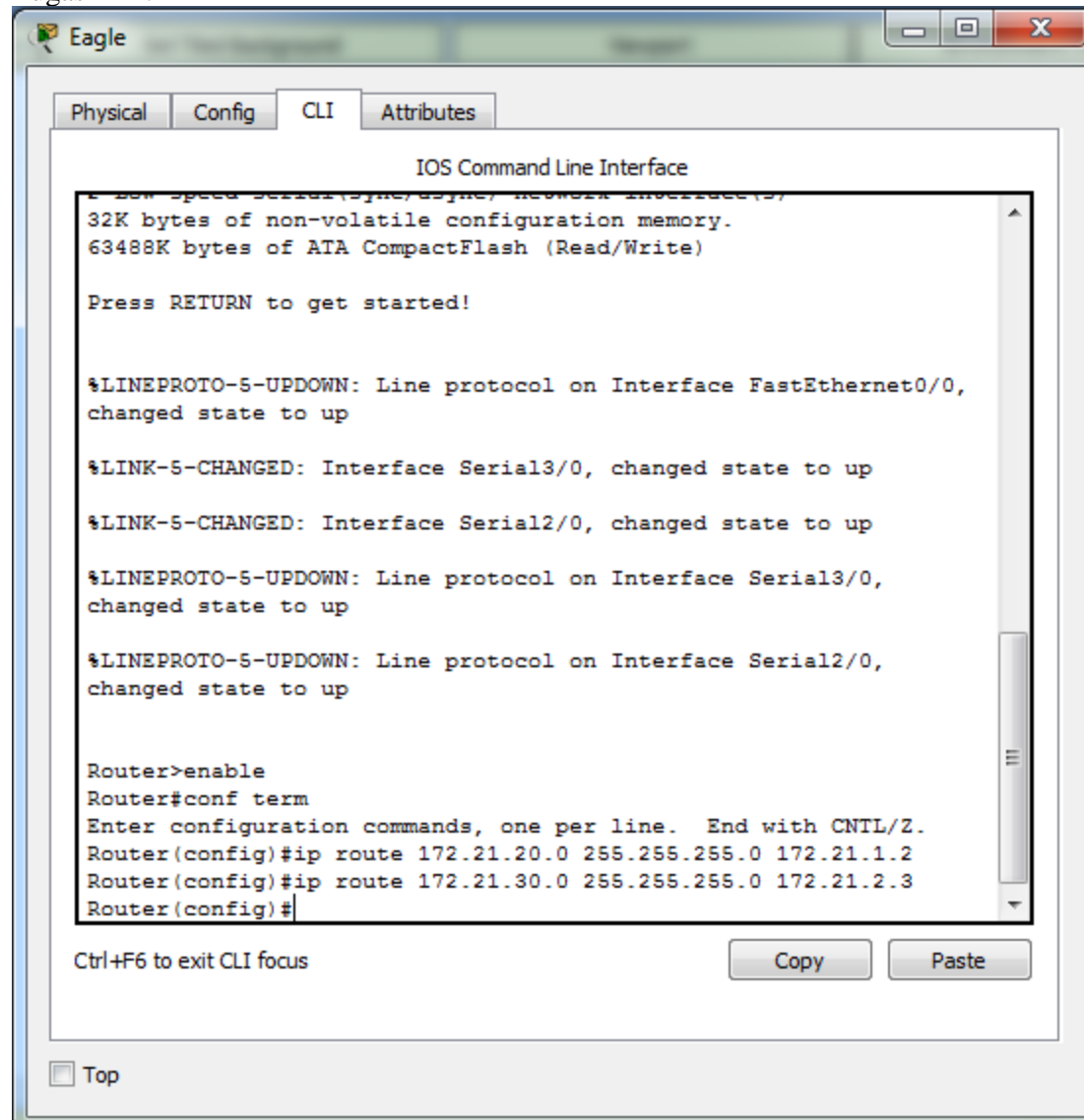
Kelas : C

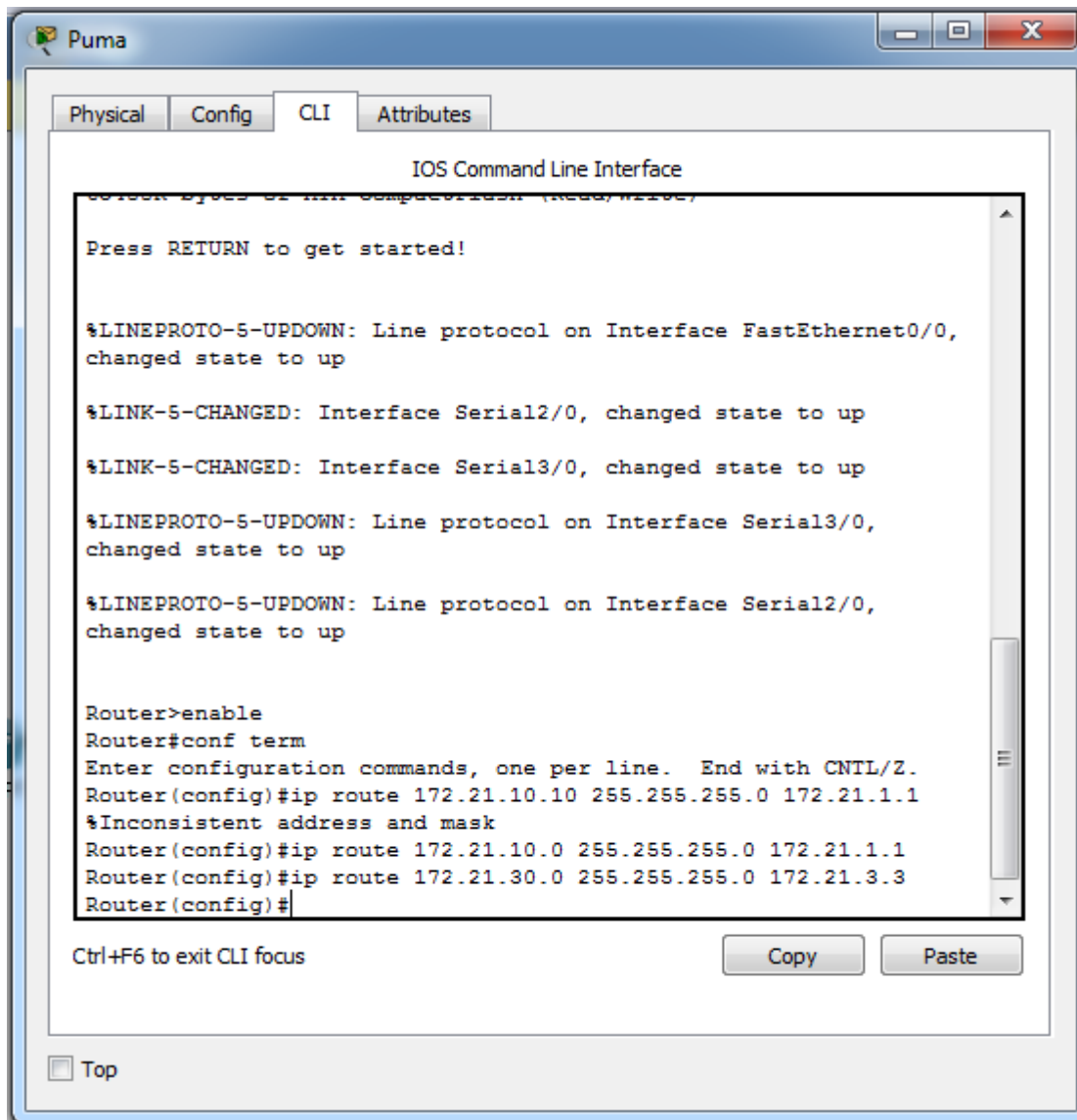
NIM : L200170123

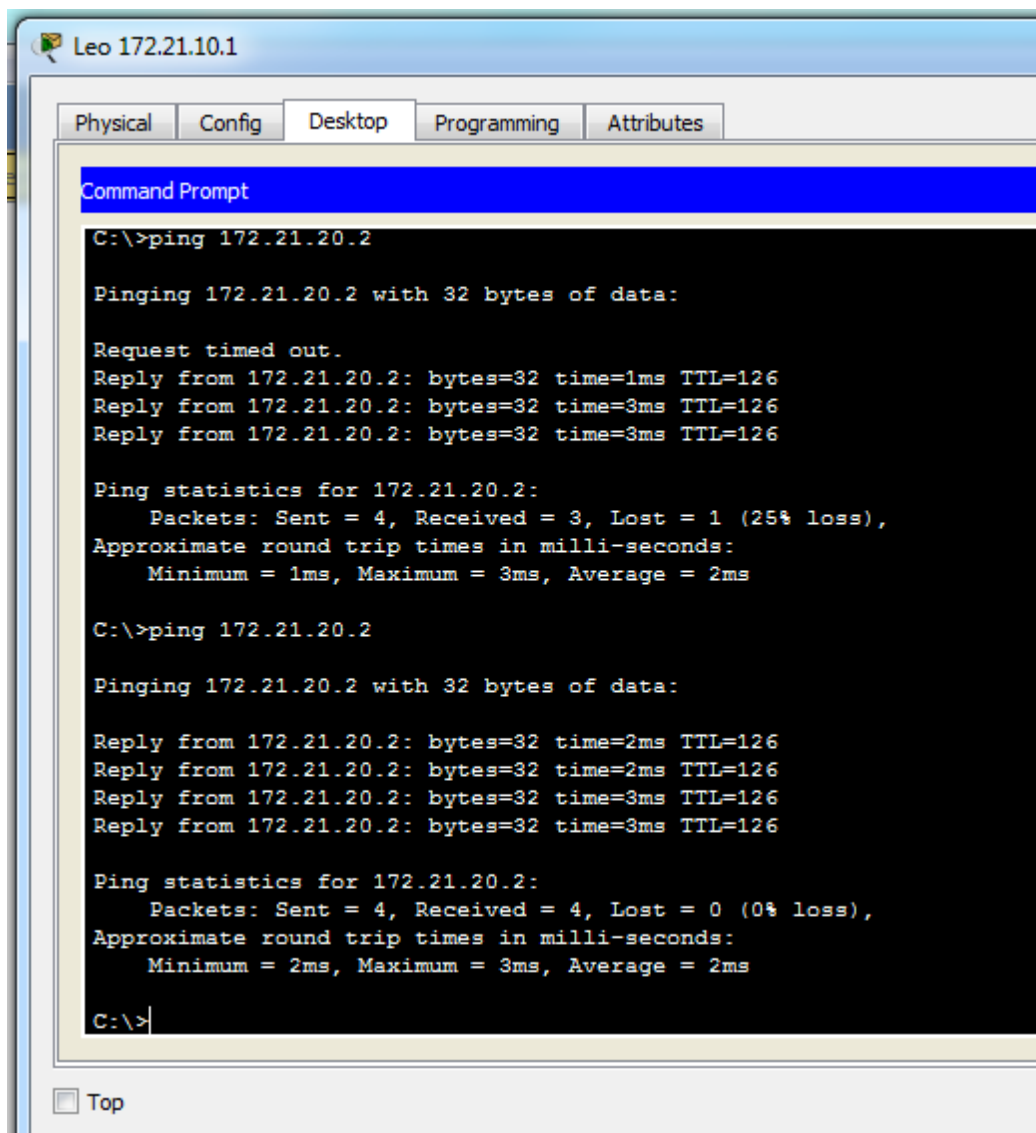
KEGIATAN 1



Tugas 11A:





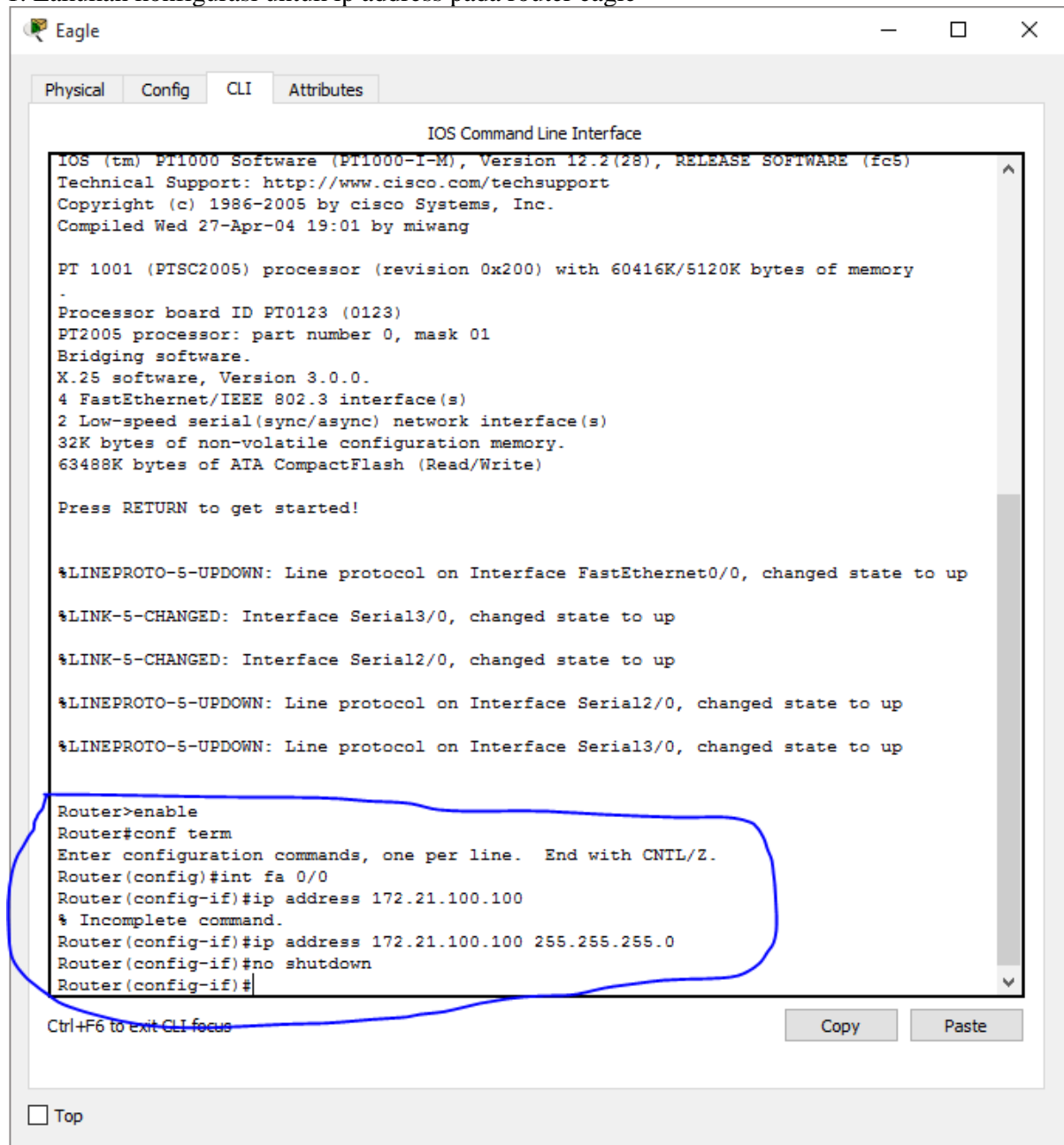


Tugas 12A:

Iya mendapatkan tanggapan dari Puma. Hal ini dikarenakan telah dibuat peroutingan untuk data lewat melalui jalur yang mana.

Tugas 12B:

1. Lakukan konfigurasi untuk ip address pada router eagle



2. Lakukan konfigurasi ip pada pc leo dan ubah default gateway.

Leo 172.21.10.1

Physical Config Desktop Programming Attributes

IP Configuration X

IP Configuration

☐ DHCP ☒ Static

IP Address 172.21.100.10

Subnet Mask 255.255.255.0

Default Gateway 172.21.100.100

DNS Server 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

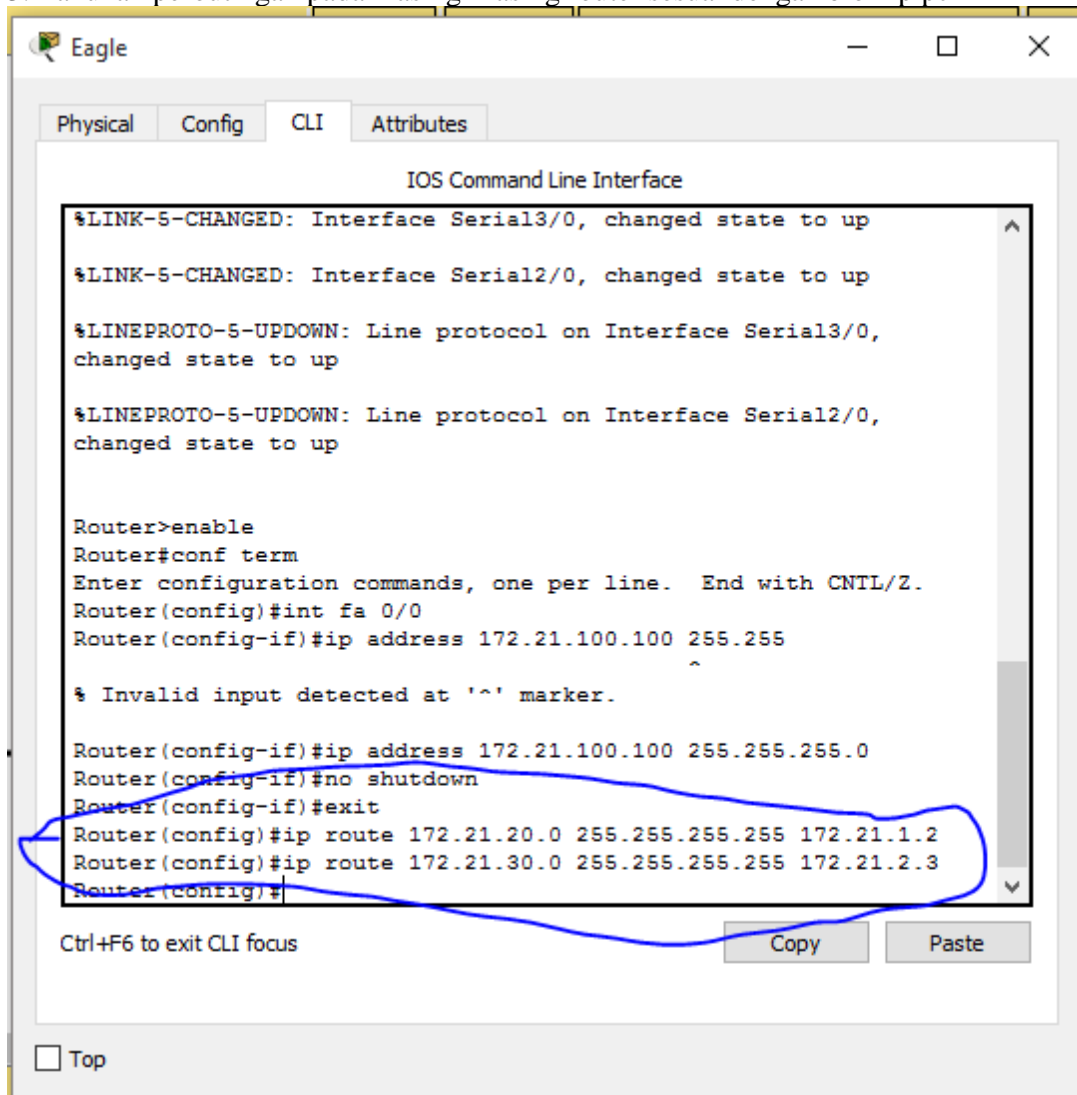
Link Local Address FE80::20A:41FF:FECE:1008

