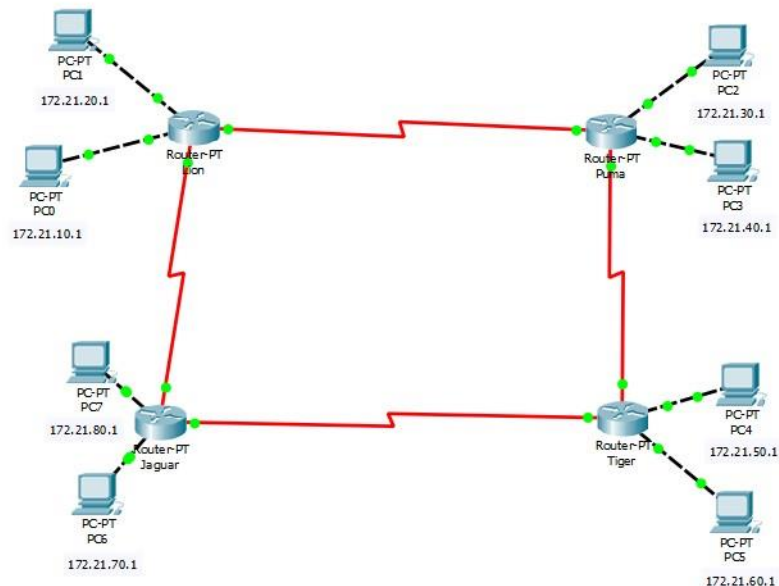


Nama : Irfananda Irsyad A
NIM : L200180096
Kelas : C

Praktikum Jarkom Modul 7

1. Rancangan Jaringan



2. Melakukan konfigurasi ip router

a. Lion

```
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
```

b. Puma

```
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
```

c. Tiger

```
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 172.21.60.60 255.255.255.0
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)#
```

d. Jaguar

```
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)#
```

3. Konfigurasi pada PC

The screenshot shows the configuration window for PC0. The 'Config' tab is selected. Under 'IP Configuration', the 'Static' radio button is selected. The IP Address is 172.21.10.1, Subnet Mask is 255.255.255.0, Default Gateway is 172.21.10.10, and DNS Server is 0.0.0.0. Under 'IPv6 Configuration', the 'Static' radio button is selected. The IPv6 Address is empty, Link Local Address is FE80::260:70FF:FE63:670B, IPv6 Gateway is empty, and IPv6 DNS Server is empty.

IP Configuration	
<input type="radio"/> DHCP	<input checked="" type="radio"/> 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		
<input type="radio"/> DHCP	<input type="radio"/> Auto Config	<input checked="" type="radio"/> Static
IPv6 Address		
Link Local Address	FE80::260:70FF:FE63:670B	
IPv6 Gateway		
IPv6 DNS Server		

PC1

Physical	Config	Desktop	Programming	Attributes
IP Configuration				
IP Configuration				
<input type="radio"/> DHCP		<input checked="" type="radio"/> 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				
<input type="radio"/> DHCP		<input type="radio"/> Auto Config	<input checked="" type="radio"/> Static	
IPv6 Address				
Link Local Address		FE80::290:21FF:FE8E:9245		
IPv6 Gateway				
IPv6 DNS Server				

PC2

Physical	Config	Desktop	Programming	Attributes
IP Configuration				
IP Configuration				
<input type="radio"/> DHCP		<input checked="" type="radio"/> 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				
<input type="radio"/> DHCP		<input type="radio"/> Auto Config	<input checked="" type="radio"/> Static	
IPv6 Address				
Link Local Address		FE80::2D0:58FF:FED7:5136		
IPv6 Gateway				
IPv6 DNS Server				

