

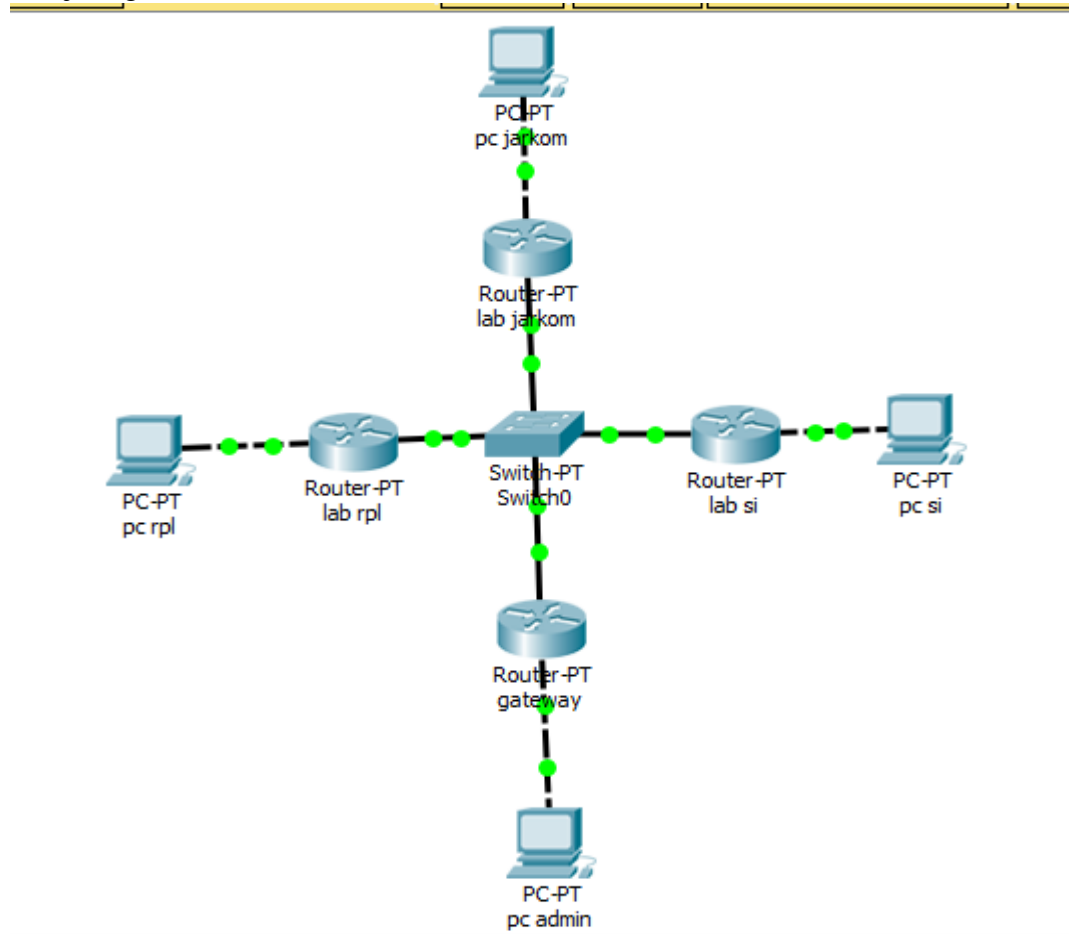
NAMA : KHAIRUL NOVIYANTI
NIM : L200170178
KELAS : D

Praktikum Jaringan Komputer

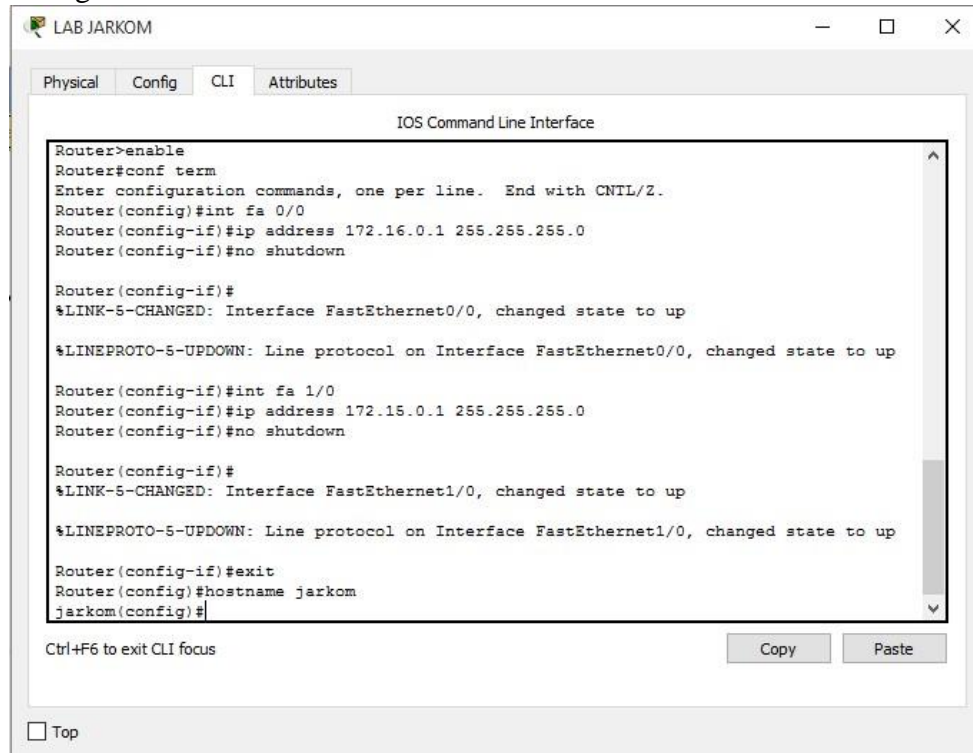
Tugas Modul 11

NOMOR 1

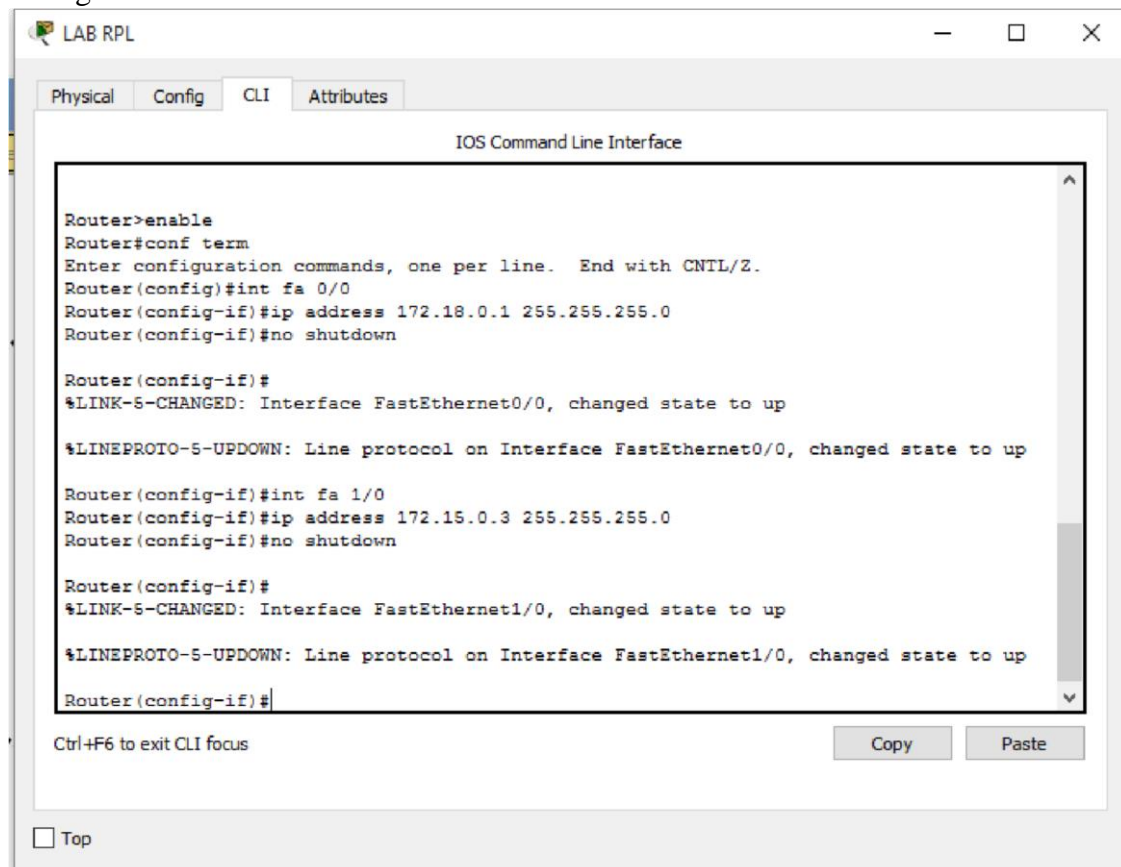
1. Desain jaringan



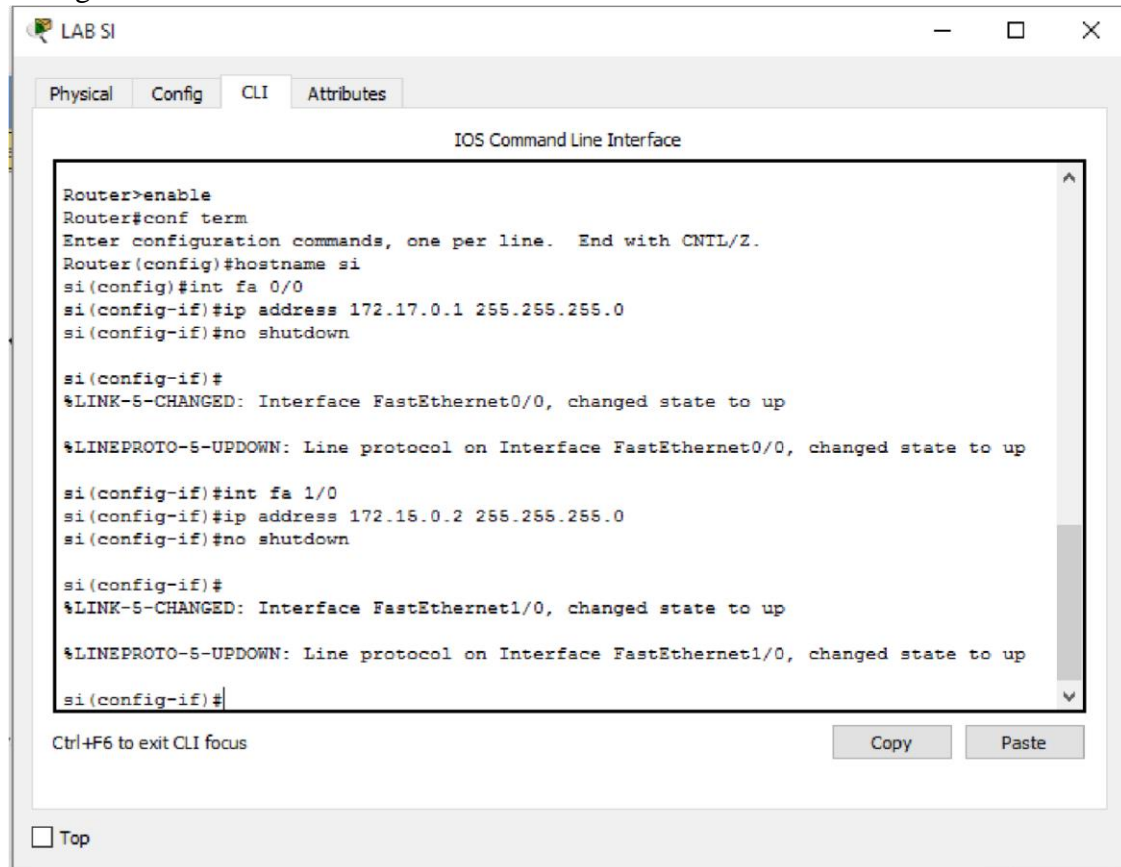
2. Konfigurasi Router Jarkom



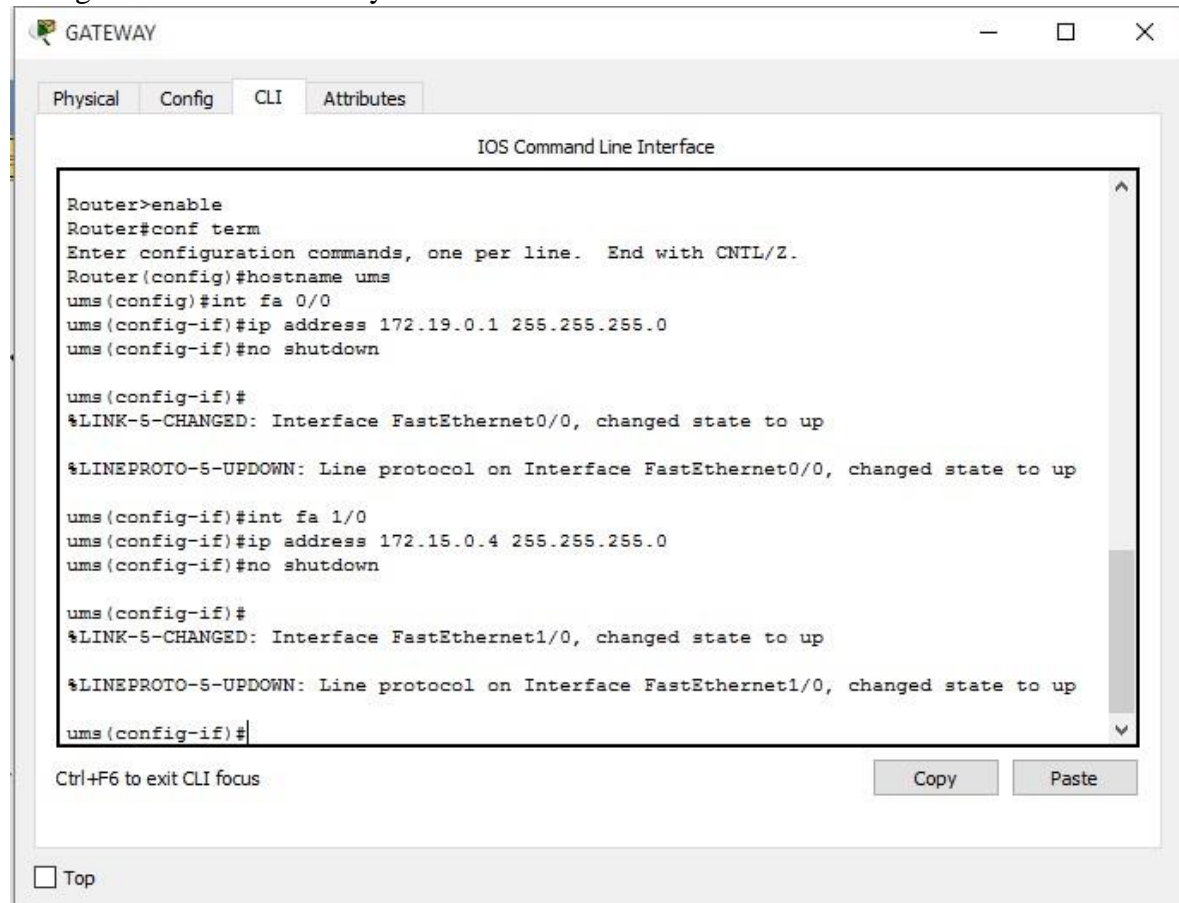
