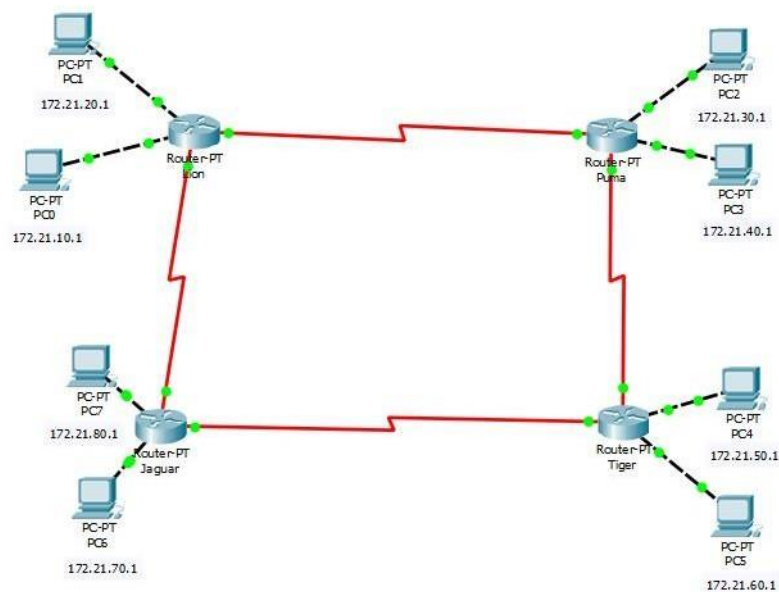


Nama : Chandika Aulia
NIM : L200180097
Kelas : C

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
```

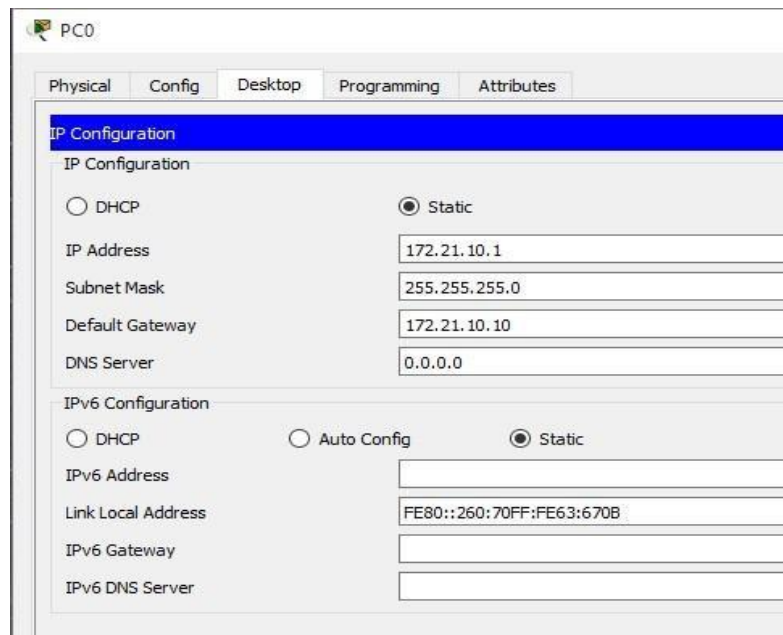
c. Tiger

```
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 chosen. The IP Address is set to 172.21.10.1, Subnet Mask to 255.255.255.0, Default Gateway to 172.21.10.10, and DNS Server to 0.0.0.0. Under 'IPv6 Configuration', the 'Static' radio button is also chosen. The IPv6 Address field is empty, Link Local Address is set to FE80::260:70FF:FE63:670B, and both IPv6 Gateway and IPv6 DNS Server fields are 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

☐ 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

PC2

Physical Config Desktop Programming Attributes

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

Physical Config Desktop Programming Attributes

IP Configuration

IP Configuration

DHCP

☒ Static

IP Address

172.21.10.1

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



Physical Config Desktop Programme 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:C9F:F47A:685A