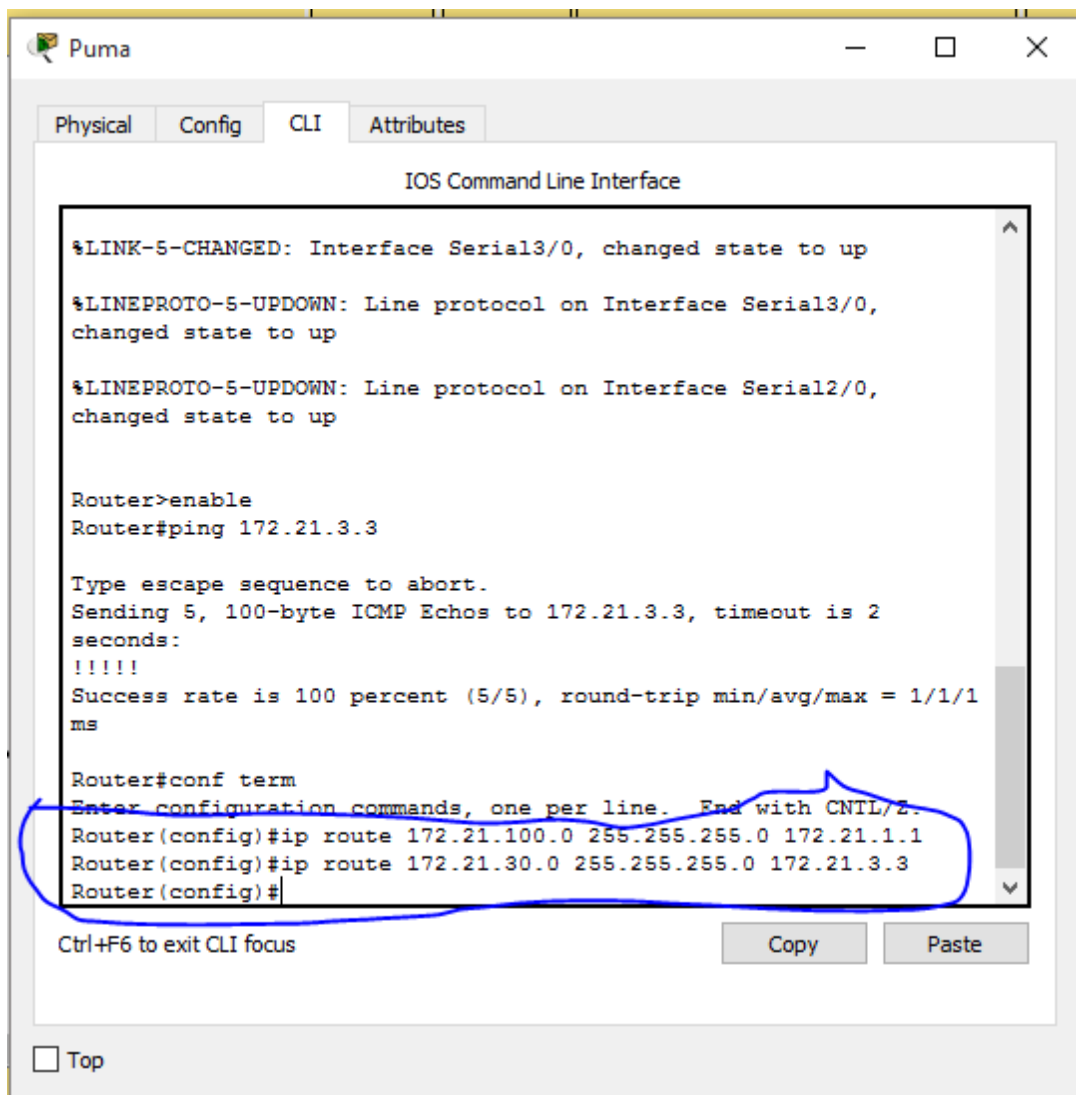
IPv6 Gateway

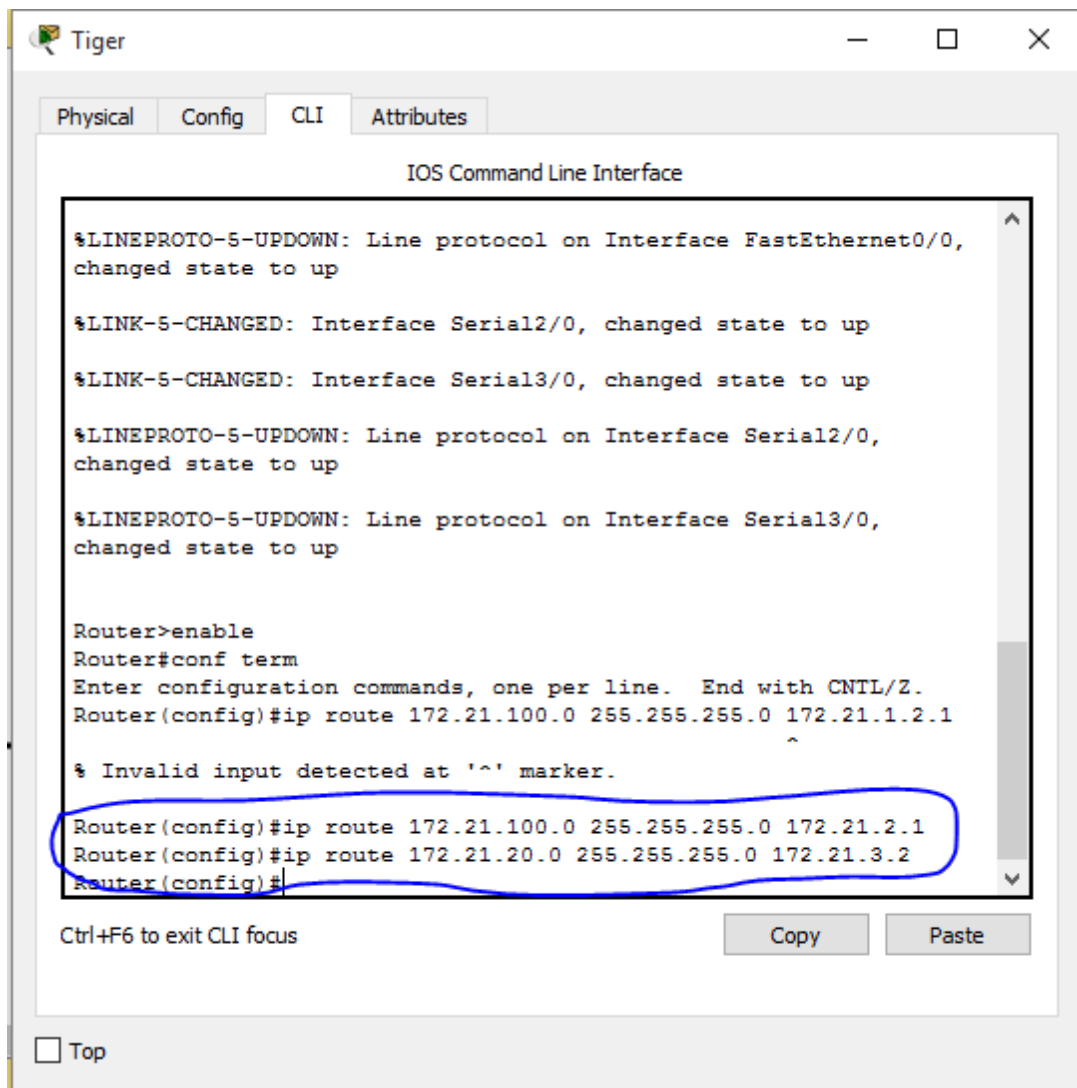
IPv6 DNS Server

☐ Top

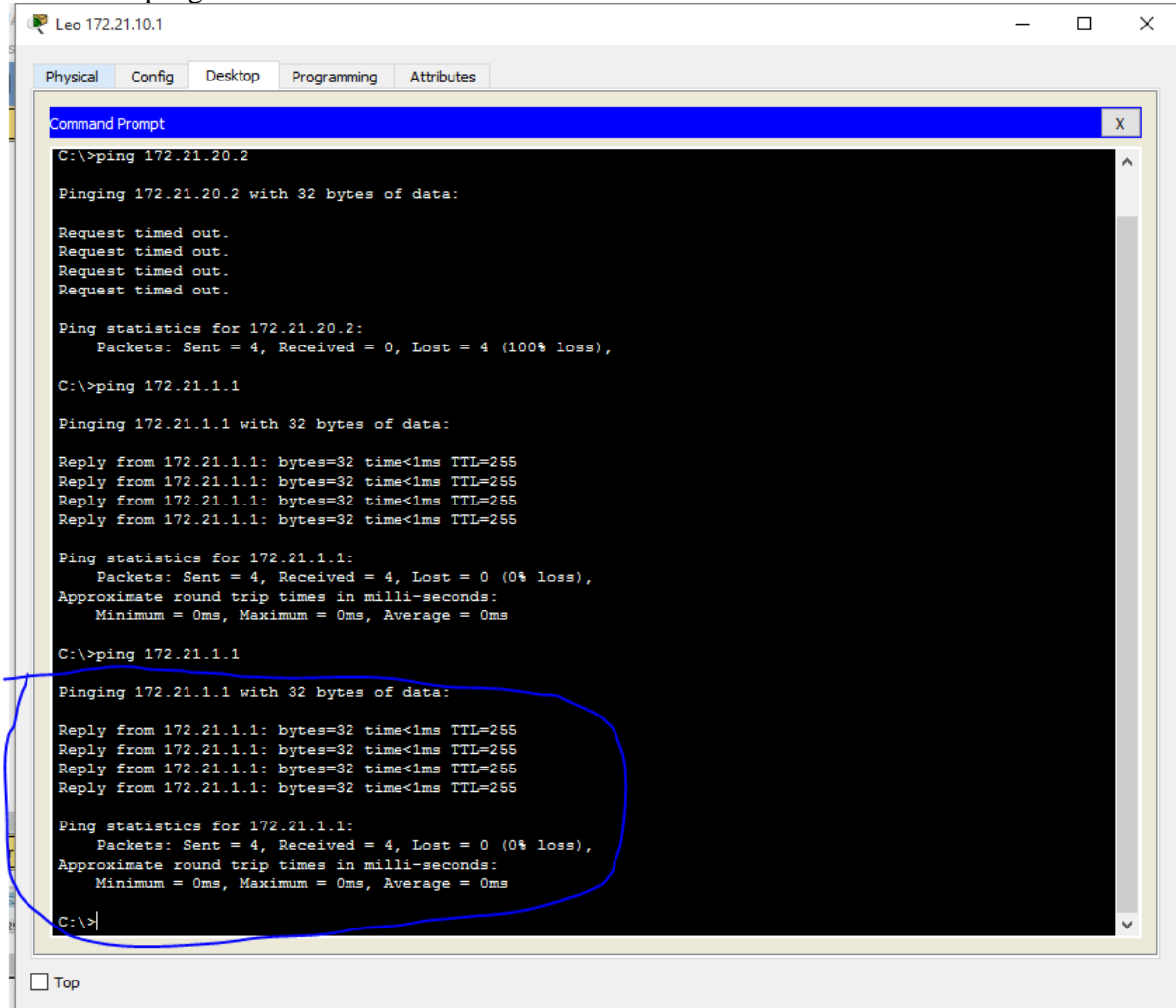
3. Lakukan peroutingan pada masing-masing router sesuai dengan blok ip pc







4. Lakukan pengecekan



```
Leo 172.21.10.1
Physical Config Desktop Programming Attributes
Command Prompt
C:\>ping 172.21.20.2

Pinging 172.21.20.2 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 172.21.20.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ping 172.21.1.1

Pinging 172.21.1.1 with 32 bytes of data:

Reply from 172.21.1.1: bytes=32 time<1ms TTL=255
Reply from 172.21.1.1: bytes=32 time<1ms TTL=255
Reply from 172.21.1.1: bytes=32 time<1ms TTL=255
Reply from 172.21.1.1: bytes=32 time<1ms TTL=255

Ping statistics for 172.21.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 172.21.1.1

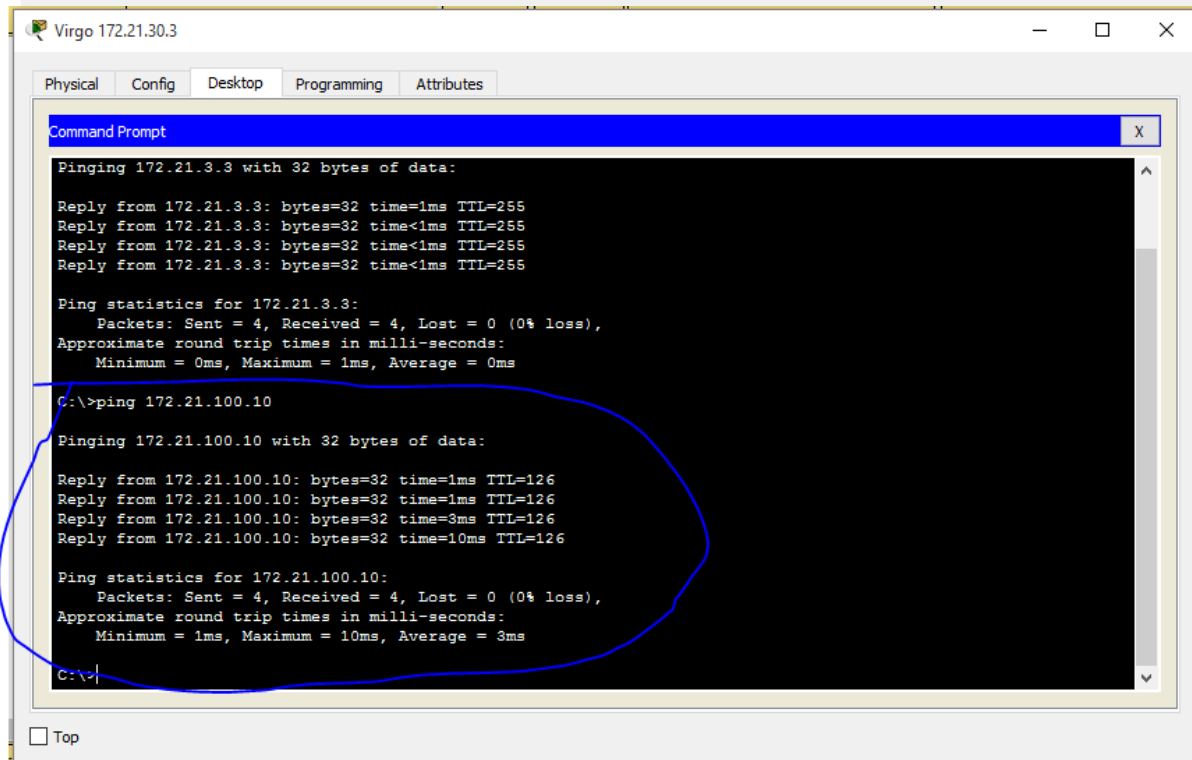
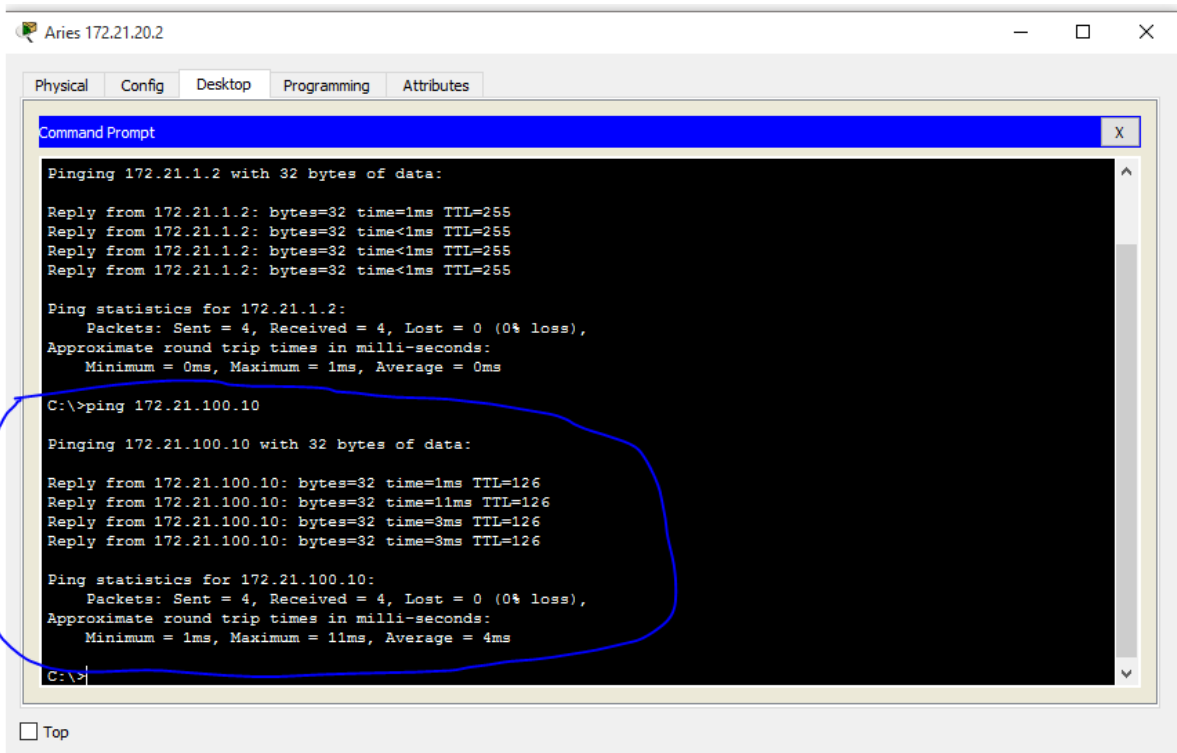
Pinging 172.21.1.1 with 32 bytes of data:

Reply from 172.21.1.1: bytes=32 time<1ms TTL=255
Reply from 172.21.1.1: bytes=32 time<1ms TTL=255
Reply from 172.21.1.1: bytes=32 time<1ms TTL=255
Reply from 172.21.1.1: bytes=32 time<1ms TTL=255

Ping statistics for 172.21.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

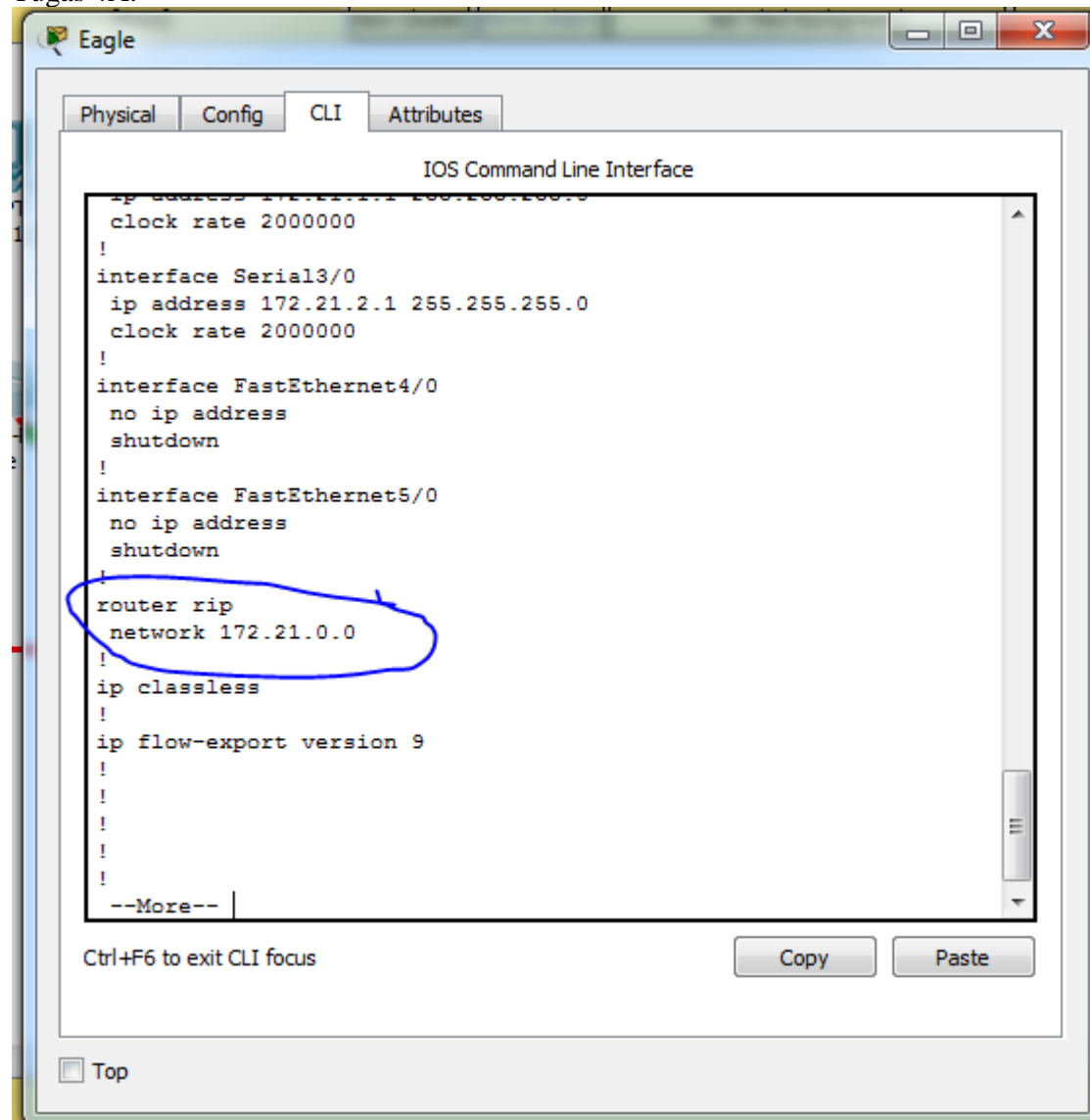
C:\>|
```