3. Konfigurasi Router RPL



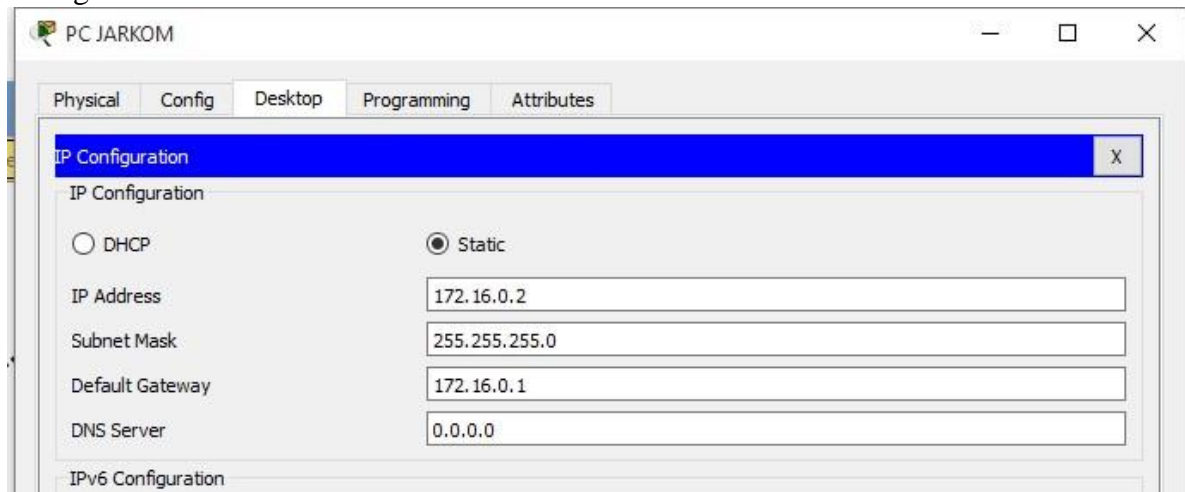
4. Konfigurasi Router SI



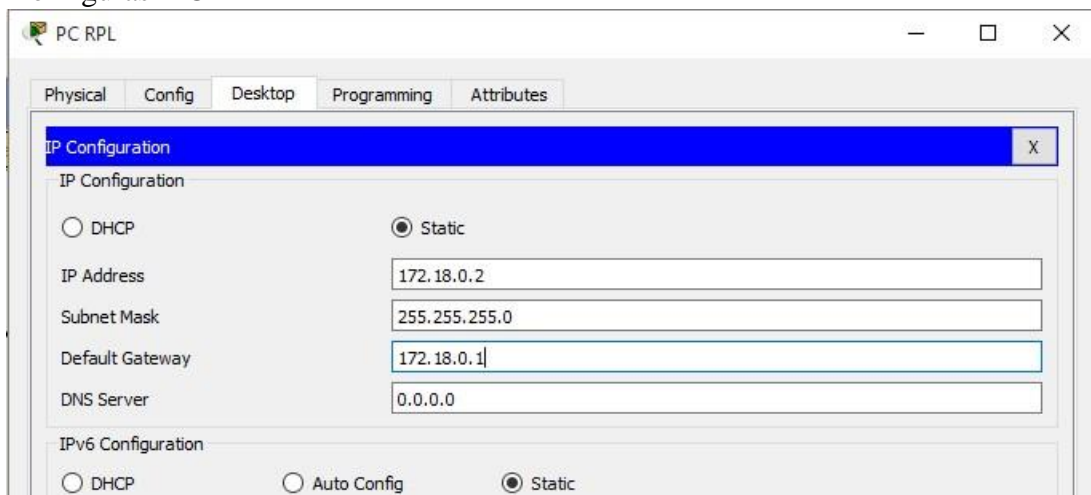
5. Konfigurasi Router Gatewaay



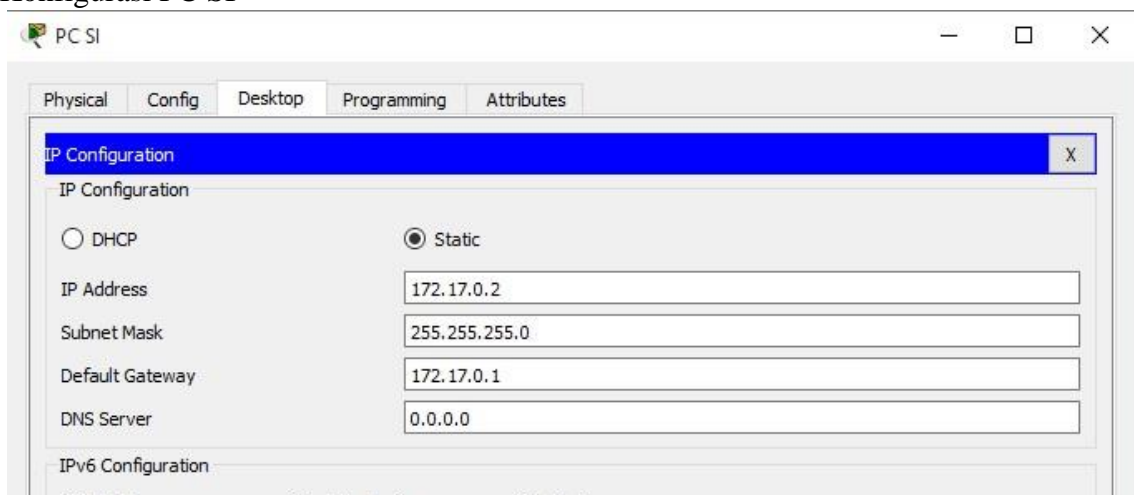
6. Konfigurasi PC Jarkom



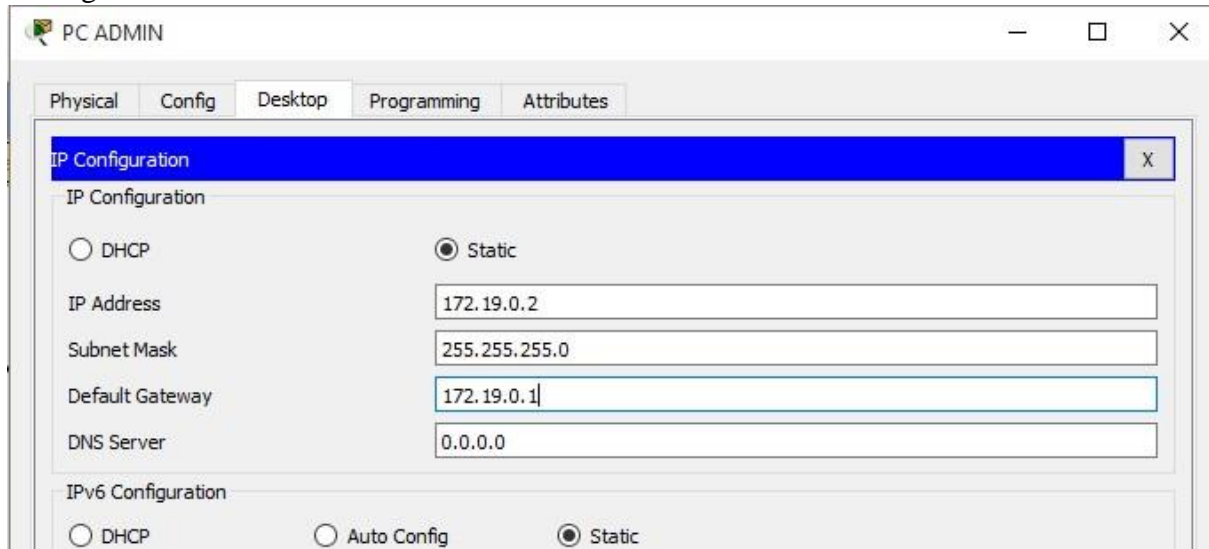
7. Konfigurasi PC RPL



8. Konfigurasi PC SI



9. Konfigurasi PC Admin



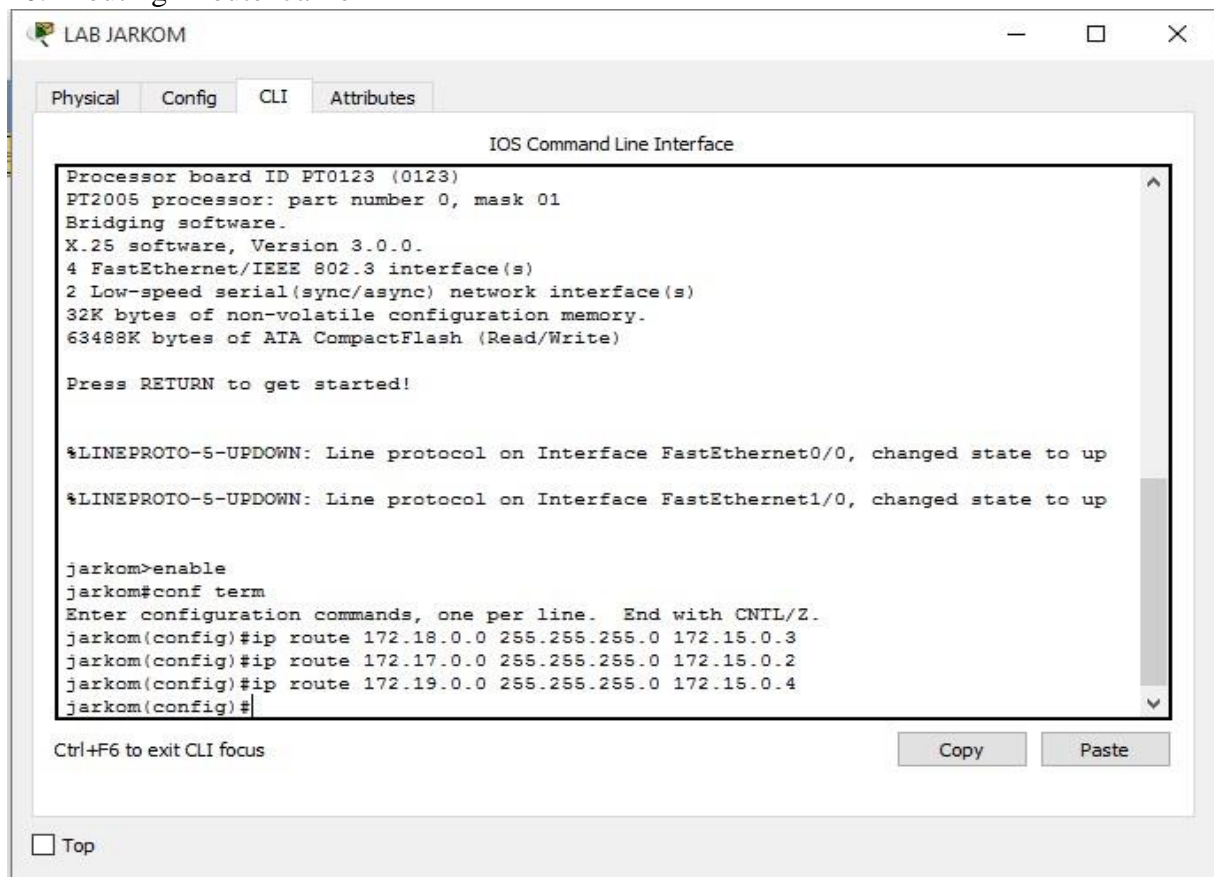