IPv6 Gateway

IPv6 DNS Server

PC 5

Physical Config Desktop Programming Attributes

IP Configuration

IPConfigurateur

DHCP

☒ Static

IP Address 172.21.60.1
Subnet Mask 255.255.255.0
Default Gateway 171.31.80.60
DNS Server 0.0.0.0

IPv6 Configuration

@ DHCP

☐ Auto Config

☒ Static

IPv6 Address
Link Local Address FE80::2E0:B0FF:FE11:8Z2A
IPv6 Gateway
IPv6 DNS Server

PC6

Physical Config Desktop Programming Attributes

IP Configuration

IP Configurator

DHCP

☒ Static

IP Address 172.21.70.1
Subnet Mask 255.255.255.0
Default Gateway 1
DNS Server 0.0.0.0

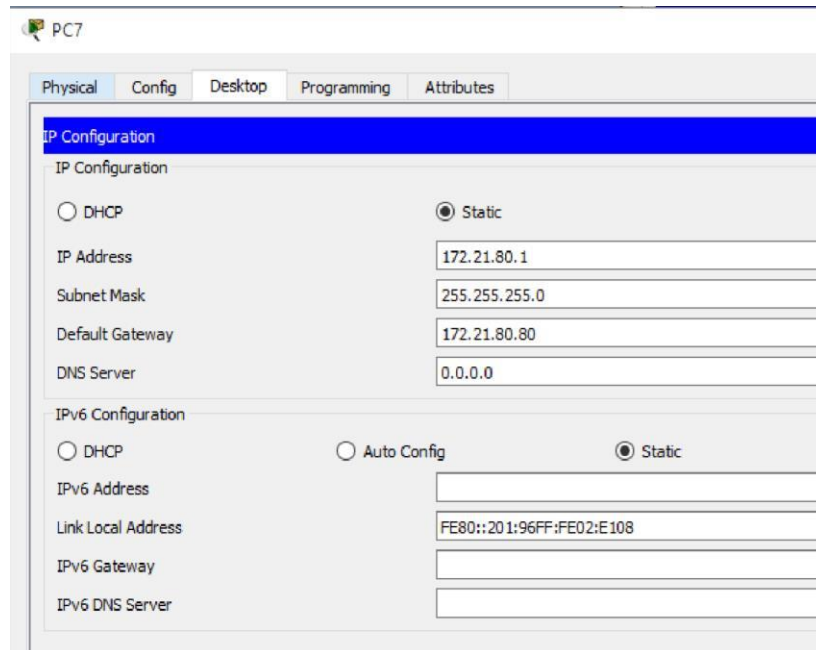
IPv6 Configuration

DHCP

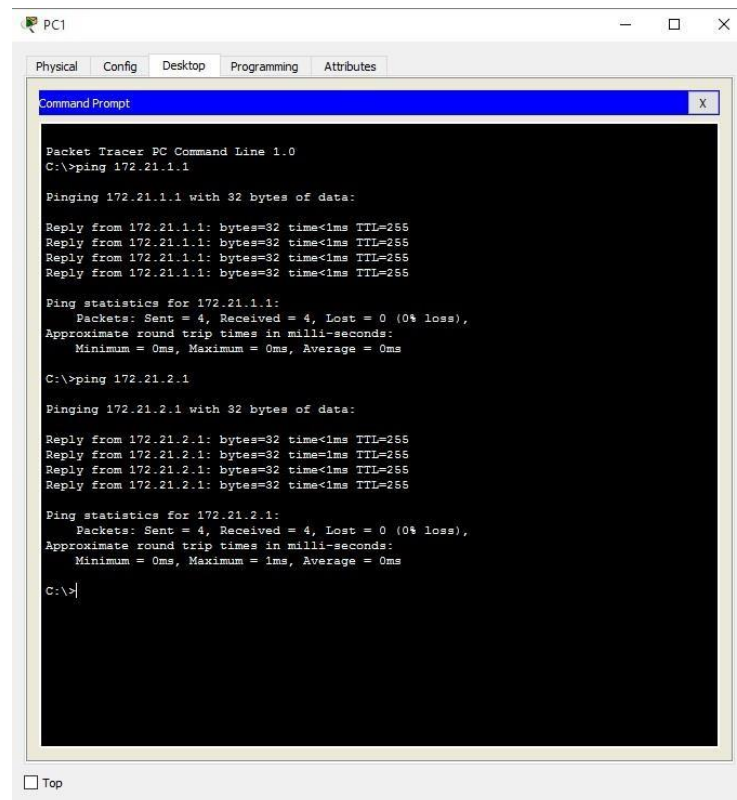
☐ Auto Config

☒ Static

IPv6 Address
Link Local Address FE00::Z01:43ff:FEE0:4DBE
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 172.21.50.0 255.255.255.0 172.21.3.2
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
```

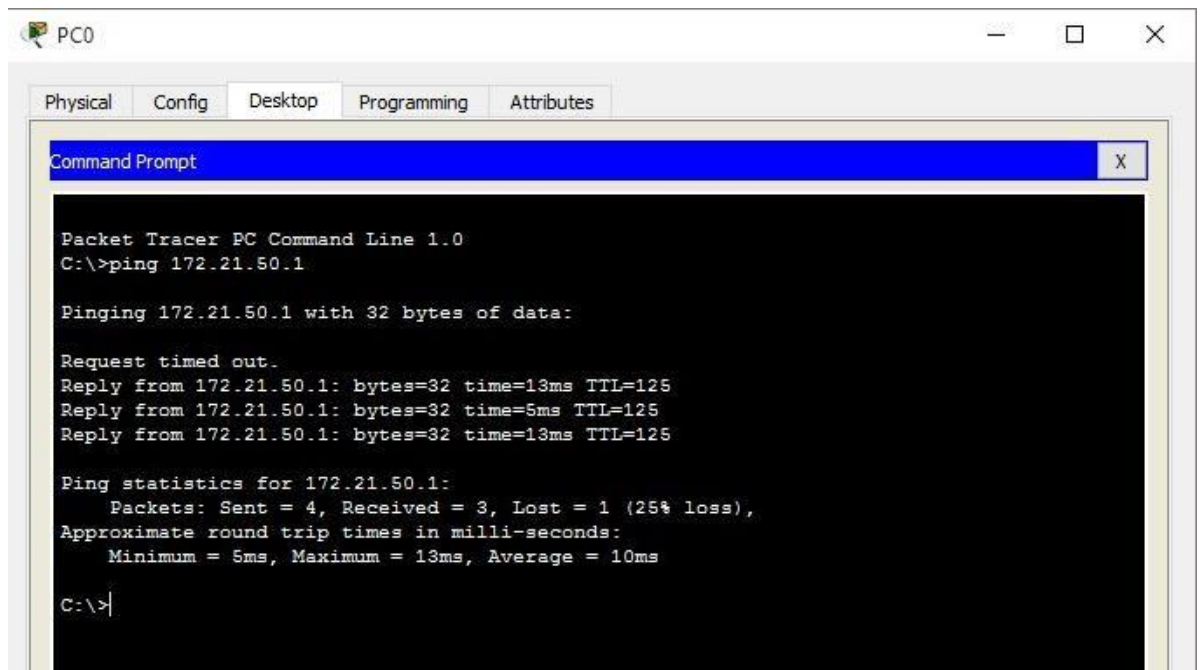
- Tiger