☐ Top



KEGIATAN 2

Tugas 4A:



Tugas 4B:

Karena network 172.21.0.0 sudah mencakup semua alamat jaringan lain.

Tugas 5A:

The screenshot shows the Eagle network simulator window with the 'CLI' tab selected. The title bar reads 'Eagle'. Below the title bar are tabs for 'Physical', 'Config', 'CLI', and 'Attributes'. The main area is titled 'IOS Command Line Interface' and contains the following text:

```

Router#
Router#debug ip rip
RIP protocol debugging is on
Router#RIP: sending v1 update to 255.255.255.255 via FastEthernet0/0 (172.21.10.10)
RIP: build update entries
    network 172.21.1.0 metric 1
    network 172.21.2.0 metric 1
RIP: sending v1 update to 255.255.255.255 via Serial2/0 (172.21.1.1)
RIP: build update entries
    network 172.21.2.0 metric 1
    network 172.21.10.0 metric 1
RIP: sending v1 update to 255.255.255.255 via Serial3/0 (172.21.2.1)
RIP: build update entries
    network 172.21.1.0 metric 1
    network 172.21.10.0 metric 1
RIP: sending v1 update to 255.255.255.255 via FastEthernet0/0 (172.21.10.10)
RIP: build update entries
    network 172.21.1.0 metric 1
    network 172.21.2.0 metric 1
RIP: sending v1 update to 255.255.255.255 via Serial2/0 (172.21.1.1)
RIP: build update entries
    network 172.21.2.0 metric 1
    network 172.21.10.0 metric 1
RIP: sending v1 update to 255.255.255.255 via Serial3/0 (172.21.2.1)
RIP: build update entries
    network 172.21.1.0 metric 1
    network 172.21.10.0 metric 1
Router#
  
```

At the bottom left, there is a checkbox labeled 'Top' and a text label 'Ctrl+F6 to exit CLI focus'. At the bottom right, there are two buttons: 'Copy' and 'Paste'.

Debug berfungsi melihat transaksi yang terjadi.

Tugas 6A dan 6B:

The left screenshot shows the Puma router's CLI with the following commands entered:

```
Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router rip
Router(config-router)#network 172.21.0.0
% Invalid input detected at '^' marker.
Router(config-router)#network 172.21.0.0
Router(config-router)#
```

The right screenshot shows the Eagle router's CLI with the following output from the `show ip ospf` command:

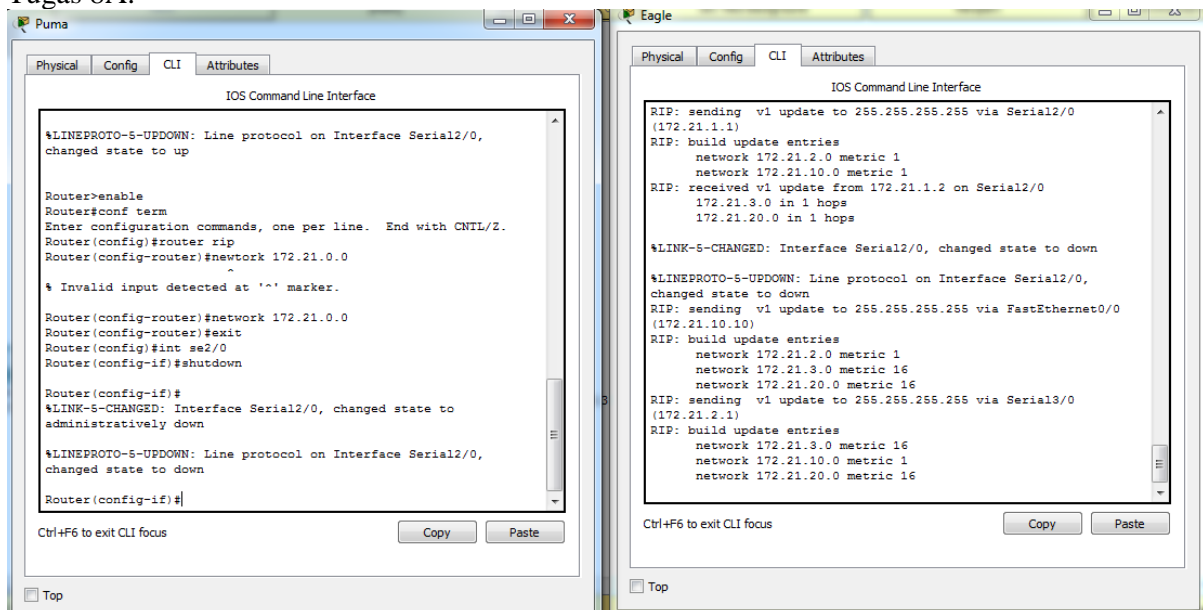
```
RIP: received v1 update from 172.21.1.2 on Serial2/0
    172.21.3.0 in 1 hops
    172.21.20.0 in 1 hops
RIP: sending v1 update to 255.255.255.255 via FastEthernet0/0
(172.21.10.10)
RIP: build update entries
    network 172.21.1.0 metric 1
    network 172.21.2.0 metric 1
    network 172.21.3.0 metric 2
    network 172.21.20.0 metric 2
RIP: sending v1 update to 255.255.255.255 via Serial3/0
(172.21.2.1)
RIP: build update entries
    network 172.21.1.0 metric 1
    network 172.21.3.0 metric 2
    network 172.21.10.0 metric 1
    network 172.21.20.0 metric 2
RIP: sending v1 update to 255.255.255.255 via Serial2/0
(172.21.1.1)
RIP: build update entries
    network 172.21.2.0 metric 1
    network 172.21.10.0 metric 1
RIP: received v1 update from 172.21.1.2 on Serial2/0
    172.21.3.0 in 1 hops
    172.21.20.0 in 1 hops
```

Setelah router Puma dilakukan routing rip maka pada router eagle secara otomatis mengupdate entries untuk routing rip.

Tugas 6C:

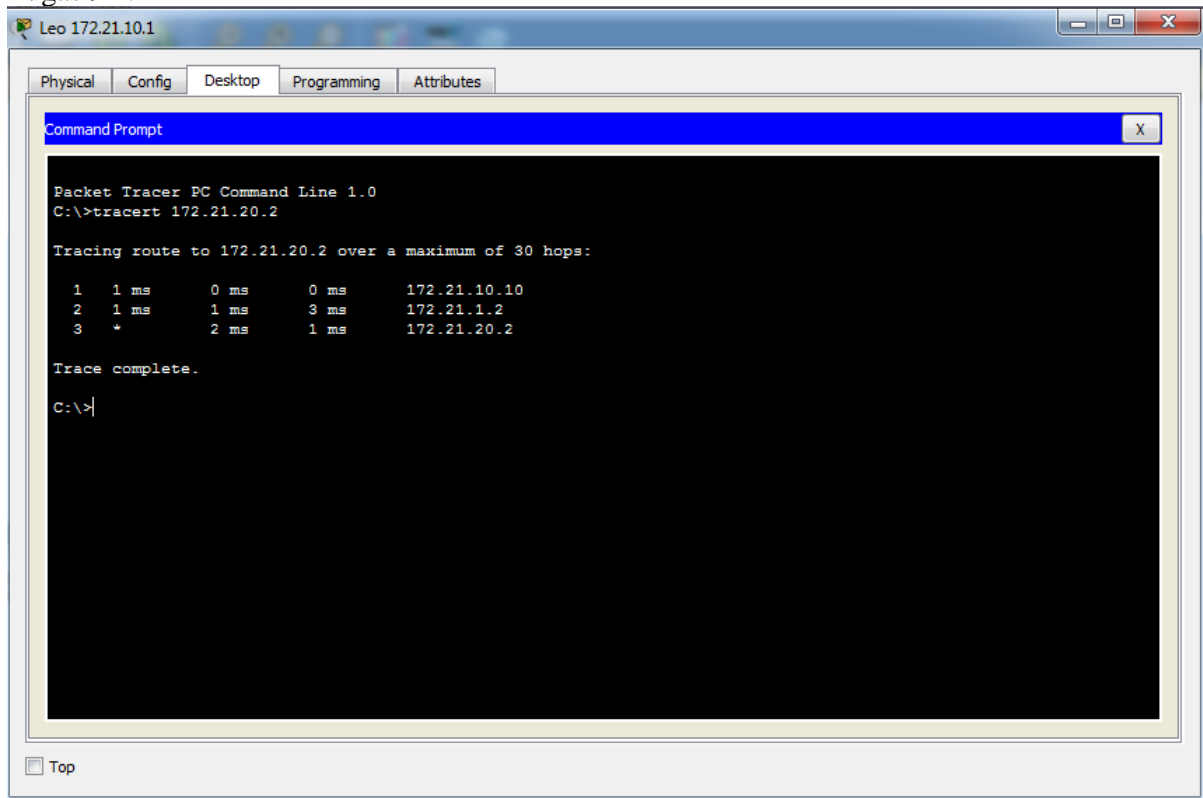
Tidak perlu. Hal tersebut karena network yang dipakai adalah 172.21.0.0 yang dimana masih dalam satu jaringan.

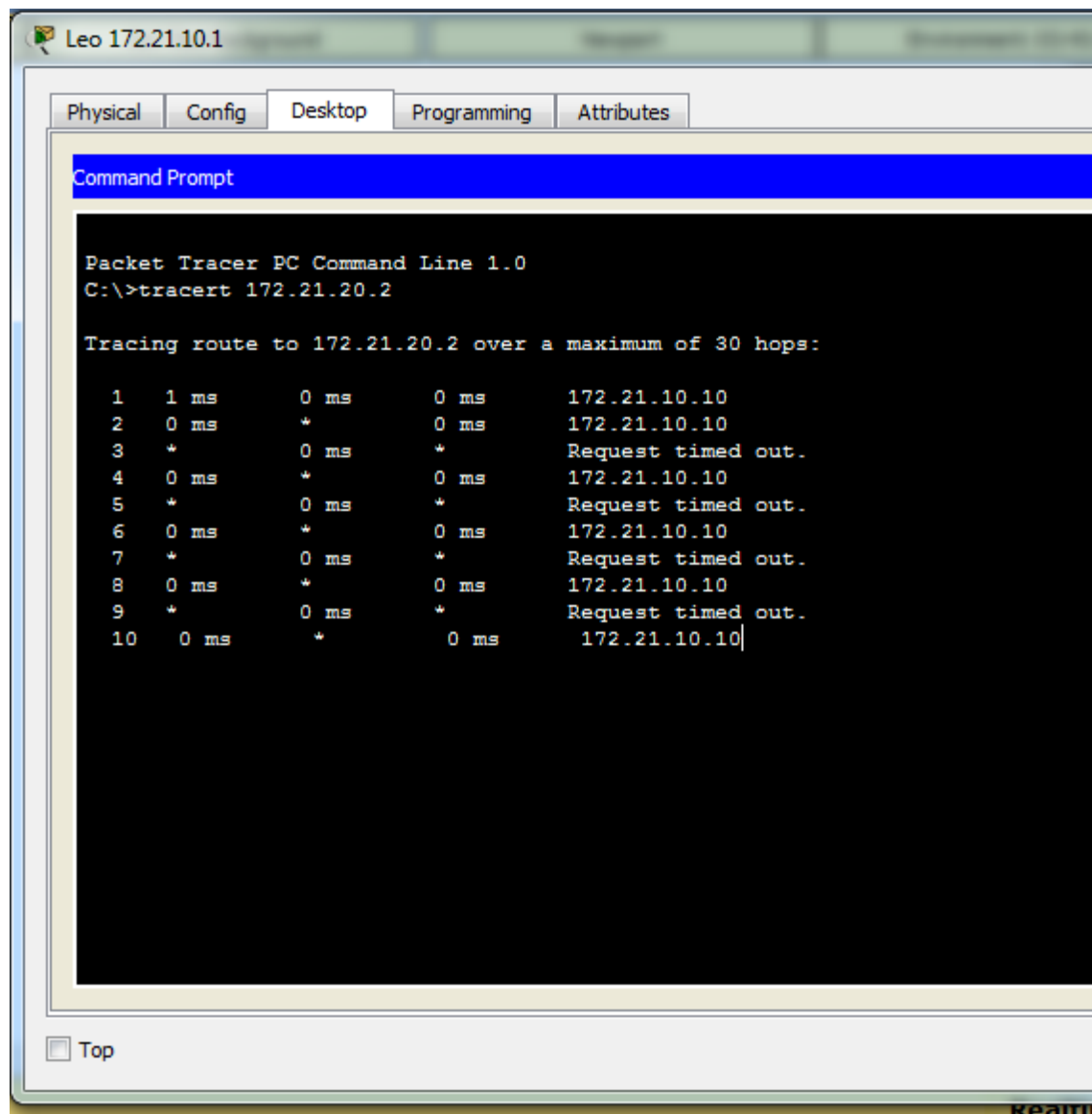
Tugas 8A:



Routing otomatis di downkan dan dimana melalui serial 3/0 yang terjadi di mana hops juga berubah.