The screenshot shows the 'PC ADMIN' window with the 'Config' tab selected. The 'IP Configuration' section is active, displaying the following settings:

- ☐ DHCP
- ☒ Static
- IP Address: 172.19.0.2
- Subnet Mask: 255.255.255.0
- Default Gateway: 172.19.0.1
- DNS Server: 0.0.0.0

Below the IP Configuration section, the 'IPv6 Configuration' section is visible with the following settings:

- ☐ DHCP
- ☐ Auto Config
- ☒ Static

10. Routing – router Jarkom



The screenshot shows the 'LAB JARKOM' window with the 'CLI' tab selected. The 'IOS Command Line Interface' is displayed, showing the following text:

```
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)

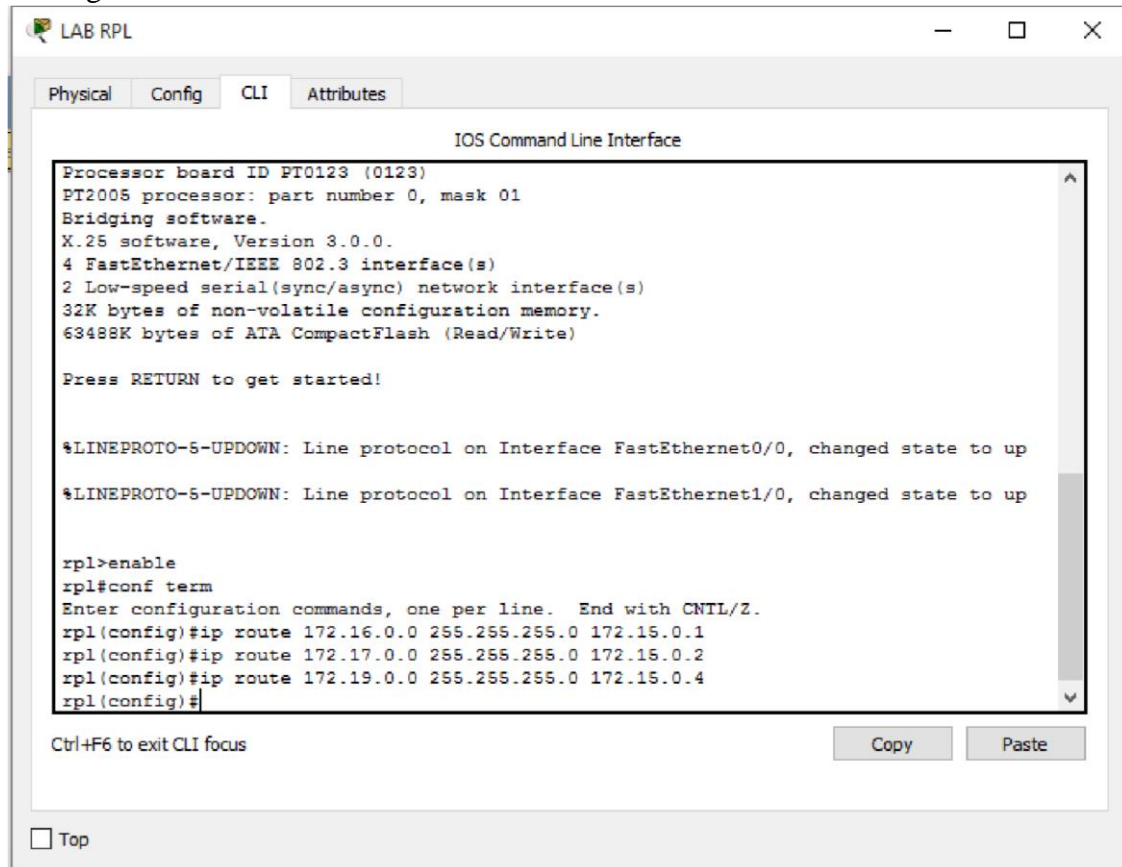
Press RETURN to get started!