PC3

Physical Config Desktop Programming Attributes

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

PC5

Physical Config Desktop Programming Attributes

IP Configuration

IP Configuration

☐ DHCP ☒ 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

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address

Link Local Address FE80::2E0:B0FF:FE11:822A

IPv6 Gateway

IPv6 DNS Server

PC6

Physical Config Desktop Programming Attributes

IP Configuration

IP Configuration

☐ DHCP ☒ Static

IP Address 172.21.70.1

Subnet Mask 255.255.255.0

Default Gateway 172.21.70.70

DNS Server 0.0.0.0

IPv6 Configuration

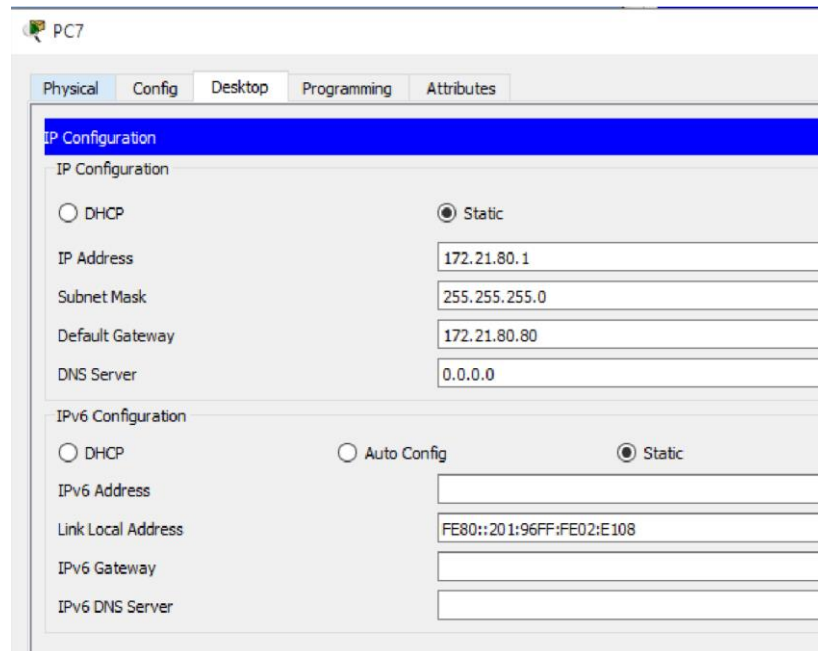
☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address

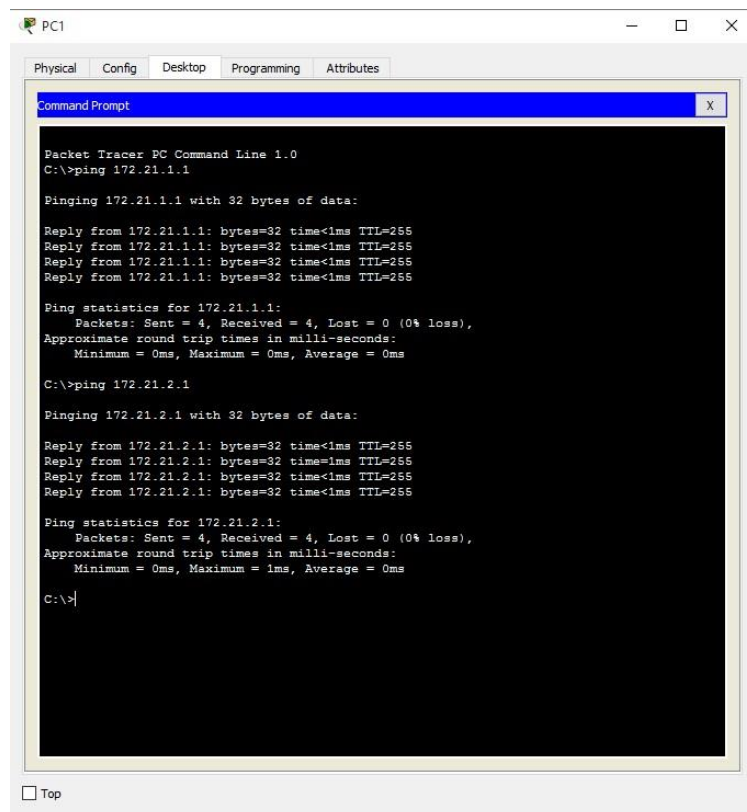
Link Local Address FE80::201:43FF:FEED:4DBE

IPv6 Gateway

IPv6 DNS Server



4. Melakukan cek koneksi dari PC 1 ke router Lion



5. Melakukan routing

- Lion

```
Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
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 172.21.70.0 255.255.255.0 172.21.1.2
Router(config)#ip route 172.21.80.0 255.255.255.0 172.21.1.2
Router(config)#
```