Tugas 9A:

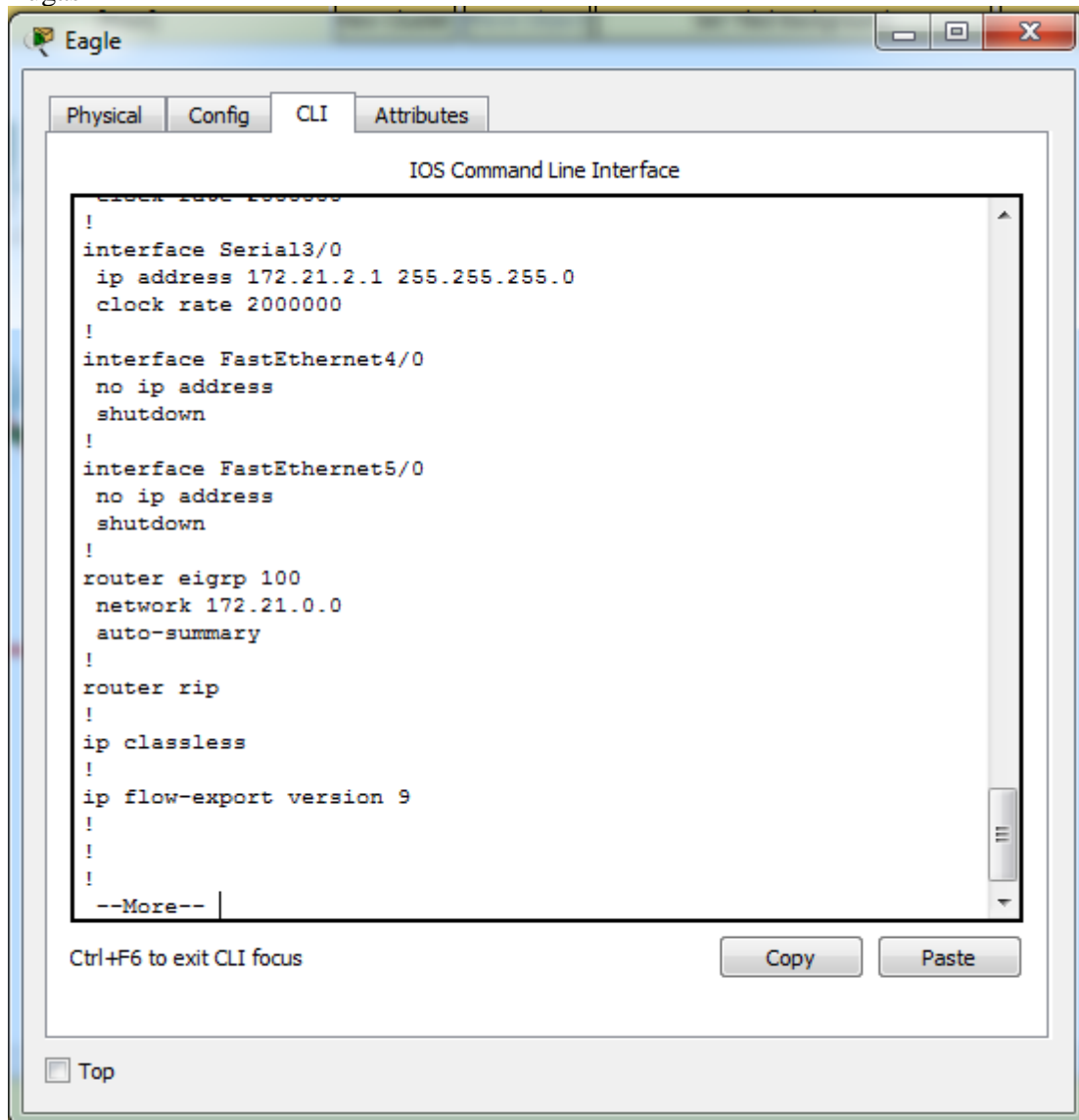




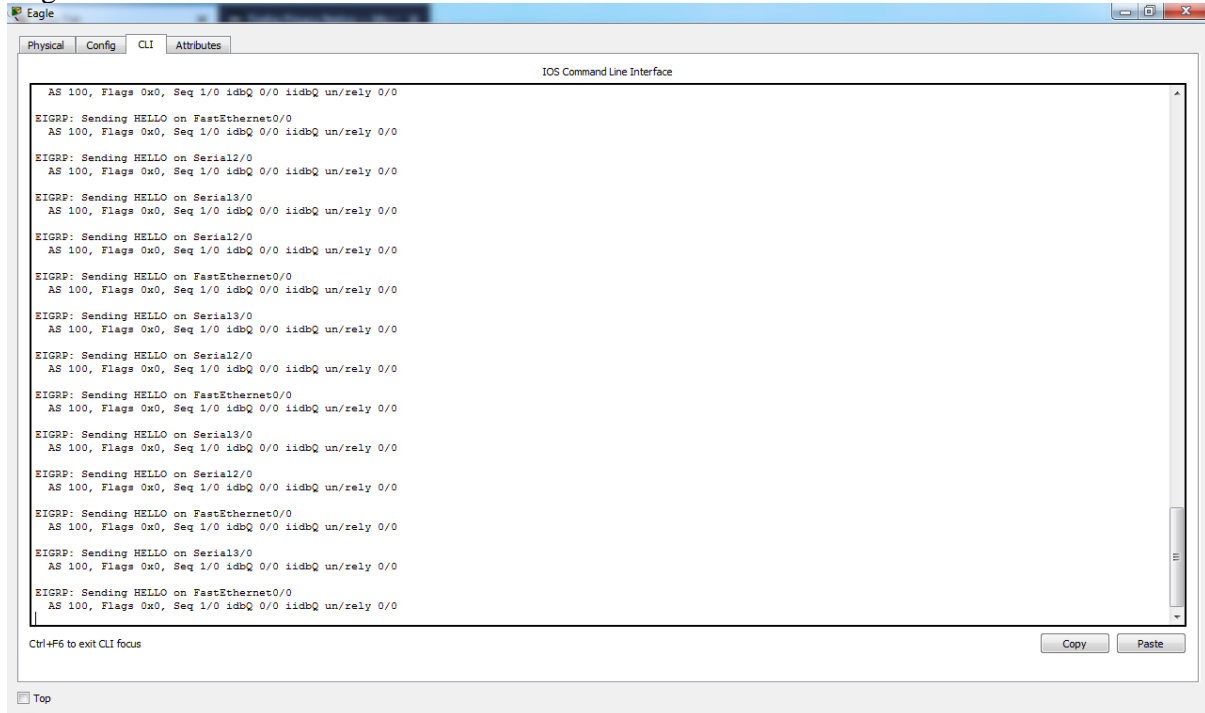
Dikarenakan hubungan di downkan maka hasil routing yang berawal dari dimulai menjadi berhenti dan menghasilkan RTO karena jaringan tidak terhubung.

KEGIATAN 3

Tugas 4A



Tugas 5A:



Terjadi suatu transaksi yang mengiri tanda ataupun sapa untuk router lain dan komputer melalui fa dan serial.

Tugas 7A:

Tiger

Physical Config CLI Attributes

IOS Command Line Interface

```
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2005 by cisco Systems, Inc.
Compiled Wed 27-Apr-04 19:01 by miwang

PT 1001 (PTSC2005) processor (revision 0x200) with 60416K/5120K bytes of memory
.
Processor board ID PT0123 (0123)
PT2005 processor: part number 0, mask 01
Bridging software.
X.25 software, Version 3.0.0.
4 FastEthernet/IEEE 802.3 interface(s)
2 Low-speed serial(sync/async) network interface(s)
32K bytes of non-volatile configuration memory.
63488K bytes of ATA CompactFlash (Read/Write)

Press RETURN to get started!

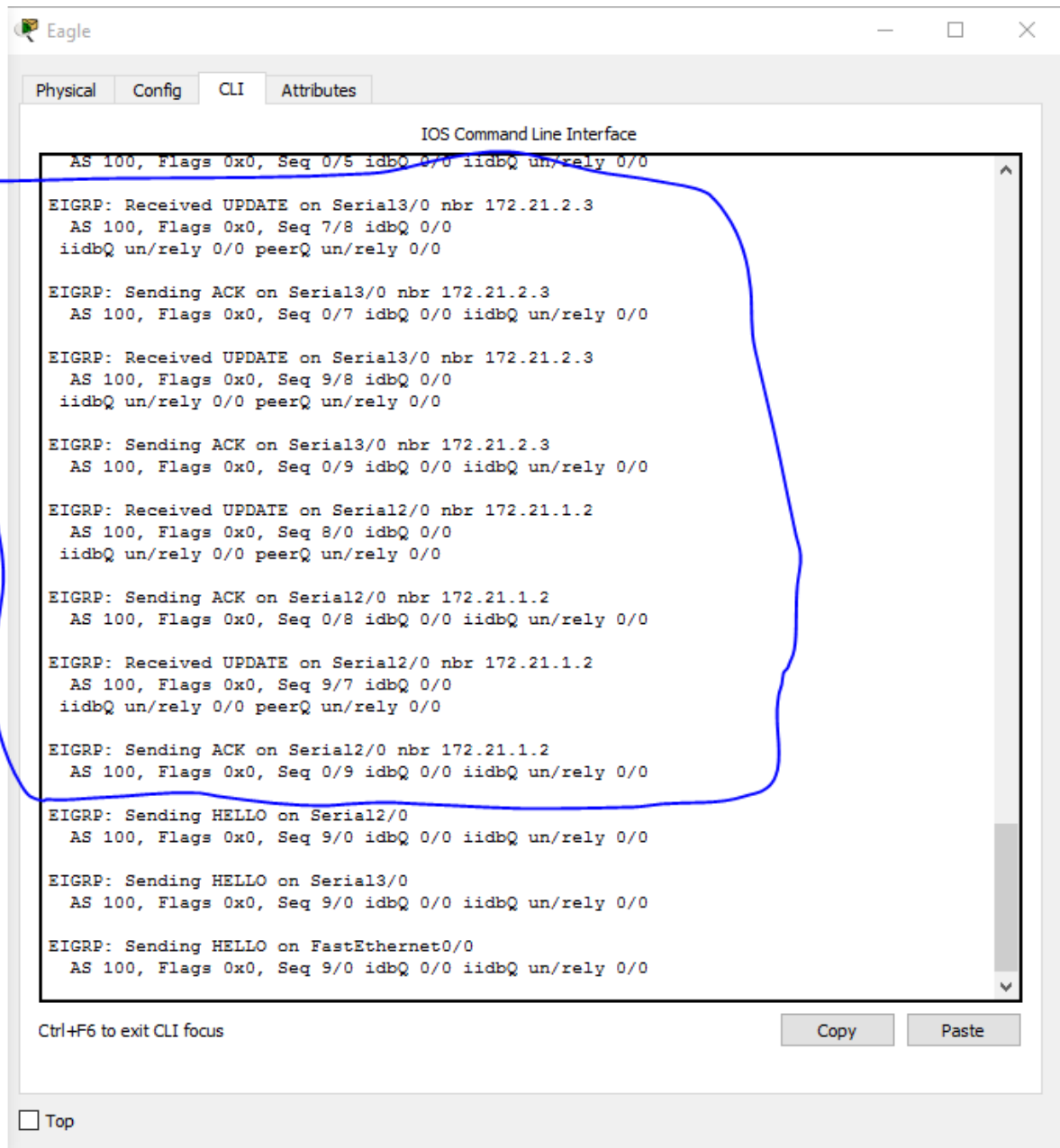
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
%LINK-5-CHANGED: Interface Serial2/0, changed state to up
%LINK-5-CHANGED: Interface Serial3/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up

Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router eigrp 100
Router(config-router)#network 172.21.0.0
Router(config-router)#
%DUAL-5-NBRCHANGE: IP-EIGRP 100: Neighbor 172.21.2.1 (Serial2/0) is up: new adjacency
%DUAL-5-NBRCHANGE: IP-EIGRP 100: Neighbor 172.21.3.2 (Serial3/0) is up: new adjacency
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top



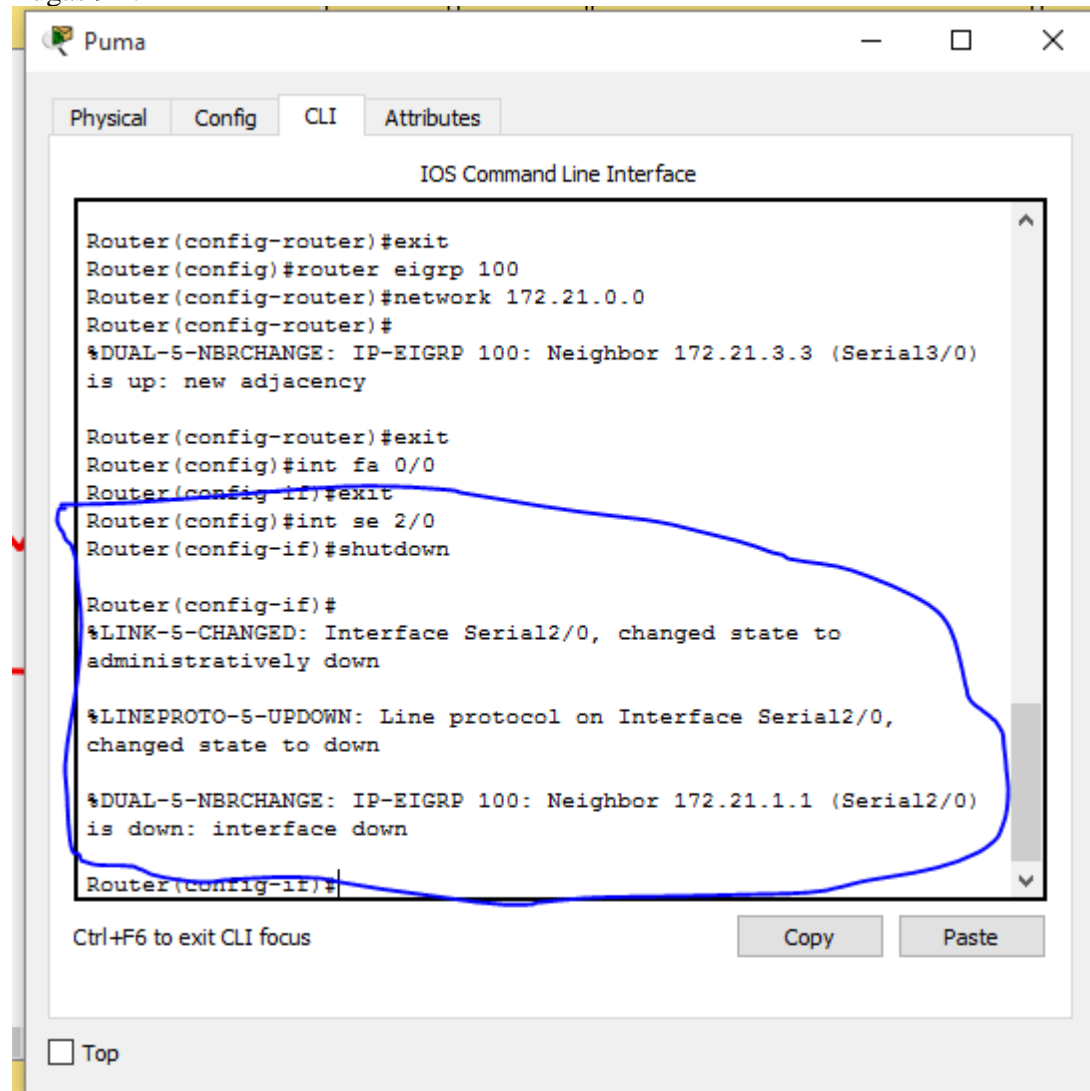
Tugas 7B:

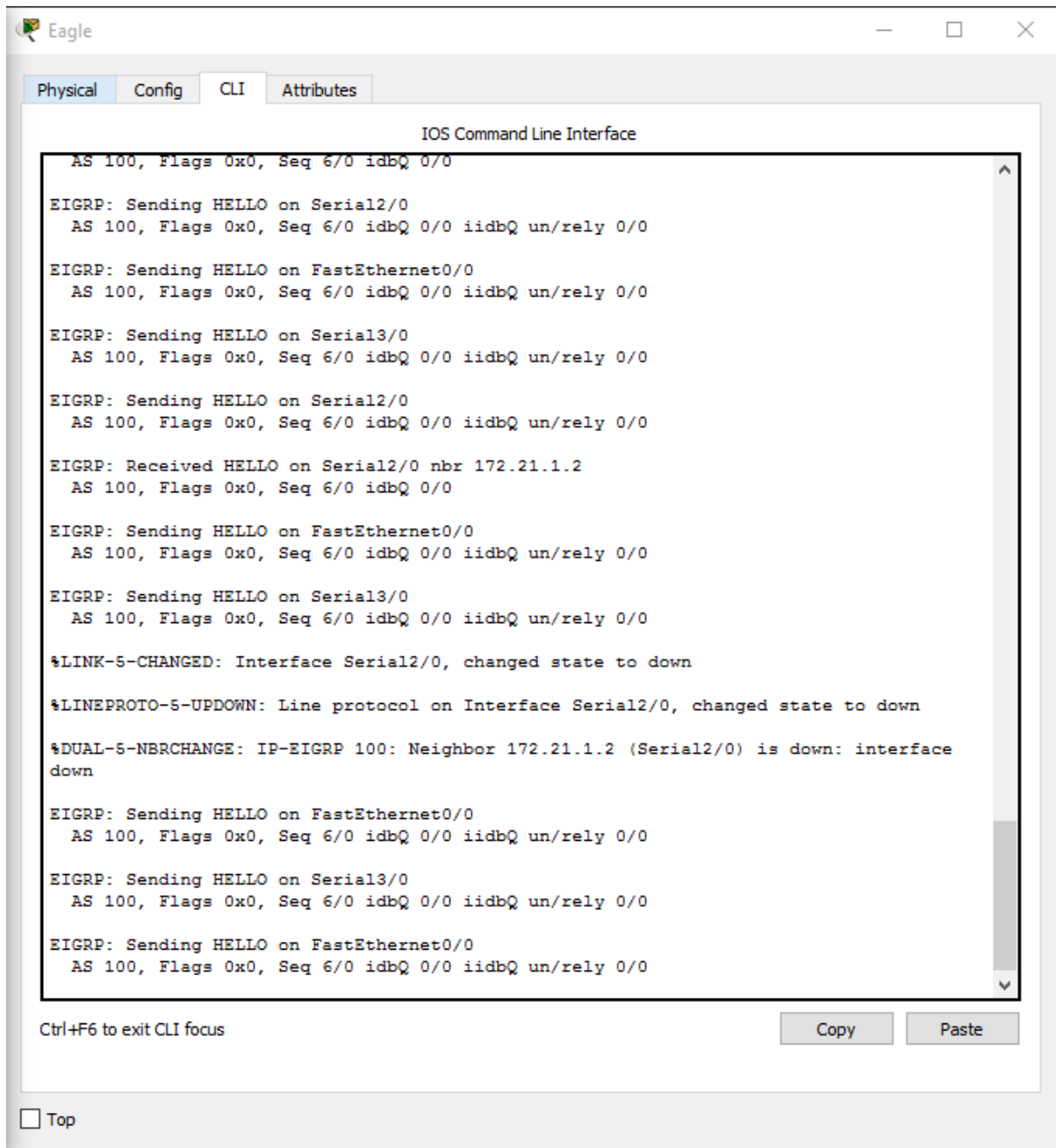
Setelah router puma dikonfigurasi maka di router eagle otomatis meng-update kemudia mengirim ack dan seterusnya hingga proses selesai.

Tugas 7C:

Tidak perlu. Kan tetap berada pada jaringan yang sama dan karena peroutingan sudah dinamis.

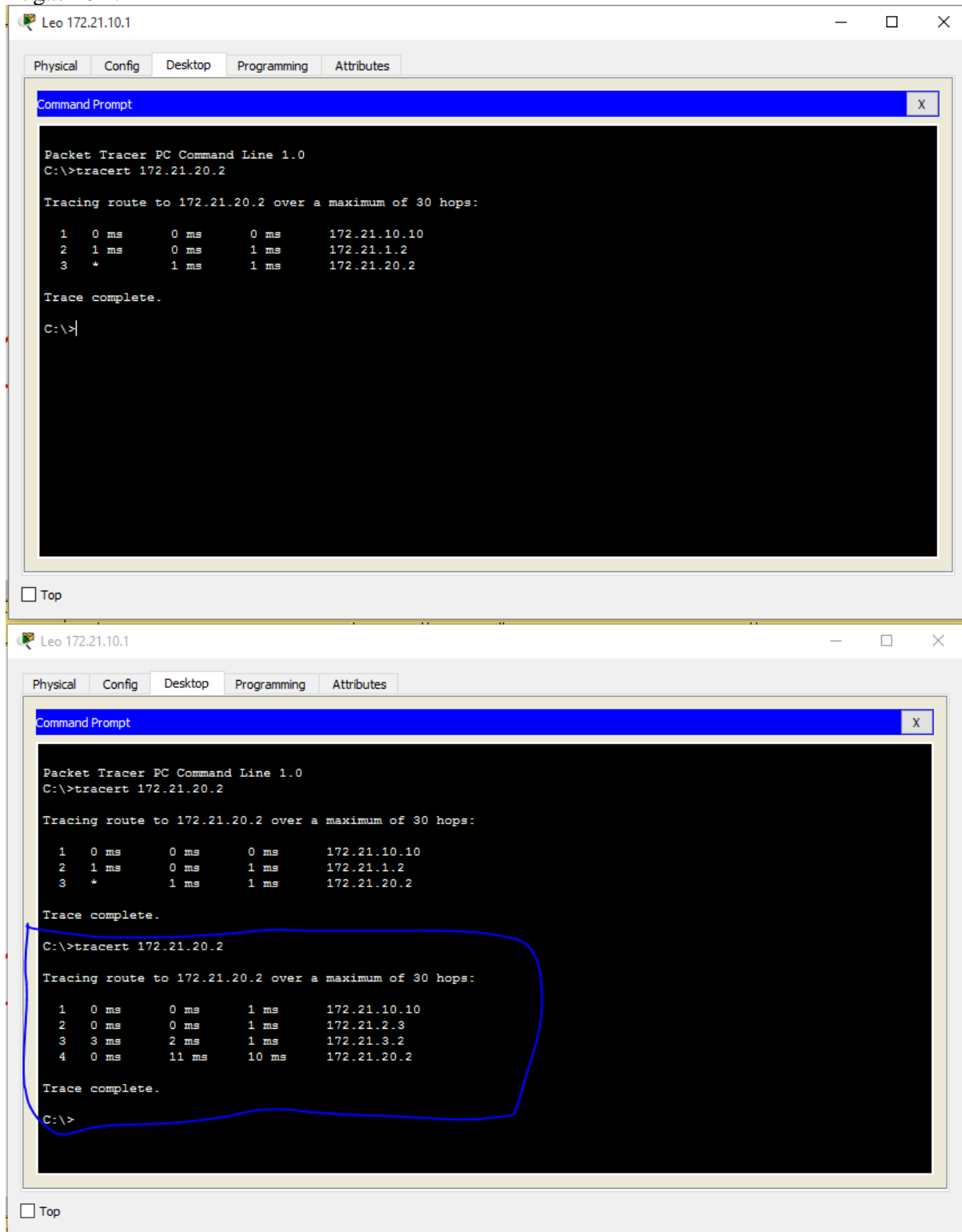
Tugas 9A:





Setelah hubungan antara router eagle dan puma di putuskan melalui router puma maka juga ada pemberitahuan dan update pada router eagle.

Tugas 10A:

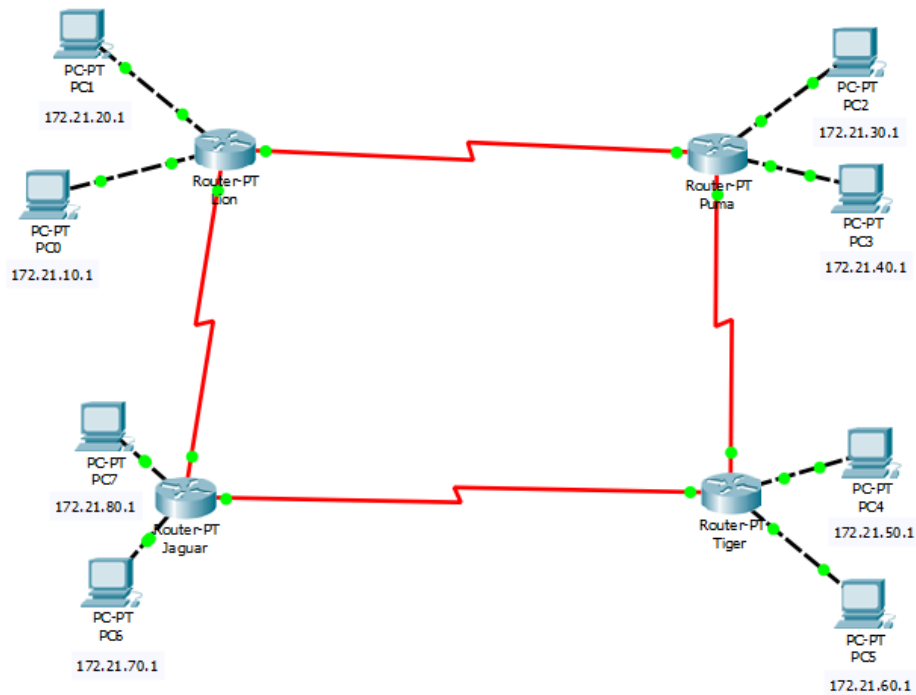


Setelah router terputus waktu yang dibutuhkan untuk mengirim data menjadi berbeda. Juga terdapat perbedaan pada hops atau jalan yang dilalui.

TUGAS MODUL 5

STATIC

1. Desain jaringan



2. Melakukan konfigurasi ip router dengan pembagian

a. Lion

- fa 0/0 = 172.21.10.10
- fa 1/0 = 172.21.20.20
- se 2/0 = 172.21.1.1
- se 3/0 = 172.21.2.1

b. Puma

- fa 0/0 = 172.21.30.10
- fa 1/0 = 172.21.40.20
- se 2/0 = 172.21.1.2
- se 3/0 = 172.21.3.1

c. Tiger

- fa 0/0 = 172.21.50.10
- fa 1/0 = 172.21.60.20
- se 2/0 = 172.21.4.1
- se 3/0 = 172.21.3.2

d. Jaguar

- fa 0/0 = 172.21.70.10
- fa 1/0 = 172.21.80.20
- fa 2/0 = 172.21.4.2
- fa 3/0 = 172.21.2.2

Lion

Physical

Config

CLI

Attributes

IOS Command Line Interface

4 FastEthernet/IEEE 802.3 interface(s)
2 Low-speed serial(sync/async) network interface(s)
32K bytes of non-volatile configuration memory.
63488K bytes of ATA CompactFlash (Read/Write)

Press RETURN to get started!

%LINK-5-CHANGED: Interface Serial2/0, changed state to up

%LINK-5-CHANGED: Interface Serial3/0, changed state to up

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

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

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up

Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa 0/0
Router(config-if)#ip address 172.21.10.10 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int fa 1/0
Router(config-if)#ip address 172.21.20.20 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int se 2/0
Router(config-if)#clock rate 2000000
Router(config-if)#ip address 172.21.1.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int se 3/0
Router(config-if)#clock rate 2000000
Router(config-if)#ip address 172.21.2.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#

Ctrl+F6 to exit CLI focus

Copy

Paste

☐ Top

IOS Command Line Interface