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

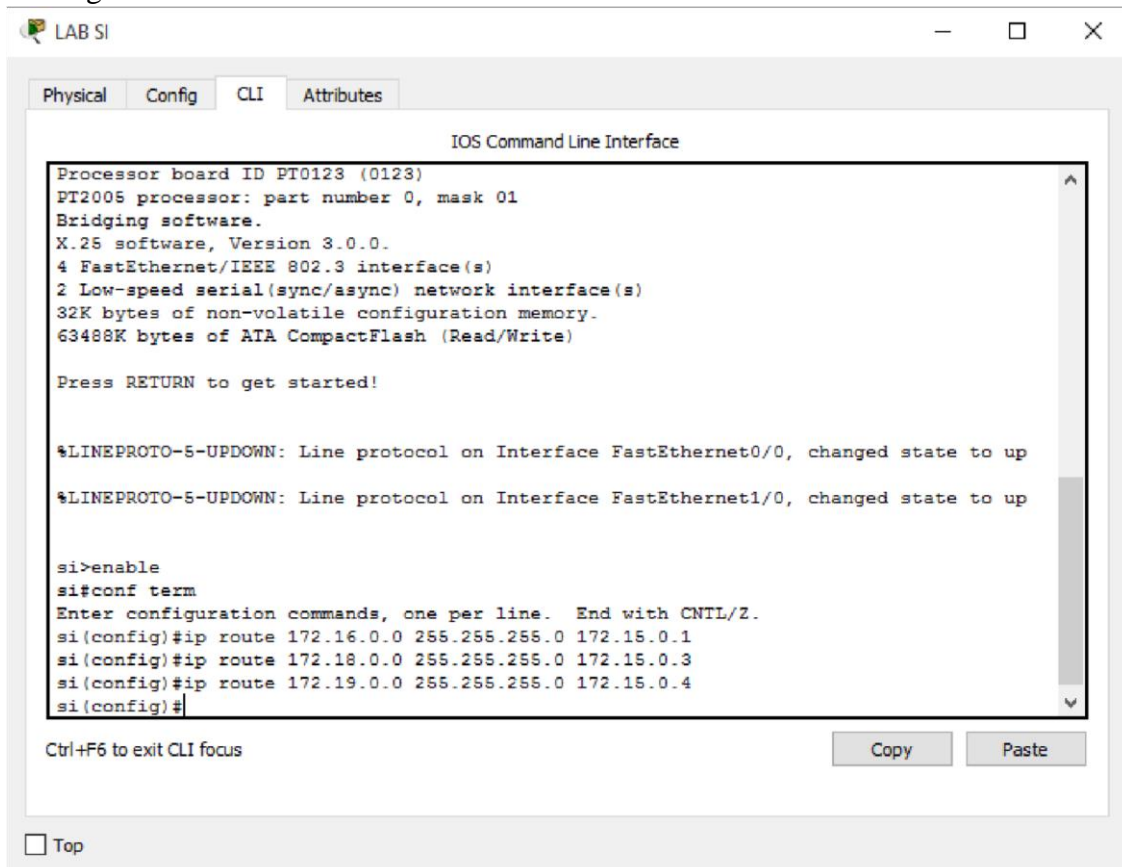
jarkom>enable
jarkom#conf term
Enter configuration commands, one per line. End with CNTL/Z.
jarkom(config)#ip route 172.18.0.0 255.255.255.0 172.15.0.3
jarkom(config)#ip route 172.17.0.0 255.255.255.0 172.15.0.2
jarkom(config)#ip route 172.19.0.0 255.255.255.0 172.15.0.4
jarkom(config)#
```