```
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 172.21.70.0 255.255.255.0 172.21.4.2
Router(config)#ip route 172.21.80.0 255.255.255.0 172.21.4.2
```

- Jaguar

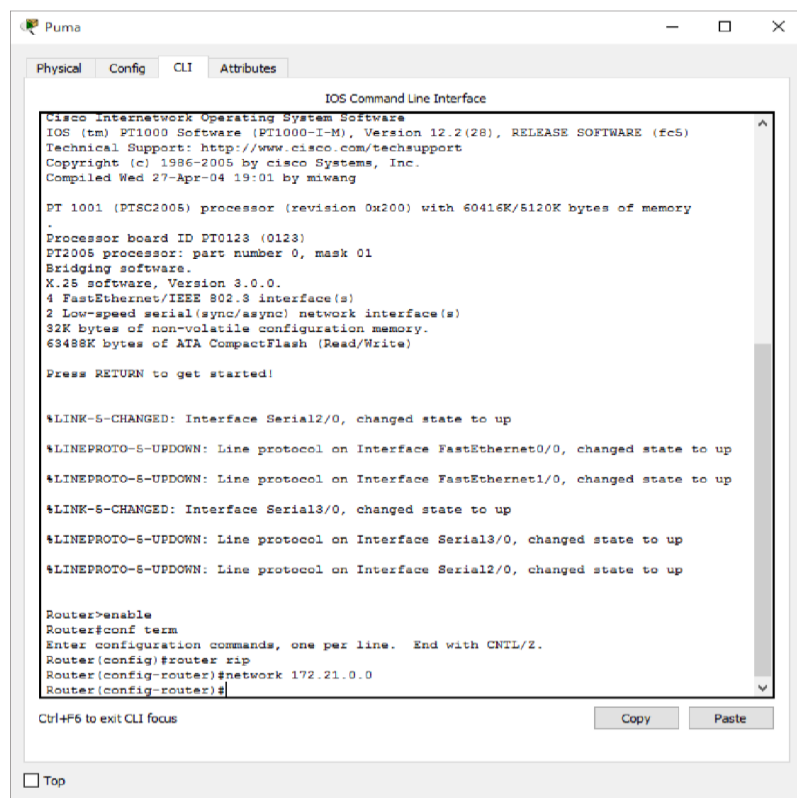
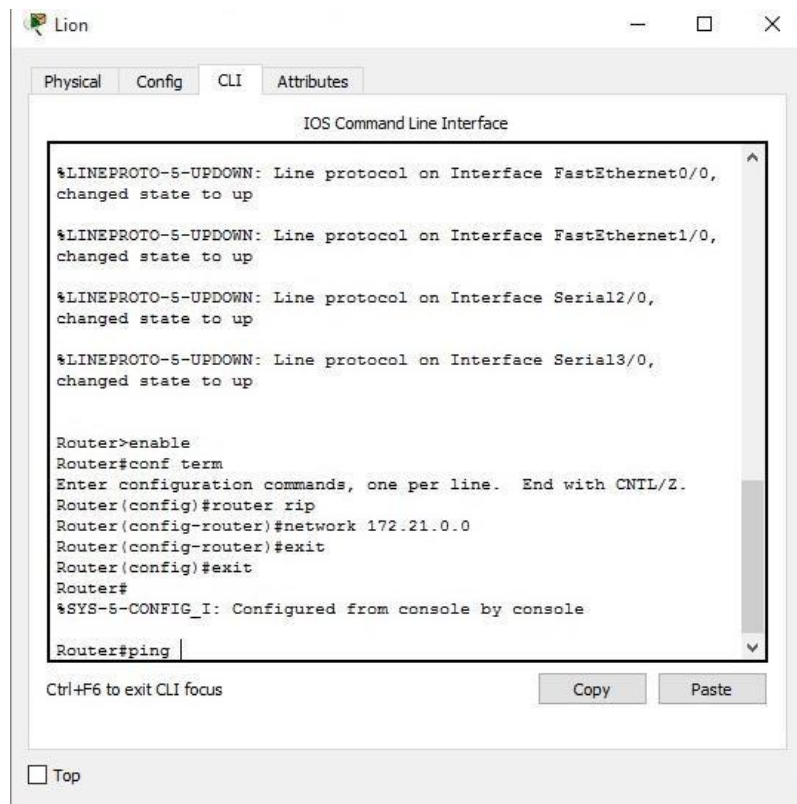
```
Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.21.10.0 255.255.255.0 172.21.2.1
Router(config)#ip route 172.21.20.0 255.255.255.0 172.21.2.1
Router(config)#ip route 172.21.30.0 255.255.255.0 172.21.2.1
Router(config)#ip route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