```
32K bytes of non-volatile configuration memory.
63488K bytes of ATA CompactFlash (Read/Write)

Press RETURN to get started!

%LINK-5-CHANGED: Interface Serial2/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
%LINK-5-CHANGED: Interface Serial3/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up

Router>enable
Router#conf term
  ^
% Invalid input detected at '^' marker.

Router#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int fa 0/0
Router(config-if)#ip address 172.21.30.30 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int fa 1/0
Router(config-if)#ip address 172.21.40.40 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int se 2/0
Router(config-if)#ip address 172.21.1.2 255.255.255.0
Router(config-if)#int se 3/0
Router(config-if)#clock rate 2000000
Router(config-if)#ip address 172.21.3.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#
```

Ctrl+F6 to exit CLI focus

Copy

Paste

IOS Command Line Interface

```
X.25 software, Version 3.0.0.
4 FastEthernet/IEEE 802.3 interface(s)
2 Low-speed serial(sync/async) network interface(s)
32K bytes of non-volatile configuration memory.
63488K bytes of ATA CompactFlash (Read/Write)

Press RETURN to get started!

%LINK-5-CHANGED: Interface Serial2/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
%LINK-5-CHANGED: Interface Serial3/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up

Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa 0/0
Router(config-if)#ip address 172.21.50.50 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int fa 1/0
Router(config-if)#ip address 172.21.60.60 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int se 2/0
Router(config-if)#clock rate 2000000
Router(config-if)#ip address 172.21.4.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int se 3/0
Router(config-if)#ip address 172.21.3.2 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#
```

Ctrl+F6 to exit CLI focus

Copy

Paste

IOS Command Line Interface

```
Bridging software.
X.25 software, Version 3.0.0.
4 FastEthernet/IEEE 802.3 interface(s)
2 Low-speed serial(sync/async) network interface(s)
32K bytes of non-volatile configuration memory.
63488K bytes of ATA CompactFlash (Read/Write)

Press RETURN to get started!

%LINK-5-CHANGED: Interface Serial3/0, changed state to up
%LINK-5-CHANGED: Interface Serial2/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up

Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa 0/0
Router(config-if)#ip address 172.21.70.70 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int fa 1/0
Router(config-if)#ip address 172.21.80.80 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int se 2/0
Router(config-if)#ip address 172.21.4.2 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int se 3/0
Router(config-if)#ip address 172.21.2.2 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#
```

Ctrl+F6 to exit CLI focus

Copy

Paste

3. Konfigurasi pada pc

PC0

Physical Config Desktop Programming Attributes

IP Configuration X

IP Configuration

☐ DHCP ☒ Static

IP Address 172.21.10.1

Subnet Mask 255.255.255.0

Default Gateway 172.21.10.10

DNS Server 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::260:70FF:FE63:670B

IPv6 Gateway

IPv6 DNS Server

Top

PC1

Physical Config Desktop Programming Attributes

IP Configuration

IP Configuration

☐ DHCP ☒ Static

IP Address 172.21.20.1

Subnet Mask 255.255.255.0

Default Gateway 172.21.20.20

DNS Server 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address

Link Local Address FE80::290:21FF:FE8E:9245

IPv6 Gateway

IPv6 DNS Server

☐ Top

PC2

PhysicalConfigDesktopProgrammingAttributes

IP Configuration

IP Configuration

☐ DHCP

☒ Static

IP Address

172.21.30.1

Subnet Mask

255.255.255.0

Default Gateway

172.21.30.30

DNS Server

0.0.0.0

IPv6 Configuration

☐ DHCP

☐ Auto Config

☒ Static

IPv6 Address

Link Local Address

FE80::2D0:58FF:FED7:5136

IPv6 Gateway

IPv6 DNS Server

☐ Top

IP Configuration

IP Configuration

☐ DHCP ☒ Static

IP Address 172.21.40.1

Subnet Mask 255.255.255.0

Default Gateway 172.21.40.40

DNS Server 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address

Link Local Address FE80::290:CFF:FE69:5254

IPv6 Gateway

IPv6 DNS Server

PC4

Physical Config Desktop Programming Attributes

IP Configuration

IP Configuration

☐ DHCP ☒ Static

IP Address 172.21.50.1

Subnet Mask 255.255.255.0

Default Gateway 172.21.50.50

DNS Server 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address

Link Local Address FE80::201:C9FF:FE7A:685A

IPv6 Gateway

IPv6 DNS Server

☐ Top

Physical	Config	Desktop	Programming	Attributes
IP Configuration				
IP Configuration				
<input type="radio"/> DHCP <input checked="" type="radio"/> Static				
IP Address		172.21.60.1		
Subnet Mask		255.255.255.0		
Default Gateway		172.21.60.60		
DNS Server		0.0.0.0		
IPv6 Configuration				
<input type="radio"/> DHCP <input type="radio"/> Auto Config <input checked="" type="radio"/> Static				
IPv6 Address				
Link Local Address		FE80::2E0:B0FF:FE11:822A		
IPv6 Gateway				
IPv6 DNS Server				
<input type="checkbox"/> Top				

PC6

Physical Config Desktop Programming Attributes

IP Configuration

IP Configuration

☐ DHCP ☒ Static

IP Address

Subnet Mask

Default Gateway

DNS Server

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address

Link Local Address

IPv6 Gateway

IPv6 DNS Server

☐ Top

PC7

PhysicalConfigDesktopProgrammingAttributes

IP Configuration

IP Configuration

☐ DHCP

☒ Static

IP Address

172.21.80.1

Subnet Mask

255.255.255.0

Default Gateway

172.21.80.80

DNS Server

0.0.0.0

IPv6 Configuration

☐ DHCP

☐ Auto Config

☒ Static

IPv6 Address

Link Local Address

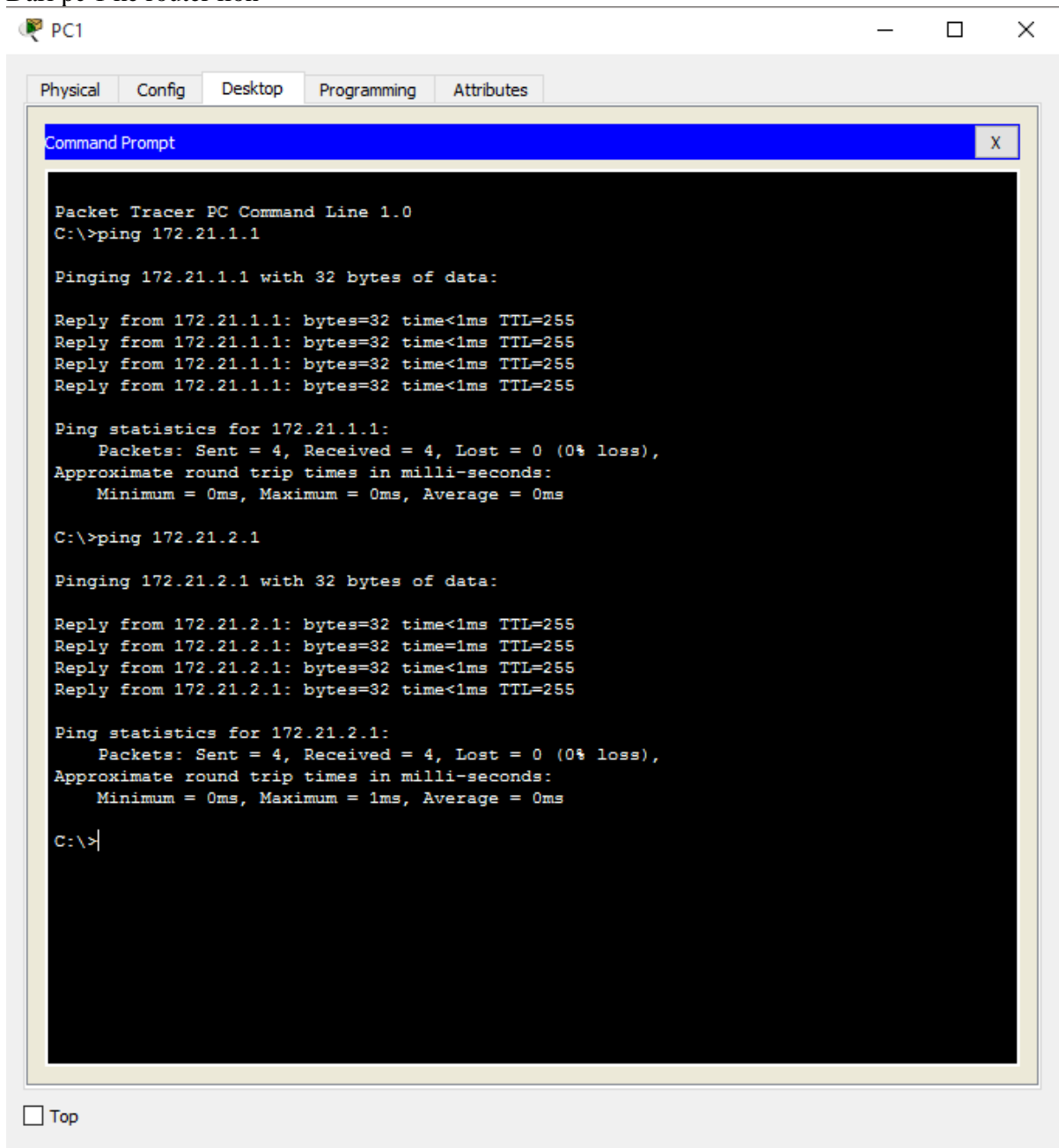
FE80::201:96FF:FE02:E108

IPv6 Gateway

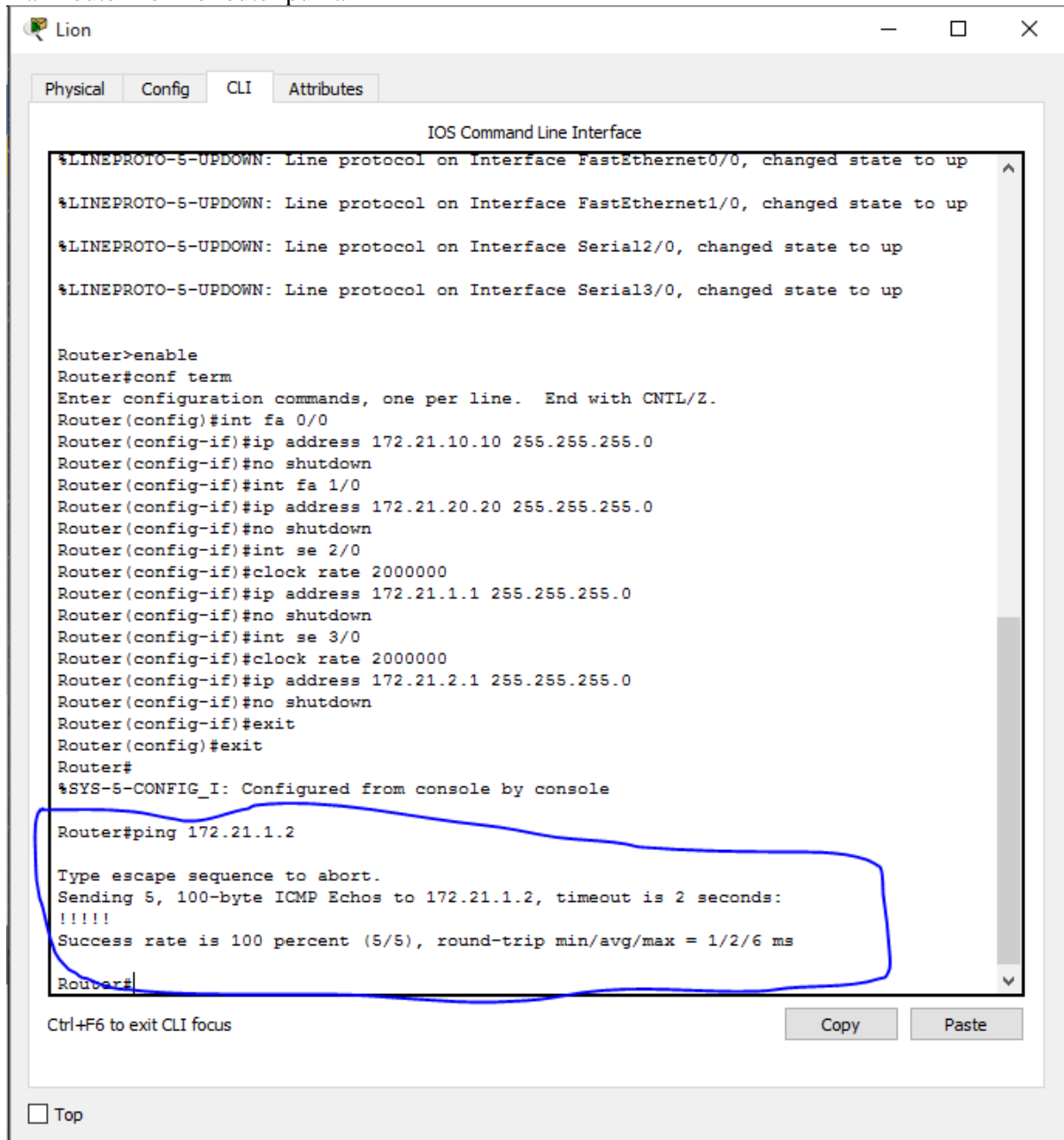
IPv6 DNS Server

☐ Top

4. Melakukan cek koneksi Dari pc 1 ke router lion



Dari router lion ke router puma



Lion

Physical Config CLI Attributes

IOS Command Line Interface