At the bottom of the window, there is a 'Ctrl+F6 to exit CLI focus' message and two buttons: 'Copy' and 'Paste'.

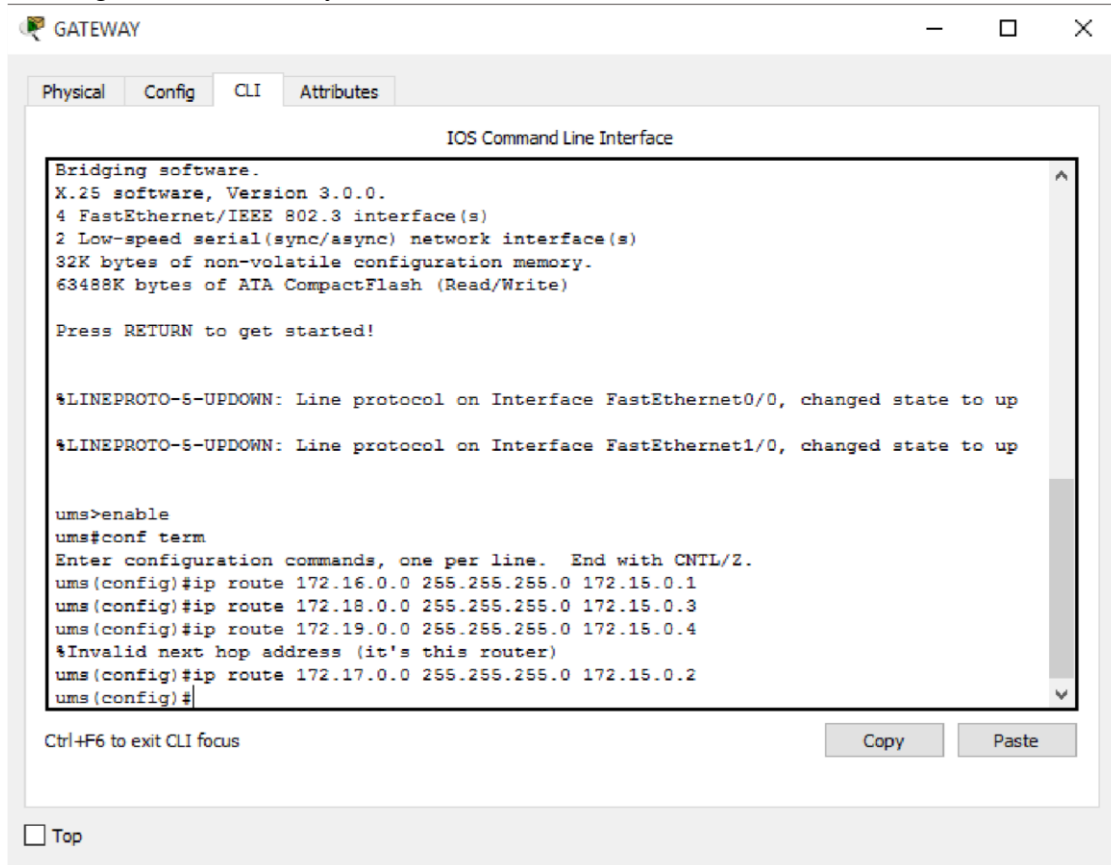
11. Routing – router RPL



12. Routing – router SI



13. Routing – router Gateway

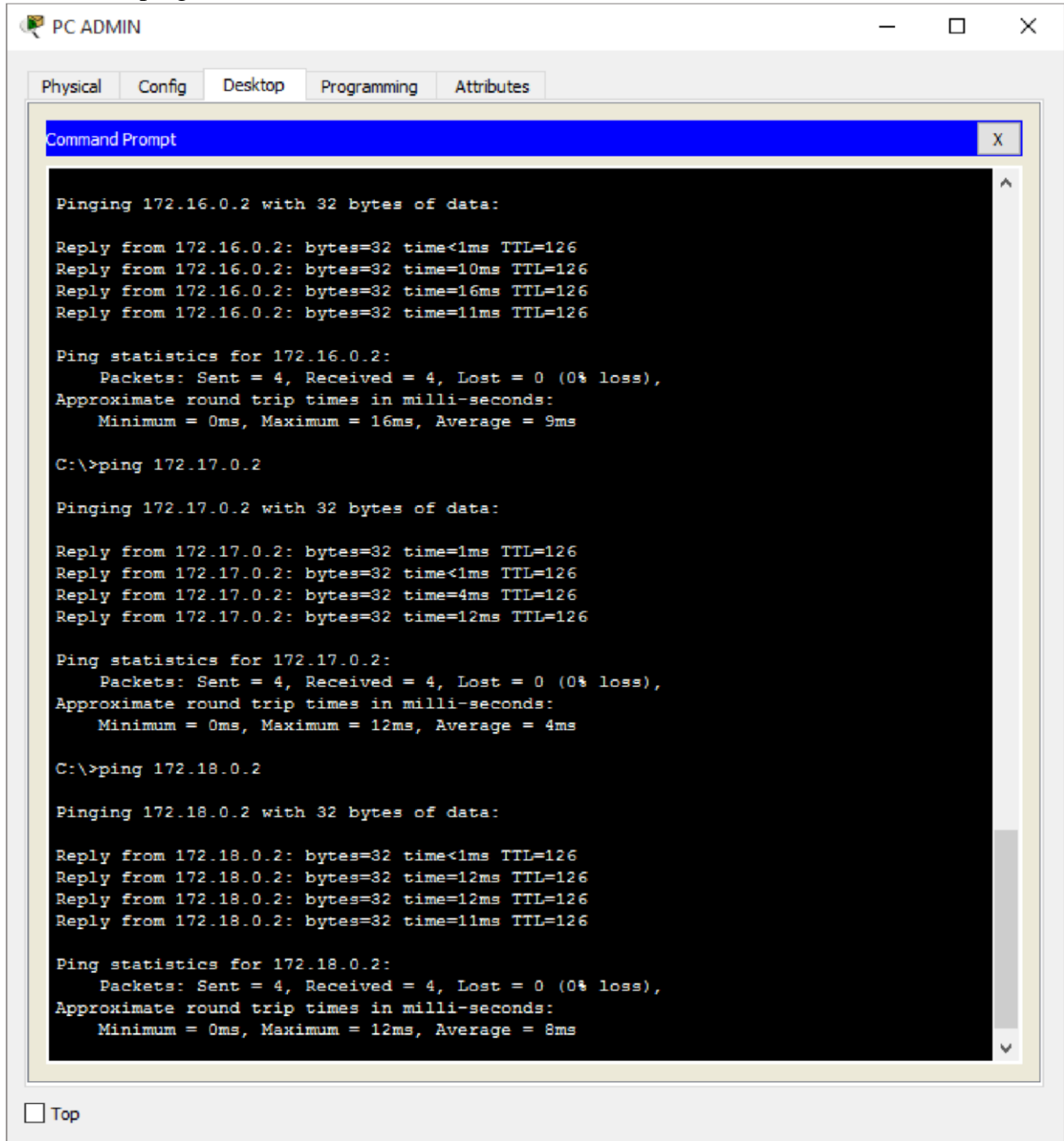


The screenshot shows a window titled "GATEWAY" with a standard Windows-style title bar (minimize, maximize, close buttons). Inside the window, there are four tabs: "Physical", "Config", "CLI", and "Attributes". The "CLI" tab is currently selected. The main content area is titled "IOS Command Line Interface" and contains a text box with the following text:

```
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  
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up  
  
ums>enable  
ums#conf term  
Enter configuration commands, one per line. End with CNTL/Z.  
ums(config)#ip route 172.16.0.0 255.255.255.0 172.15.0.1  
ums(config)#ip route 172.18.0.0 255.255.255.0 172.15.0.3  
ums(config)#ip route 172.19.0.0 255.255.255.0 172.15.0.4  
%Invalid next hop address (it's this router)  
ums(config)#ip route 172.17.0.0 255.255.255.0 172.15.0.2  
ums(config)#
```

Below the text box, there is a 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" which is currently unchecked.