- Puma

```
Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.21.10.0 255.255.255.0 172.21.1.1
Router(config)#ip route 172.21.20.0 255.255.255.0 172.21.1.1
Router(config)#ip route 172.21.30.0 255.255.255.0 172.21.3.2
Router(config)#ip route 172.21.40.0 255.255.255.0 172.21.3.2
Router(config)#ip route 172.21.50.0 255.255.255.0 172.21.3.2
Router(config)#ip route 172.21.60.0 255.255.255.0 172.21.3.2
Router(config)#ip route 172.21.70.0 255.255.255.0 172.21.3.2
Router(config)#ip route 172.21.80.0 255.255.255.0 172.21.3.2
Router(config)#
```

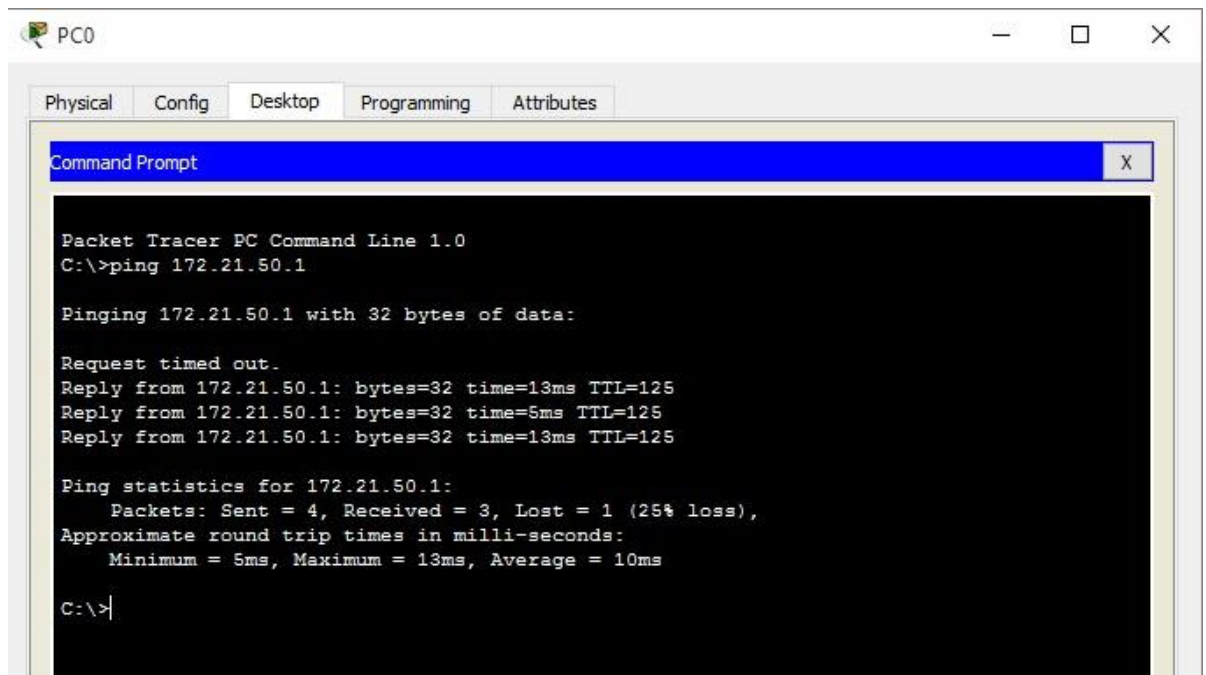
- Tiger

```
Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.21.10.0 255.255.255.0 172.21.4.2
Router(config)#ip route 172.21.20.0 255.255.255.0 172.21.4.2
Router(config)#ip route 172.21.30.0 255.255.255.0 172.21.3.1
Router(config)#ip route 172.21.40.0 255.255.255.0 172.21.3.1
Router(config)#ip route 172.21.50.0 255.255.255.0 172.21.4.2
Router(config)#ip route 172.21.60.0 255.255.255.0 172.21.4.2
Router(config)#ip route 172.21.70.0 255.255.255.0 172.21.4.2
Router(config)#ip route 172.21.80.0 255.255.255.0 172.21.4.2
Router(config)#
```