```
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up

Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa 0/0
Router(config-if)#ip address 172.21.10.10 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int fa 1/0
Router(config-if)#ip address 172.21.20.20 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int se 2/0
Router(config-if)#clock rate 2000000
Router(config-if)#ip address 172.21.1.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#int se 3/0
Router(config-if)#clock rate 2000000
Router(config-if)#ip address 172.21.2.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#ping 172.21.1.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.21.1.2, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/6 ms

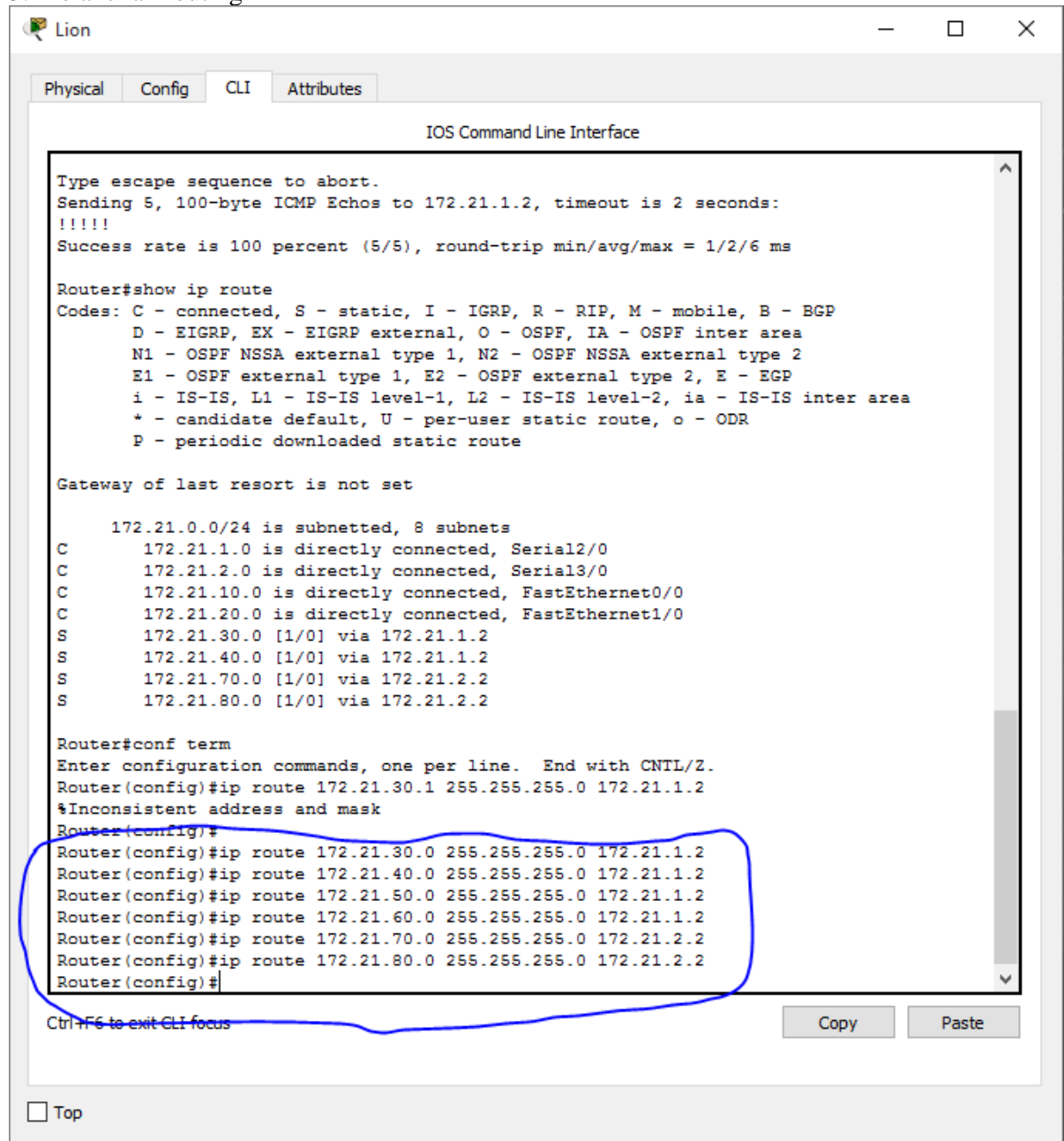
Router#
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

5. Melakukan routing



The screenshot shows the Lion network simulator window with the 'CLI' tab selected. The 'IOS Command Line Interface' is active, displaying the following text:

```
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.21.1.2, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/6 ms

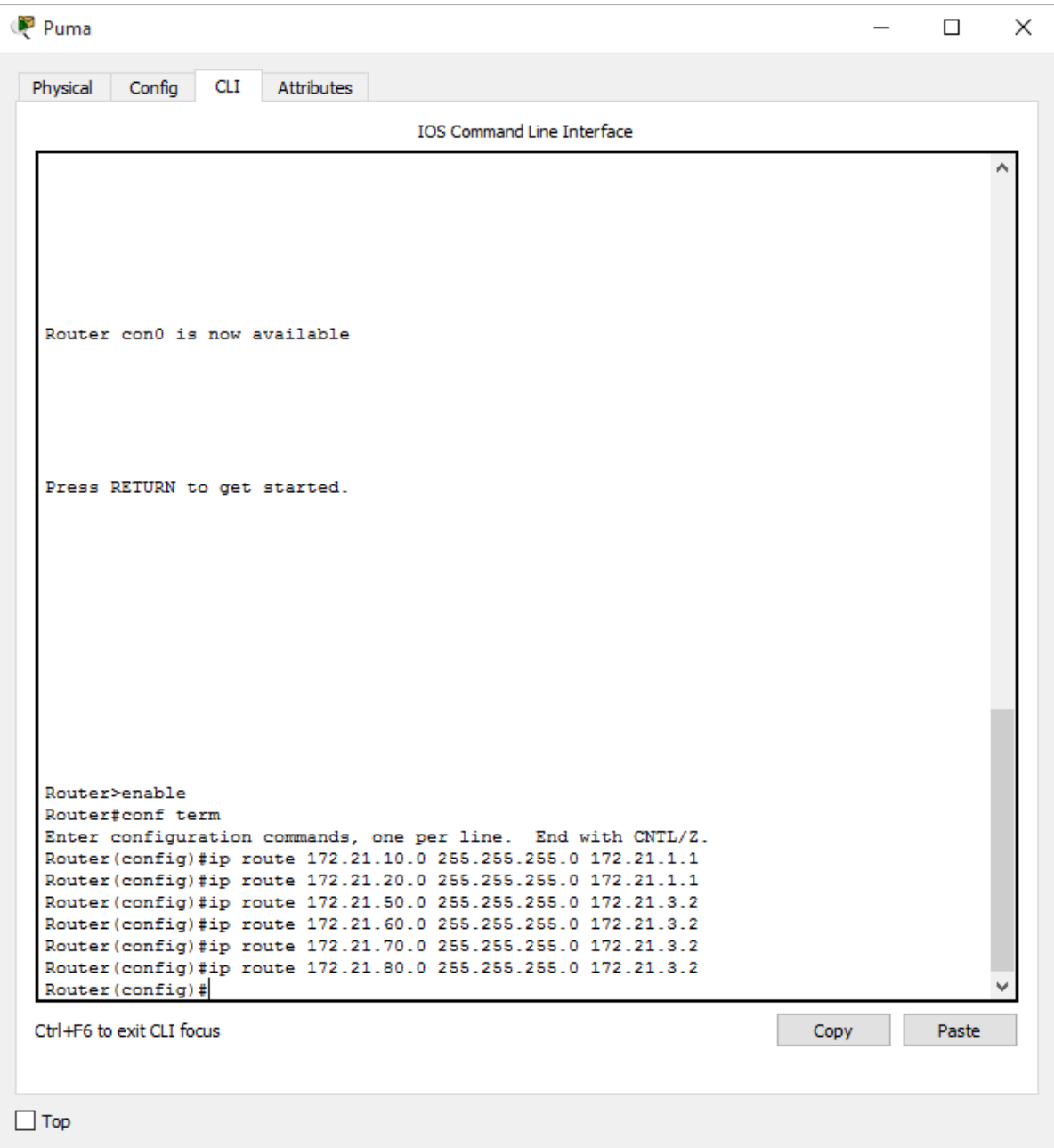
Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

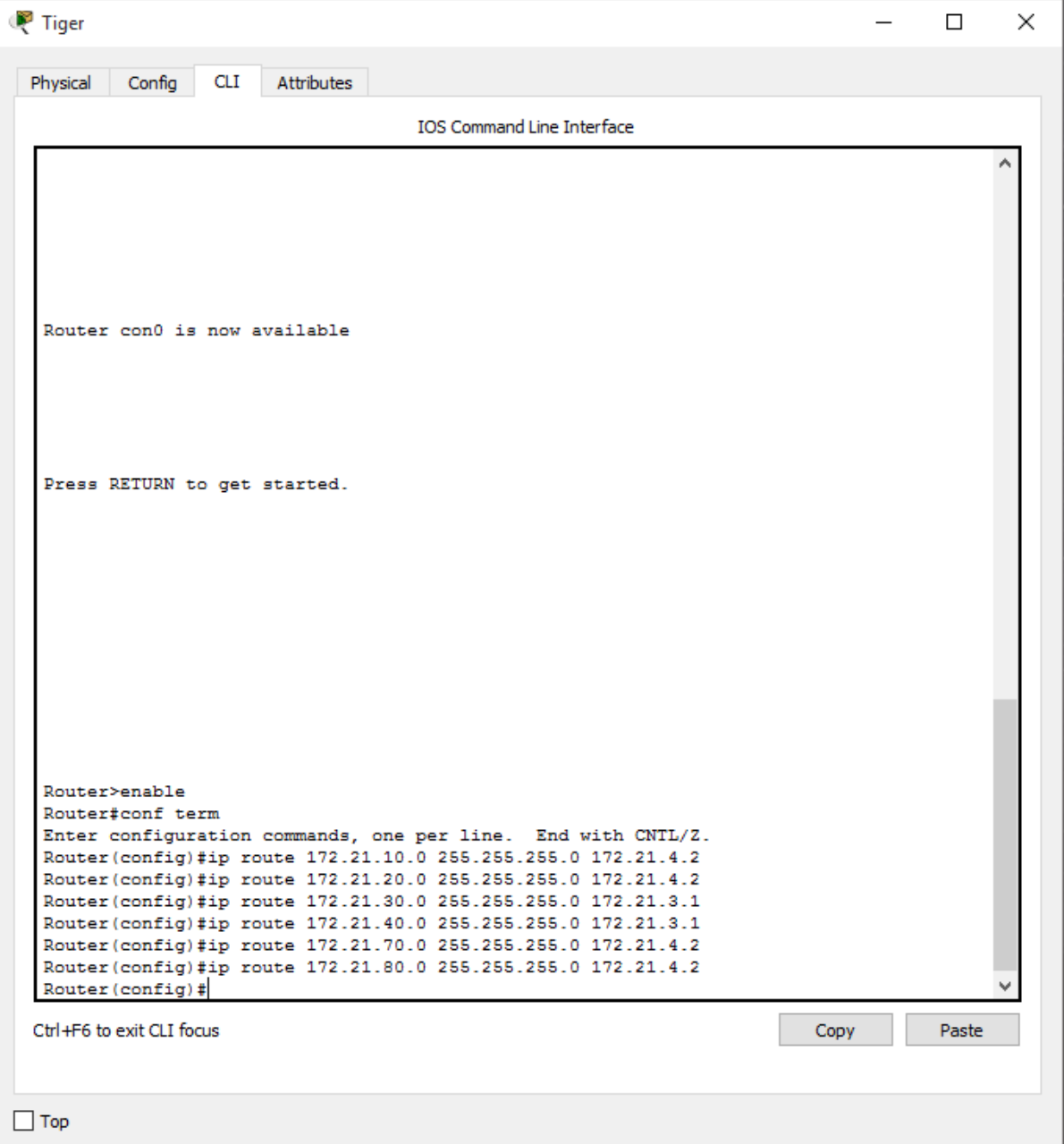
Gateway of last resort is not set

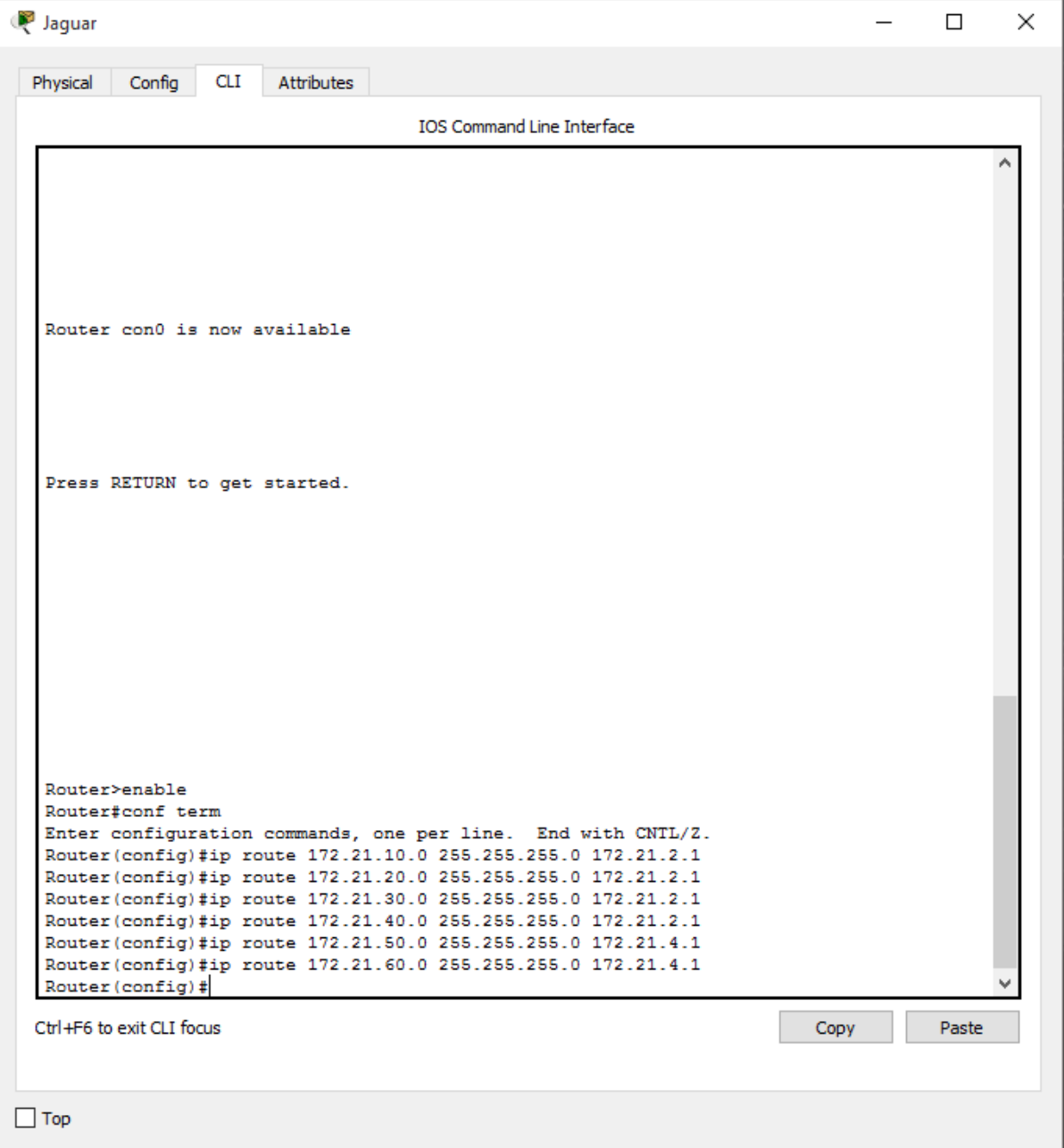
    172.21.0.0/24 is subnetted, 8 subnets
C       172.21.1.0 is directly connected, Serial2/0
C       172.21.2.0 is directly connected, Serial3/0
C       172.21.10.0 is directly connected, FastEthernet0/0
C       172.21.20.0 is directly connected, FastEthernet1/0
S       172.21.30.0 [1/0] via 172.21.1.2
S       172.21.40.0 [1/0] via 172.21.1.2
S       172.21.70.0 [1/0] via 172.21.2.2
S       172.21.80.0 [1/0] via 172.21.2.2

Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.21.30.1 255.255.255.0 172.21.1.2
%Inconsistent address and mask
Router(config)#
Router(config)#ip route 172.21.30.0 255.255.255.0 172.21.1.2
Router(config)#ip route 172.21.40.0 255.255.255.0 172.21.1.2
Router(config)#ip route 172.21.50.0 255.255.255.0 172.21.1.2
Router(config)#ip route 172.21.60.0 255.255.255.0 172.21.1.2
Router(config)#ip route 172.21.70.0 255.255.255.0 172.21.2.2
Router(config)#ip route 172.21.80.0 255.255.255.0 172.21.2.2
Router(config)#
```