14. Melakukan ping



The screenshot shows a window titled "PC ADMIN" with tabs for "Physical", "Config", "Desktop", "Programming", and "Attributes". The "Desktop" tab is active, displaying a "Command Prompt" window. The Command Prompt shows the results of three ping commands executed from the C:\> directory.

```
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=10ms TTL=126
Reply from 172.16.0.2: bytes=32 time=16ms TTL=126
Reply from 172.16.0.2: bytes=32 time=11ms 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 = 16ms, Average = 9ms

C:\>ping 172.17.0.2

Pinging 172.17.0.2 with 32 bytes of data:

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=4ms TTL=126
Reply from 172.17.0.2: bytes=32 time=12ms TTL=126

Ping statistics for 172.17.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 12ms, Average = 4ms

C:\>ping 172.18.0.2

Pinging 172.18.0.2 with 32 bytes of data:

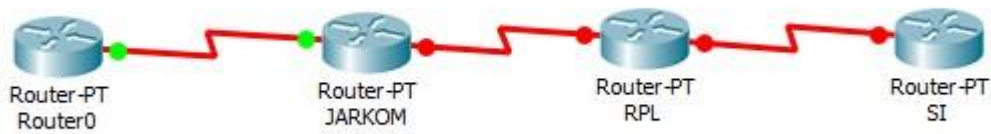
Reply from 172.18.0.2: bytes=32 time<1ms TTL=126
Reply from 172.18.0.2: bytes=32 time=12ms TTL=126
Reply from 172.18.0.2: bytes=32 time=12ms TTL=126
Reply from 172.18.0.2: bytes=32 time=11ms TTL=126

Ping statistics for 172.18.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 12ms, Average = 8ms
```