- Jaguar

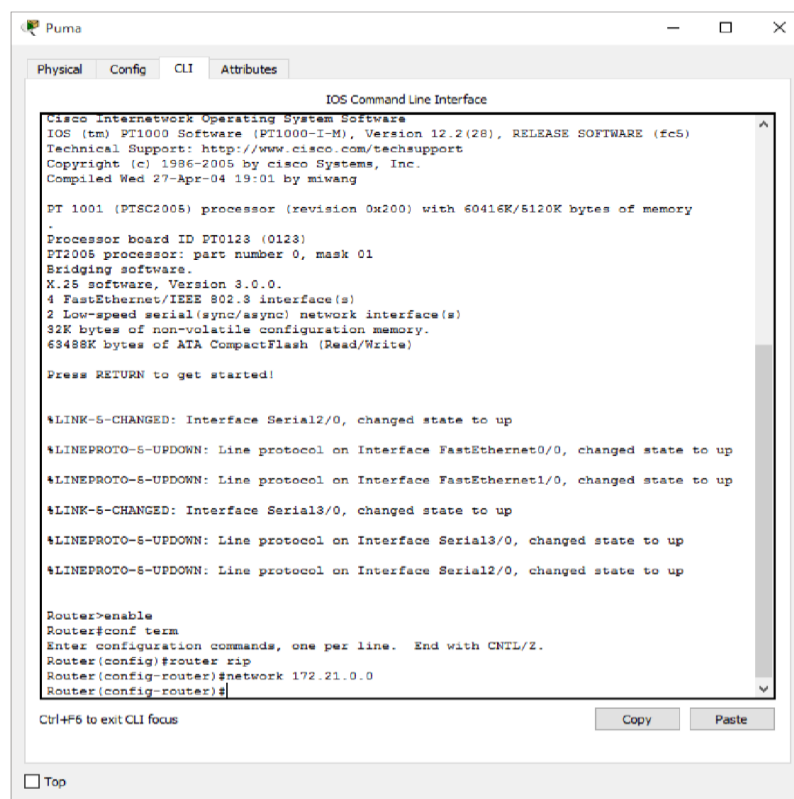
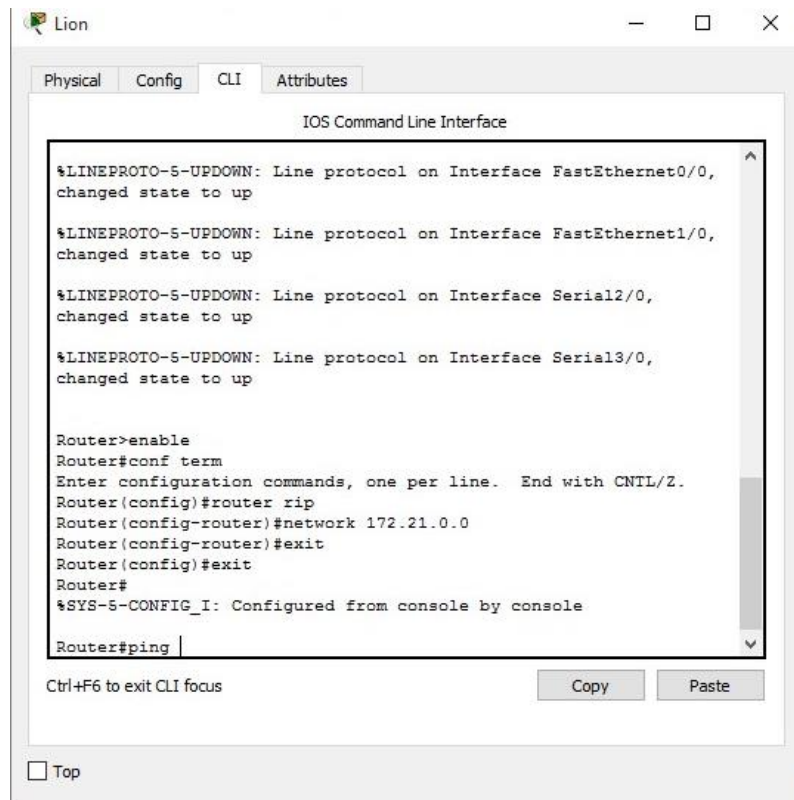
```
Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.21.10.0 255.255.255.0 172.21.2.1
Router(config)#ip route 172.21.20.0 255.255.255.0 172.21.2.1
Router(config)#ip route 172.21.30.0 255.255.255.0 172.21.2.1
Router(config)#ip route 172.21.40.0 255.255.255.0 172.21.2.1
Router(config)#ip route 172.21.50.0 255.255.255.0 172.21.4.1
Router(config)#ip route 172.21.60.0 255.255.255.0 172.21.4.1
Router(config)#ip route 172.21.70.0 255.255.255.0 172.21.4.1
Router(config)#ip route 172.21.80.0 255.255.255.0 172.21.4.1
Router(config)#
```