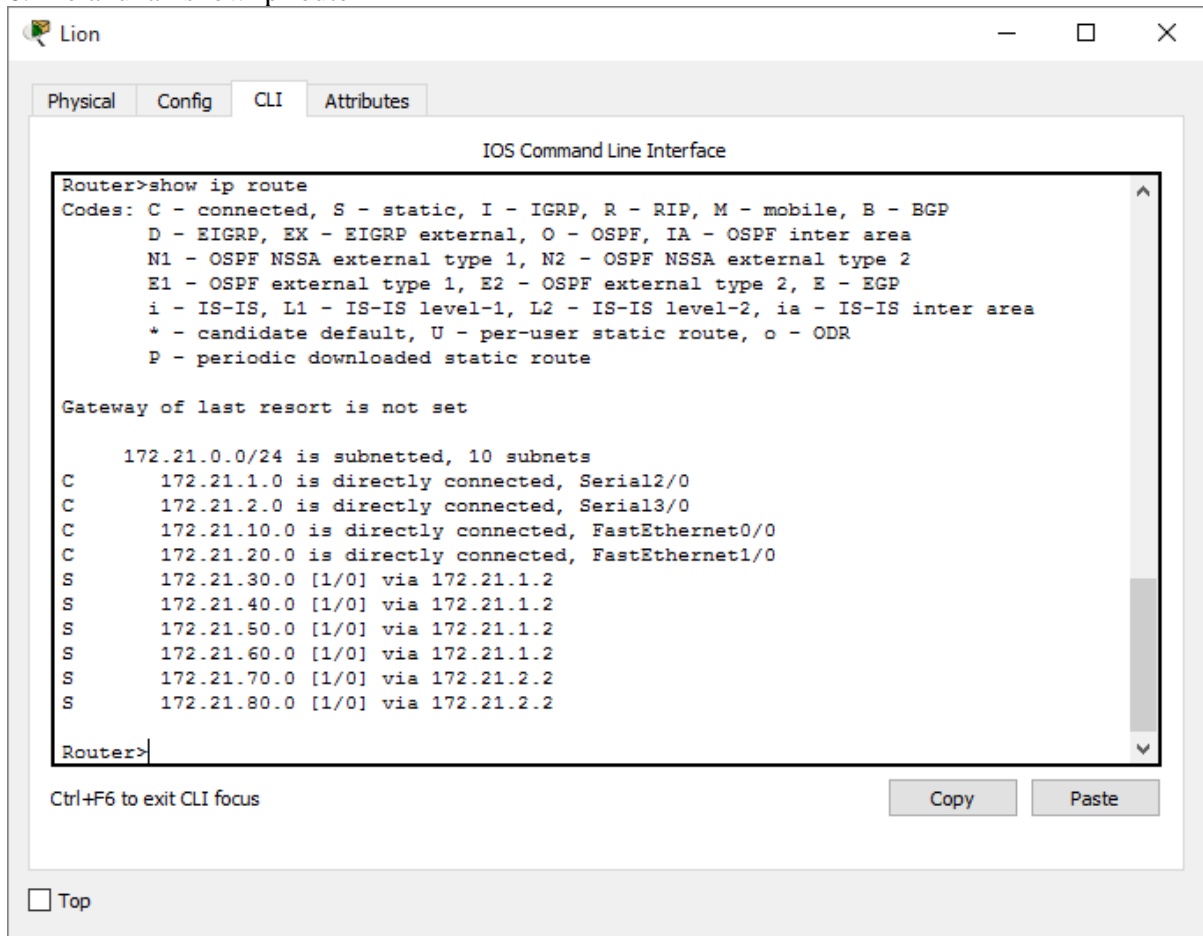
Below the CLI window, there is a 'Ctrl+F6 to exit CLI focus' label and two buttons: 'Copy' and 'Paste'.







6. Melakukan show ip route



The screenshot shows a window titled "Lion" with a tabbed interface. The "CLI" tab is active, displaying the "IOS Command Line Interface". The command "Router>show ip route" has been entered, and the output is shown in a scrollable text area. The output includes a legend for route codes, a message about the gateway of last resort, and a list of connected and static routes. At the bottom of the CLI window, there is a "Ctrl+F6 to exit CLI focus" message and "Copy" and "Paste" buttons. A "Top" button is located at the bottom left of the window.

```
Router>show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

172.21.0.0/24 is subnetted, 10 subnets
C      172.21.1.0 is directly connected, Serial2/0
C      172.21.2.0 is directly connected, Serial3/0
C      172.21.10.0 is directly connected, FastEthernet0/0
C      172.21.20.0 is directly connected, FastEthernet1/0
S      172.21.30.0 [1/0] via 172.21.1.2
S      172.21.40.0 [1/0] via 172.21.1.2
S      172.21.50.0 [1/0] via 172.21.1.2
S      172.21.60.0 [1/0] via 172.21.1.2
S      172.21.70.0 [1/0] via 172.21.2.2
S      172.21.80.0 [1/0] via 172.21.2.2

Router>
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

Puma

Physical Config CLI Attributes

IOS Command Line Interface

```
Router>show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

    172.21.0.0/24 is subnetted, 10 subnets
C       172.21.1.0 is directly connected, Serial2/0
C       172.21.3.0 is directly connected, Serial3/0
S       172.21.10.0 [1/0] via 172.21.1.1
S       172.21.20.0 [1/0] via 172.21.1.1
C       172.21.30.0 is directly connected, FastEthernet0/0
C       172.21.40.0 is directly connected, FastEthernet1/0
S       172.21.50.0 [1/0] via 172.21.3.2
S       172.21.60.0 [1/0] via 172.21.3.2
S       172.21.70.0 [1/0] via 172.21.3.2
S       172.21.80.0 [1/0] via 172.21.3.2

Router>
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

Tiger

Physical Config CLI Attributes

IOS Command Line Interface

```
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
* - candidate default, U - per-user static route, o - ODR
P - periodic downloaded static route

Gateway of last resort is not set


    172.21.0.0/24 is subnetted, 10 subnets
C       172.21.3.0 is directly connected, Serial3/0
C       172.21.4.0 is directly connected, Serial2/0
S       172.21.10.0 [1/0] via 172.21.4.2
S       172.21.20.0 [1/0] via 172.21.4.2
S       172.21.30.0 [1/0] via 172.21.3.1
S       172.21.40.0 [1/0] via 172.21.3.1
C       172.21.50.0 is directly connected, FastEthernet0/0
C       172.21.60.0 is directly connected, FastEthernet1/0
S       172.21.70.0 [1/0] via 172.21.4.2
           [1/0] via 172.21.3.1
S       172.21.80.0 [1/0] via 172.21.4.2

Router>
Router>
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

 Jaguar

PhysicalConfigCLIAttributes

IOS Command Line Interface

Router>show ip route

Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
* - candidate default, U - per-user static route, o - ODR
P - periodic downloaded static route

Gateway of last resort is not set

172.21.0.0/24 is subnetted, 10 subnets

C 172.21.2.0 is directly connected, Serial3/0
C 172.21.4.0 is directly connected, Serial2/0
S 172.21.10.0 [1/0] via 172.21.2.1
S 172.21.20.0 [1/0] via 172.21.2.1
S 172.21.30.0 [1/0] via 172.21.2.1
S 172.21.40.0 [1/0] via 172.21.2.1
S 172.21.50.0 [1/0] via 172.21.4.1
S 172.21.60.0 [1/0] via 172.21.4.1
C 172.21.70.0 is directly connected, FastEthernet0/0
C 172.21.80.0 is directly connected, FastEthernet1/0

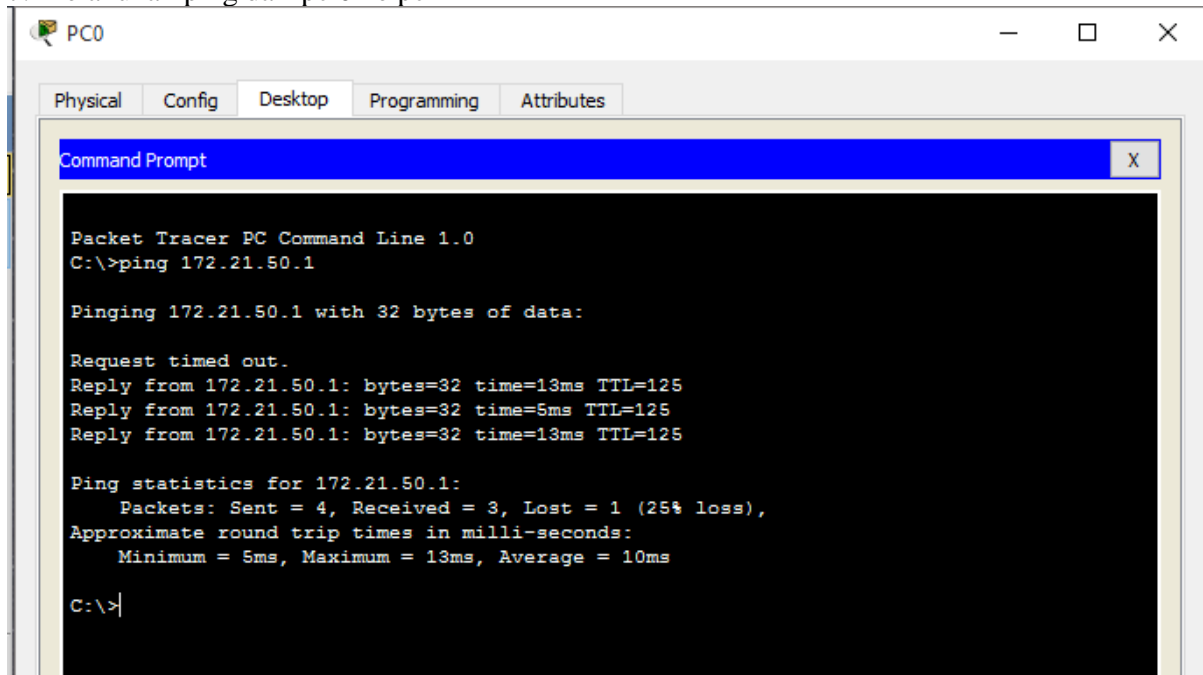
Router>

Ctrl+F6 to exit CLI focus

CopyPaste

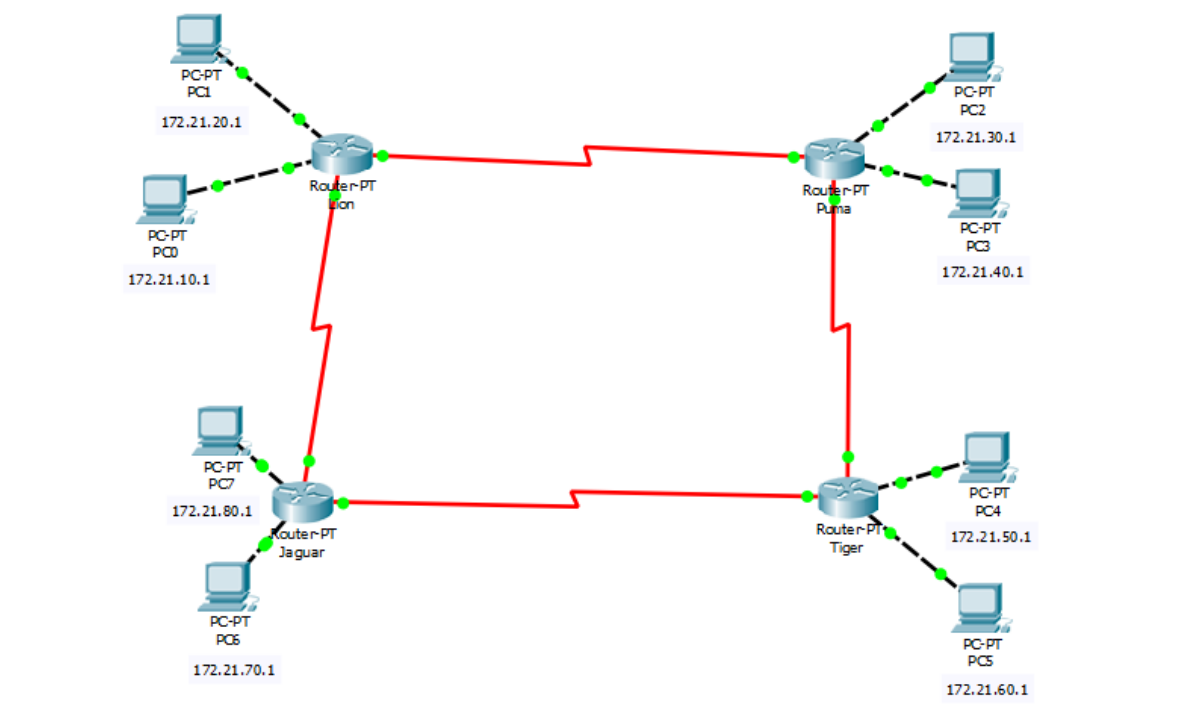
☐ Top

7. Melakukan ping dari pc 0 ke pc 4

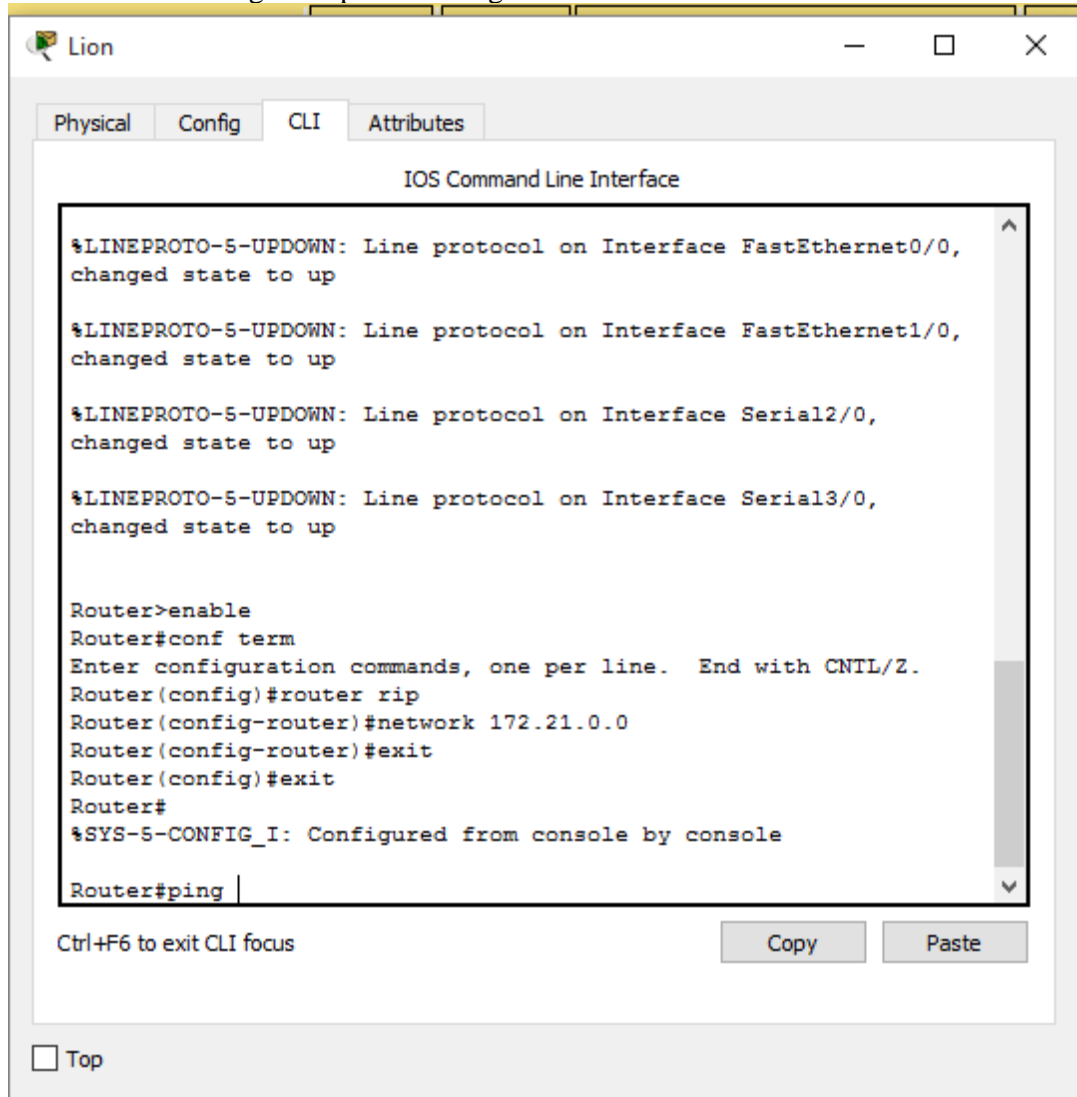


RIP

1. Desain jaringan



2. Melakukan konfigurasi ip dan routing



Puma

Physical Config CLI Attributes

IOS Command Line Interface

```
Cisco Internetwork Operating System Software
IOS (tm) PT1000 Software (PT1000-I-M), Version 12.2(28), RELEASE SOFTWARE (fc5)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2005 by cisco Systems, Inc.
Compiled Wed 27-Apr-04 19:01 by miwang

PT 1001 (PTSC2005) processor (revision 0x200) with 60416K/5120K bytes of memory
.
Processor board ID PT0123 (0123)
PT2005 processor: part number 0, mask 01
Bridging software.
X.25 software, Version 3.0.0.
4 FastEthernet/IEEE 802.3 interface(s)
2 Low-speed serial(sync/async) network interface(s)
32K bytes of non-volatile configuration memory.
63488K bytes of ATA CompactFlash (Read/Write)

Press RETURN to get started!