6. Melakukan dari PC 0 ke PC 4



RIP

Melakukan konfigurasi ip dan routing




```
PFIOOt<yIWC&Oot> zvu**vr eviiunO*&OO>*i<h&O<1IZ/S1&OHby< uC      z
Pnoc*sio bo» a Io Pious <Qie;
```

```
a3*88xsys.so**iAcomeactriasn<*eaa,**iEe,
```

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

```
znzer conrigurasion comaanas. one per iine. znd vizh cNTr,z.
```

Physical Cuufig CLT Attrdutes

```
(3183d bytes oi ATA OampaccFlash !âead/Jrise.'
Lissa I•ID2N to ger ssartsd!

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

$LIN.4-e - C3A H0x 2: Int ex i*ce Sex ia lz / 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

8LIN]D20TO-t-OEDOW: Line protocol on Interiaee ferial3.0, :haogeu state to up

4LIW:£10I0-t-U£DO?T: Line protocol cn Interface Serial*,0, changed state to up

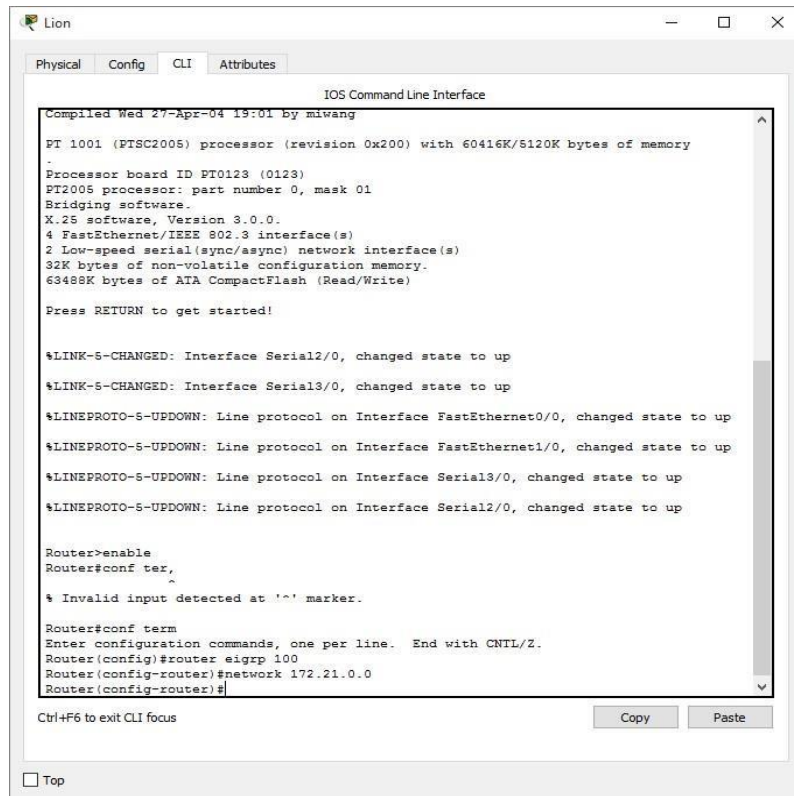
:otsr cenriguratizn command , one per lies. :nd with OW[/Z
2ouior(cooIig)lioutsr rip
aouze<lcoc:ig-:oucer:'*nec«o<2 1?2.21.0.0
```