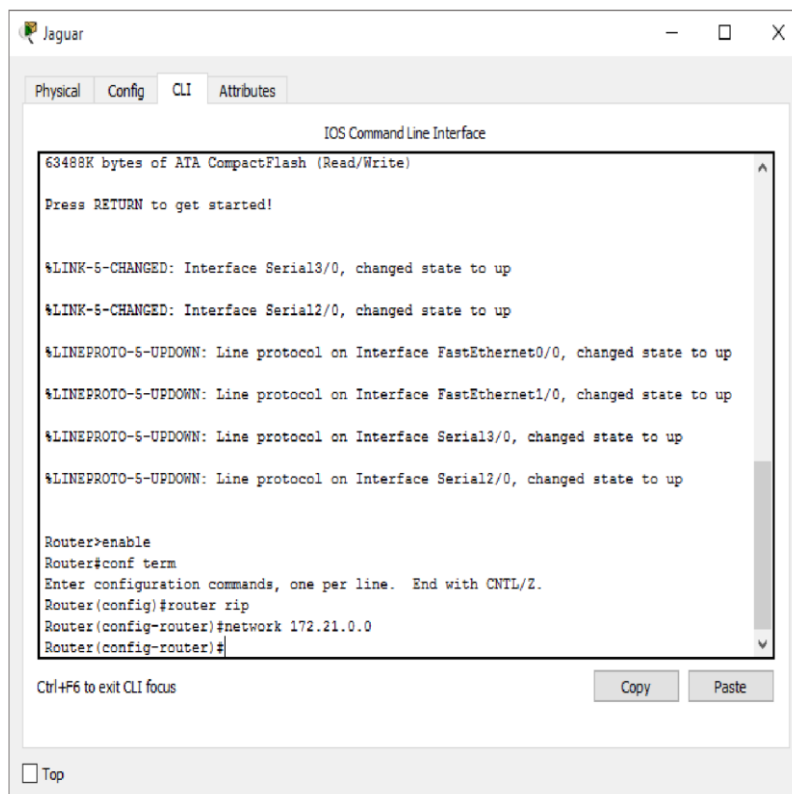
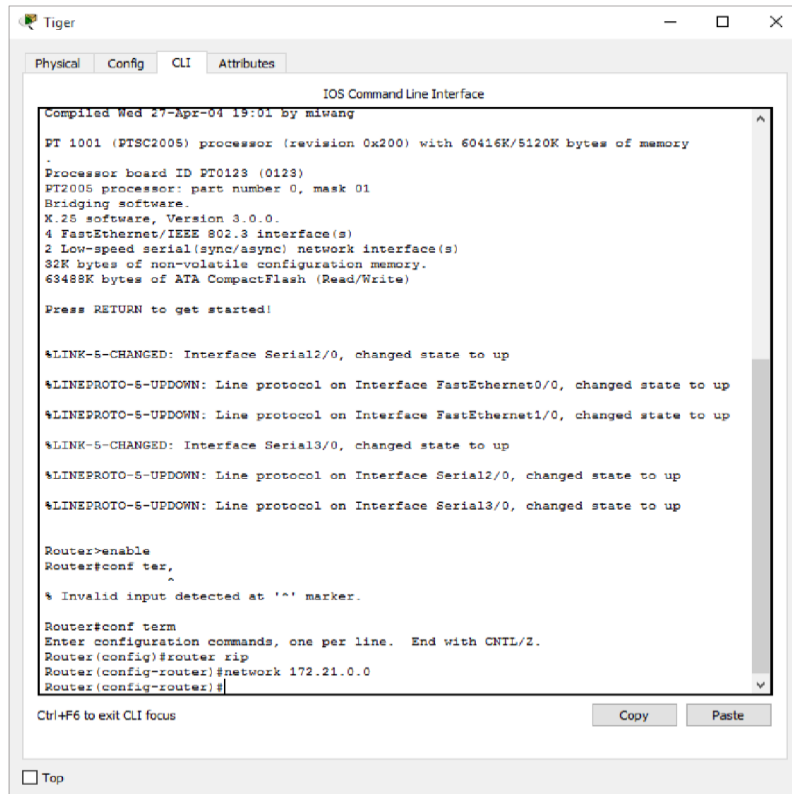
6. Melakukan dari PC 0 ke PC 4



RIP

Melakukan konfigurasi ip dan routing





IGRP

Melakukan konfigurasi ip dan routing secara otomatis