%LINK-5-CHANGED: Interface Serial2/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
%LINK-5-CHANGED: Interface Serial3/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up

Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router rip
Router(config-router)#network 172.21.0.0
Router(config-router)#
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

IOS Command Line Interface

```
Compiled Wed 27-Apr-04 19:01 by miwang

PT 1001 (PTSC2005) processor (revision 0x200) with 60416K/5120K bytes of memory
-
Processor board ID PT0123 (0123)
PT2005 processor: part number 0, mask 01
Bridging software.
X.25 software, Version 3.0.0.
4 FastEthernet/IEEE 802.3 interface(s)
2 Low-speed serial(sync/async) network interface(s)
32K bytes of non-volatile configuration memory.
63488K bytes of ATA CompactFlash (Read/Write)

Press RETURN to get started!

%LINK-5-CHANGED: Interface Serial2/0, changed state to up

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

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

%LINK-5-CHANGED: Interface Serial3/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up

Router>enable
Router#conf ter,
^
% Invalid input detected at '^' marker.

Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router rip
Router(config-router)#network 172.21.0.0
Router(config-router)#
```

Ctrl+F6 to exit CLI focus

Copy

Paste

Physical Config CLI Attributes

IOS Command Line Interface

```
63488K bytes of ATA CompactFlash (Read/Write)

Press RETURN to get started!

%LINK-5-CHANGED: Interface Serial3/0, changed state to up
%LINK-5-CHANGED: Interface Serial2/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up

Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router rip
Router(config-router)#network 172.21.0.0
Router(config-router)#
```

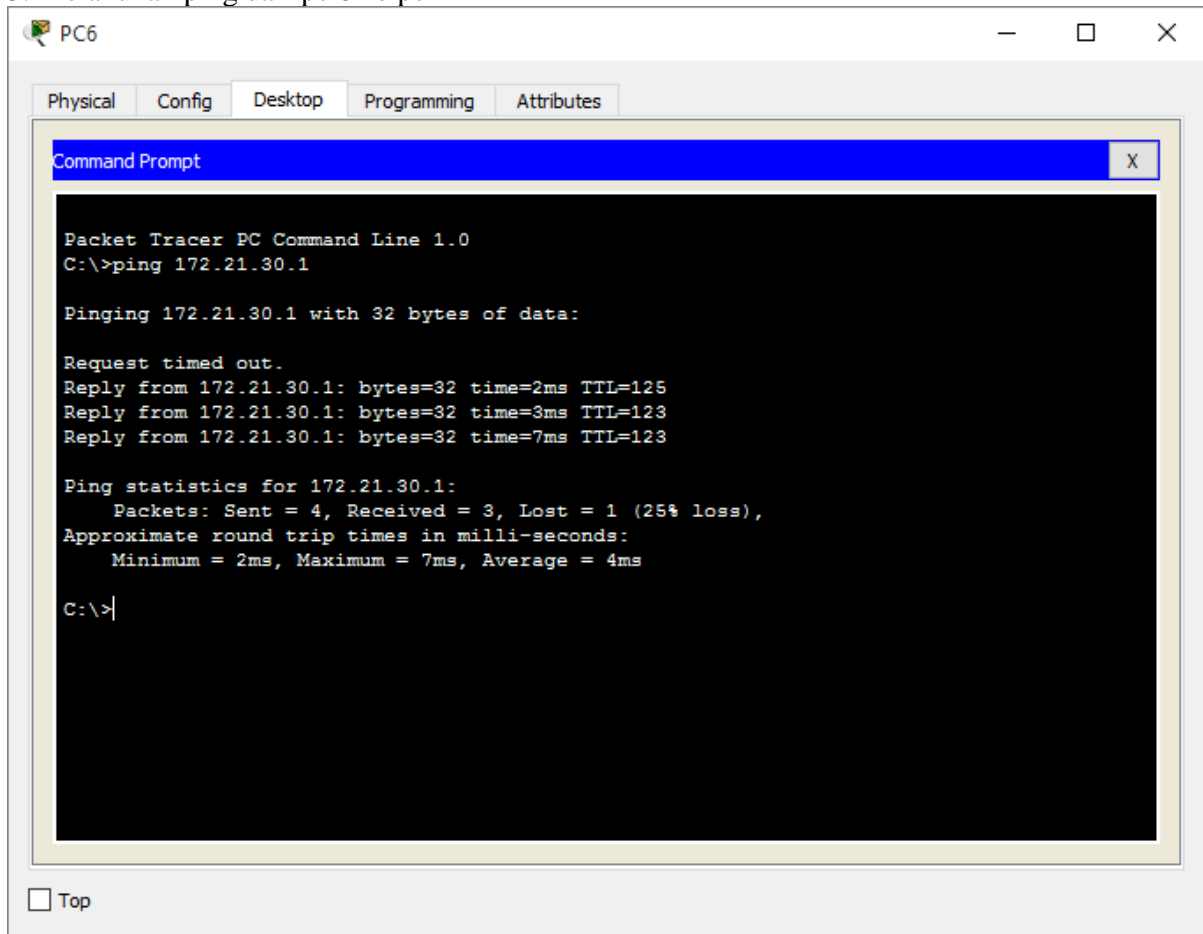
Ctrl+F6 to exit CLI focus

Copy

Paste

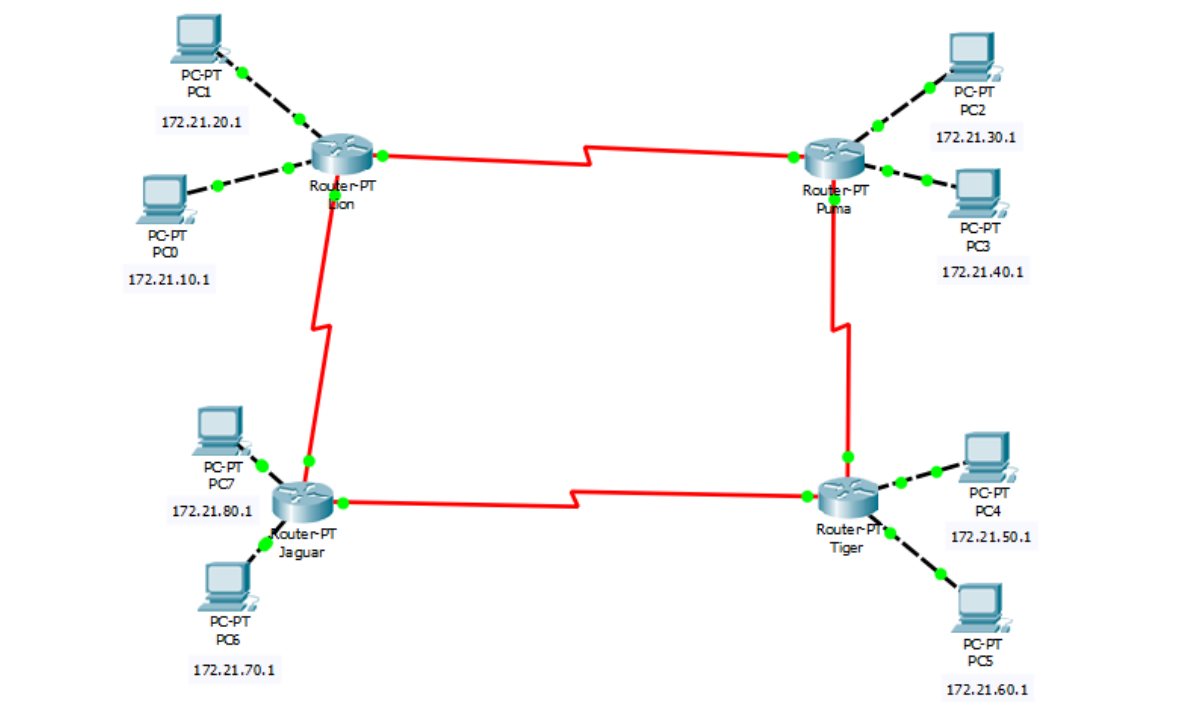
☐ Top

3. Melakukan ping dari pc 6 ke pc 2

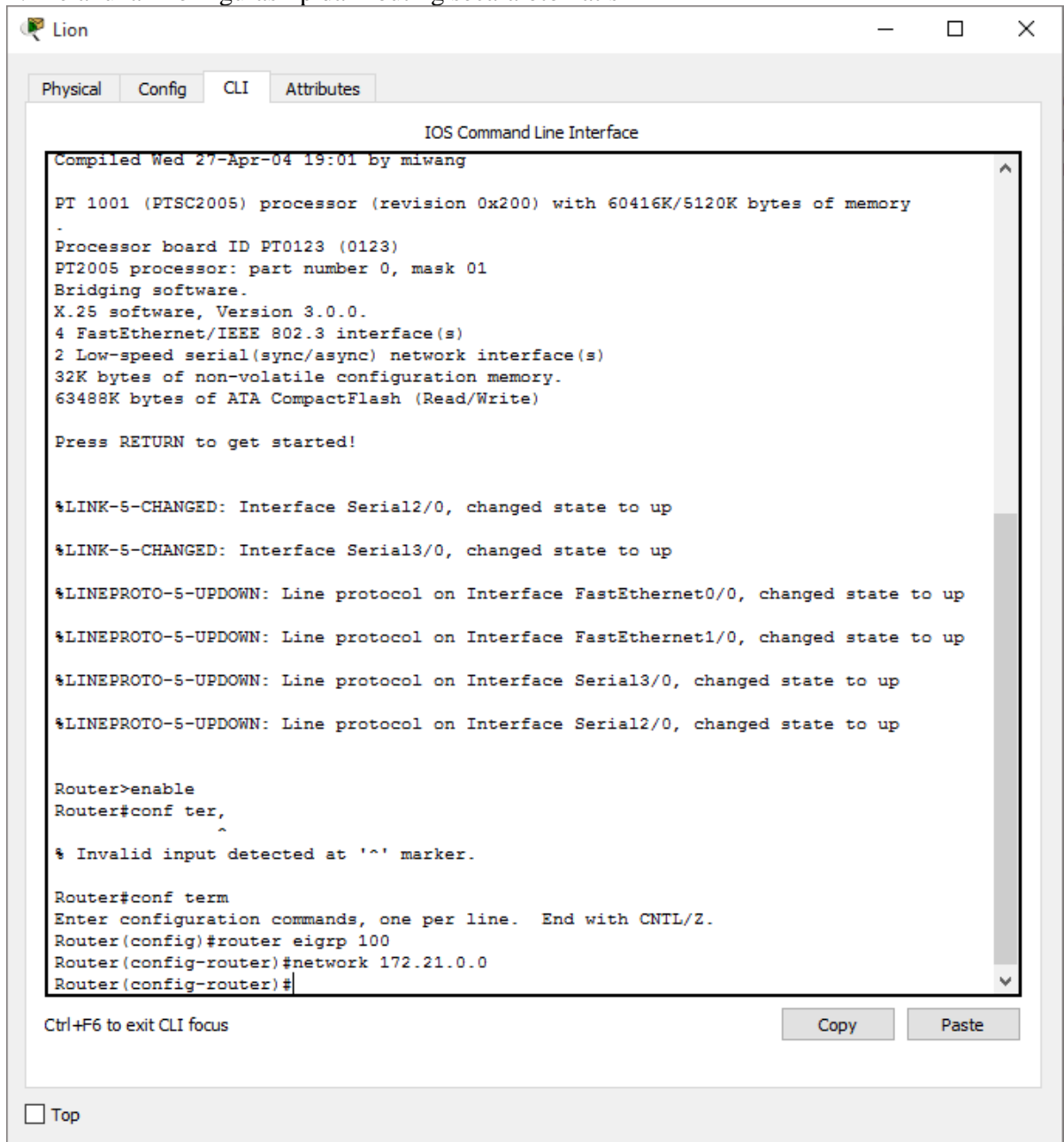


IGRP

1. Desain jaringan



2. Melakukan konfigurasi ip dan routing secara otomatis



The screenshot shows a window titled "Lion" with a tabbed interface. The "CLI" tab is selected, displaying the "IOS Command Line Interface". The text in the CLI window is as follows:

```
Compiled Wed 27-Apr-04 19:01 by miwang

PT 1001 (PTSC2005) processor (revision 0x200) with 60416K/5120K bytes of memory
.
Processor board ID PT0123 (0123)
PT2005 processor: part number 0, mask 01
Bridging software.
X.25 software, Version 3.0.0.
4 FastEthernet/IEEE 802.3 interface(s)
2 Low-speed serial(sync/async) network interface(s)
32K bytes of non-volatile configuration memory.
63488K bytes of ATA CompactFlash (Read/Write)

Press RETURN to get started!

%LINK-5-CHANGED: Interface Serial2/0, changed state to up
%LINK-5-CHANGED: Interface Serial3/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up

Router>enable
Router#conf ter,
      ^
% Invalid input detected at '^' marker.

Router#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#router eigrp 100
Router(config-router)#network 172.21.0.0
Router(config-router)#
```

Below the CLI window, there is a text label "Ctrl+F6 to exit CLI focus" and two buttons: "Copy" and "Paste". At the bottom left of the window, there is a checkbox labeled "Top".

Puma

Physical Config CLI Attributes

IOS Command Line Interface

```
Copyright (C) 1986-2003 by Cisco Systems, Inc.  
Compiled Wed 27-Apr-04 19:01 by miwang  
  
PT 1001 (PTSC2005) processor (revision 0x200) with 60416K/5120K bytes of memory  
.  
Processor board ID PT0123 (0123)  
PT2005 processor: part number 0, mask 01  
Bridging software.  
X.25 software, Version 3.0.0.  
4 FastEthernet/IEEE 802.3 interface(s)  
2 Low-speed serial(sync/async) network interface(s)  
32K bytes of non-volatile configuration memory.  
63488K bytes of ATA CompactFlash (Read/Write)  
  
Press RETURN to get started!  
  
%LINK-5-CHANGED: Interface Serial2/0, changed state to up  
  
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up  
  
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up  
  
%LINK-5-CHANGED: Interface Serial3/0, changed state to up  
  
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up  
  
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up  
  
Router>enable  
Router#conf term  
Enter configuration commands, one per line. End with CNTL/Z.  
Router(config)#router eigrp 100  
Router(config-router)#network 172.21.0.0  
Router(config-router)#  
%DUAL-5-NBRCHANGE: IP-EIGRP 100: Neighbor 172.21.1.1 (Serial2/0) is up: new adjacency  
Router(config-router)#
```

Ctrl+F6 to exit CLI focus

Copy Paste

☐ Top

Physical Config CLI Attributes

IOS Command Line Interface

```
%LINK-5-CHANGED: Interface Serial2/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up
%LINK-5-CHANGED: Interface Serial3/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up

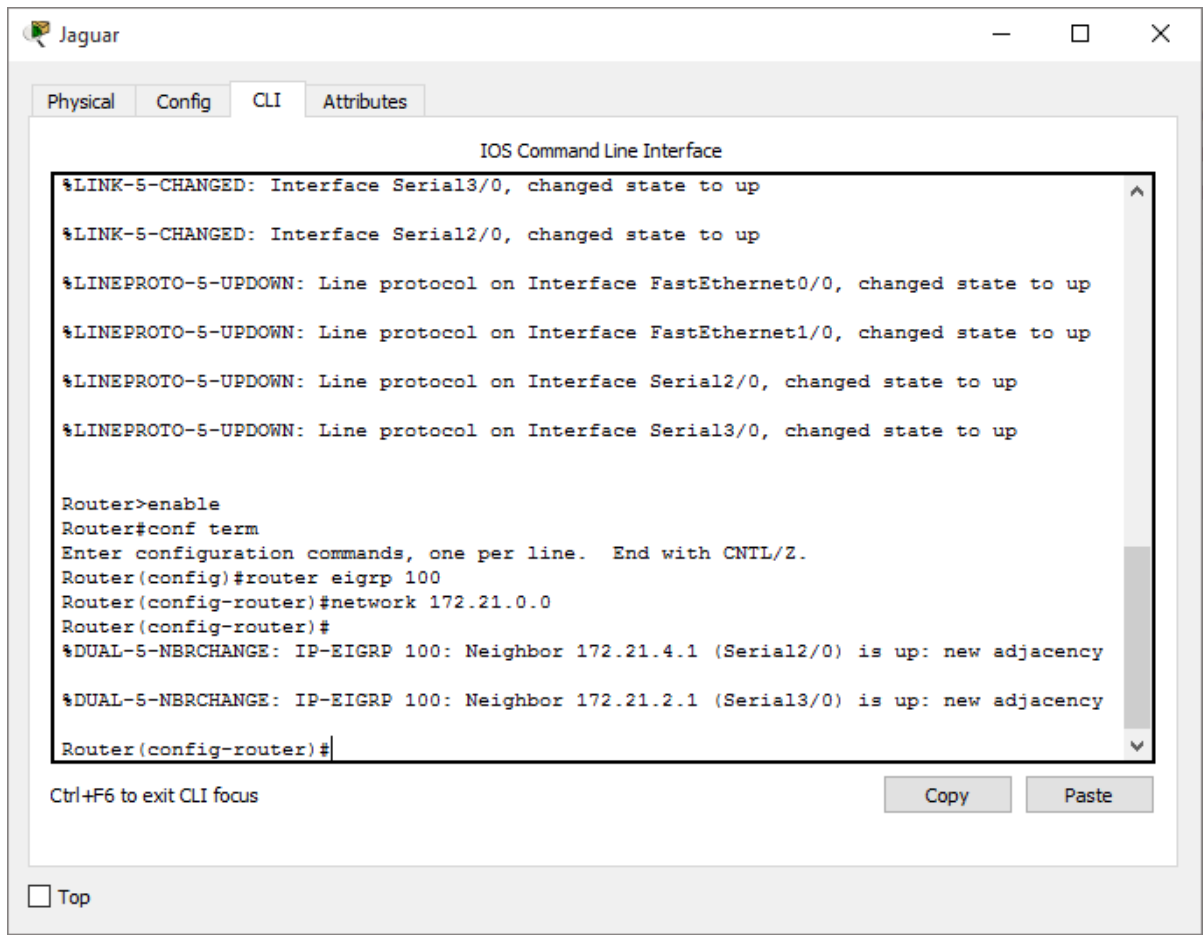
Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router eigrp 100
Router(config-router)#network 172.21.0.0
Router(config-router)#
%DUAL-5-NBRCHANGE: IP-EIGRP 100: Neighbor 172.21.3.1 (Serial3/0) is up: new adjacency
Router(config-router)#
```

Ctrl+F6 to exit CLI focus

Copy

Paste

☐ Top



3. Melakukan ping dari pc 4 ke pc 0