Ctrl+F6 to exit CLI focus

Copy Paste

IGRP

Melakukan konfigurasi ip dan routing secara otomatis



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

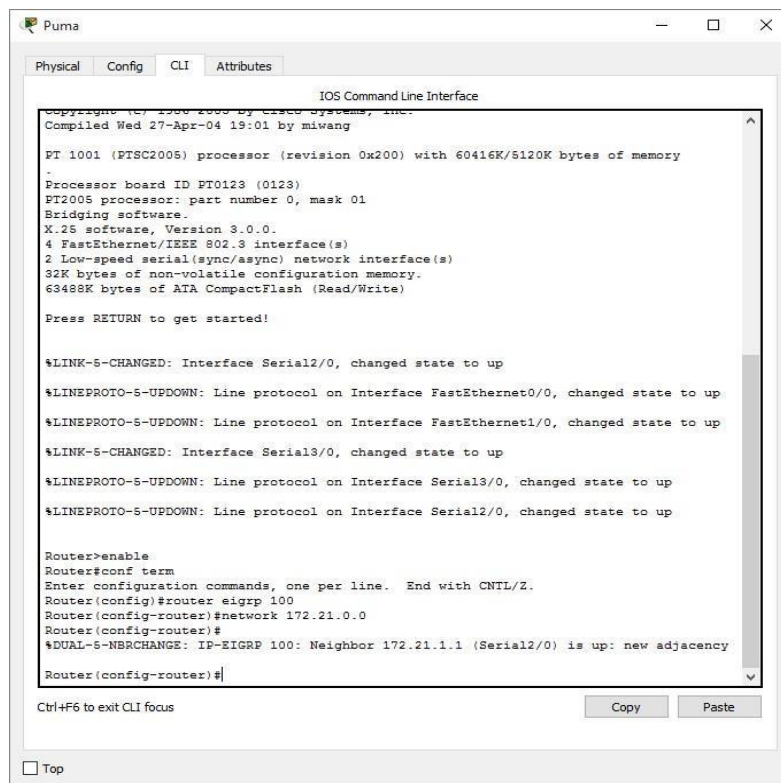
PT 1001 (PTSC2005) processor (revision 0x200) with 60416K/5120K bytes of memory
.
Processor board ID FT0123 (0123)
PT2005 processor: part number 0, mask 01
Bridging software.
X.25 software, Version 3.0.0.
4 FastEthernet/IEEE 802.3 interface(s)
2 Low-speed serial(sync/async) network interface(s)
32K bytes 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)#
```




```
Copyright 1986-2000 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 FT0123 (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)#
```

 Tiger○ X

```
tLDK-SCf1ZFGE0: mrs:*are Siia2/0, changed uYve â up

Alf1T8Dt0T0-8-0OD0WN: Lioe protocol on Imsu**ace Fast2:hemet0/0, changed 9tace ze up

tLIHEPA0C0-5-DPD0YH: Line protccol on Interface Fas2?zhernetI/0, changed srate te up

GLliE-S-CRANED: Int erfoce Serba13/0, changed state to up


%LI1KP2DI0-5-UP50WN: Lioe protocol on Imlezfacs Seial<70, cAaogeo #sats to up

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

Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.

2ouseiloonfig-routsr)@
%00AL-1-MB&CSANGZ: 1P-ZU&P ISO: Feigbbor i7.*1.2.1 lSerial0/0) is up: nev aojocency
```

Ctrl+F6 to exit CLI focusCopyPaste

 Jaguar○ X

IOS Comimd One Intr <e

```
HH I—S—AND: Interface fl erxa l3/9, changed at ate co up

iIlmPROIO—G—DPfDiif: Line protcnl nn Incex la ce FascEthemec0/0, changed state to up

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

ifn•RPROIO—S—0TfDiif: Line procncl nn Incex Care Serials/0, changed state cr up

II lItE PROMO-G -IJ P00If : twine protocol on Intex f-a ce Serial3/0, changed s to be tn up

2ouc ezenable

?nter configuration commands, one psr lins. Znd vib6 ClKL/2.

Router(config-router)#
1DUAL-S-fIBACKAEG?: IV-?1f12V lf10' Neighbor 172.21.4.1 lSerial2/0) is up: new adjaceocy

t00U-5-XB8CIfA : I9-*IG2g 19 0 : Cei gbboz 17x . xl. x . L l 5ez1a13/0\ is ug: nev adj agency

Router(config-router)
```

@ Top