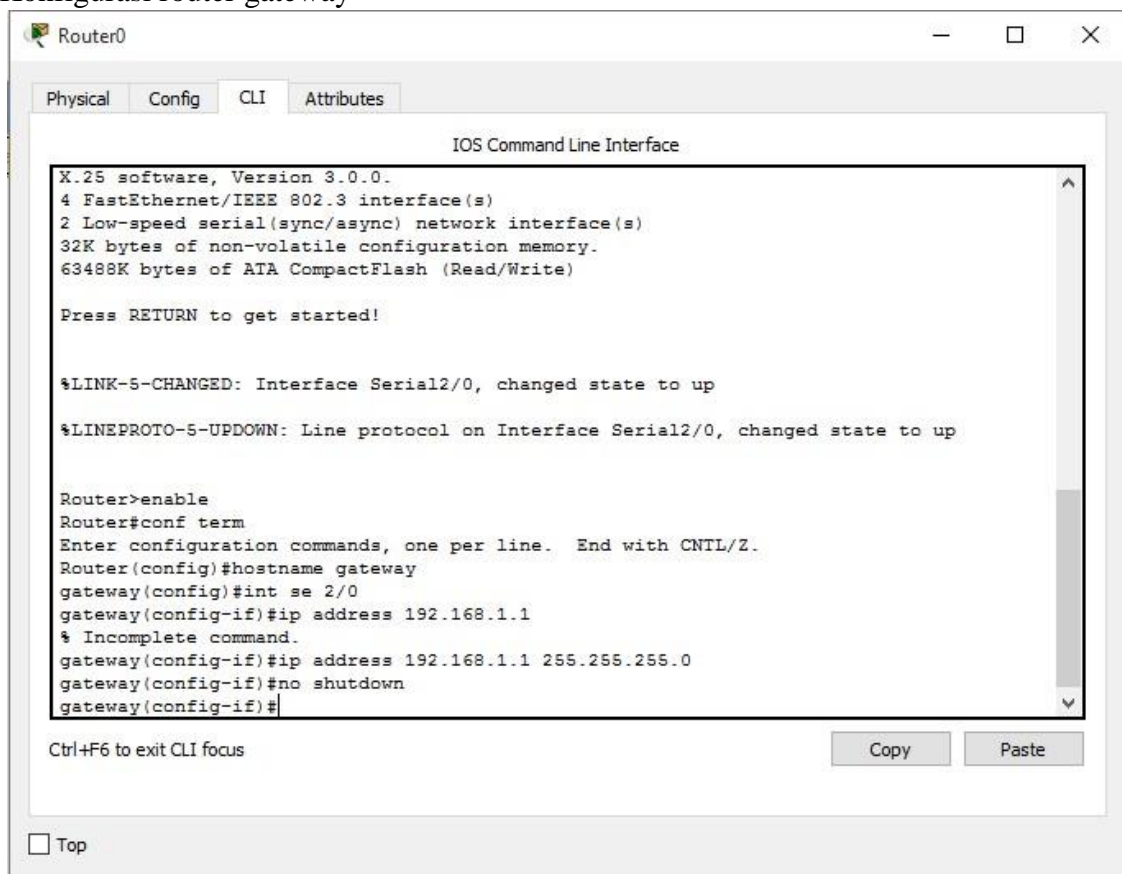
At the bottom left of the PC ADMIN window, there is a checkbox labeled "Top".

NOMOR 2 – STATIC

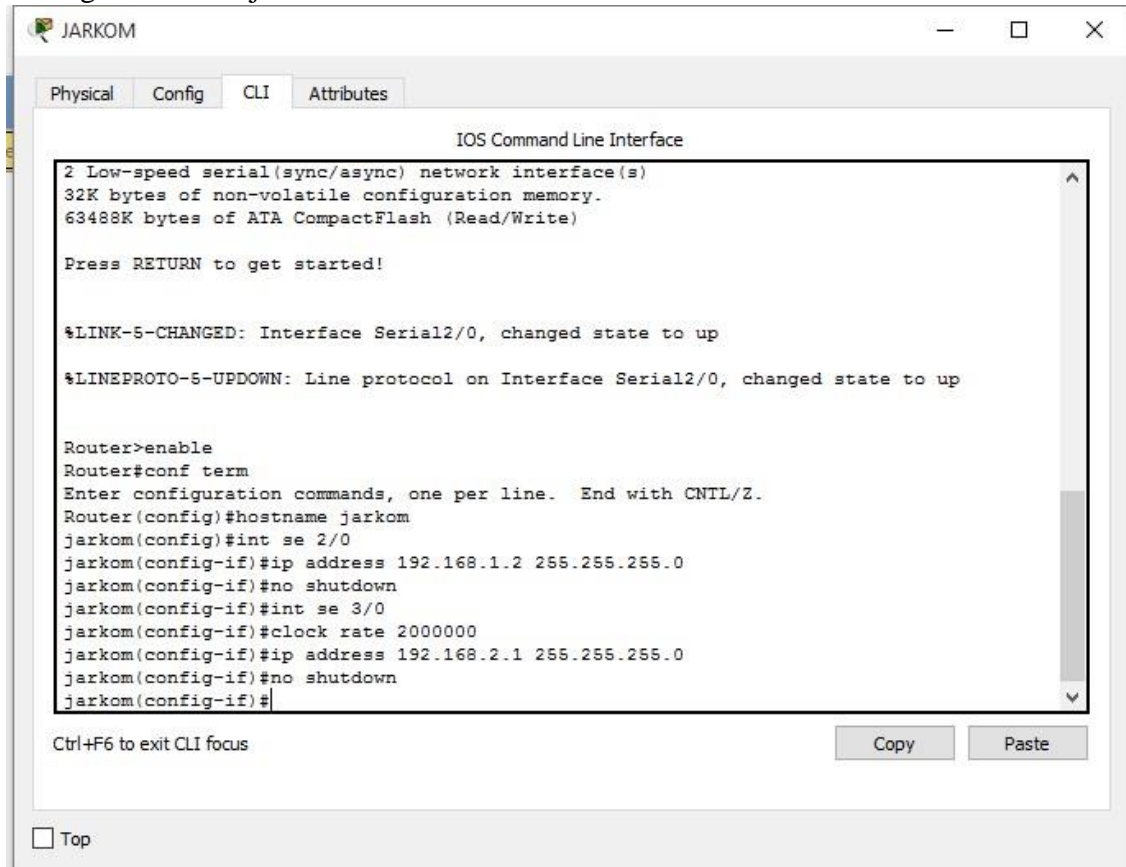
1. Desain jaringan



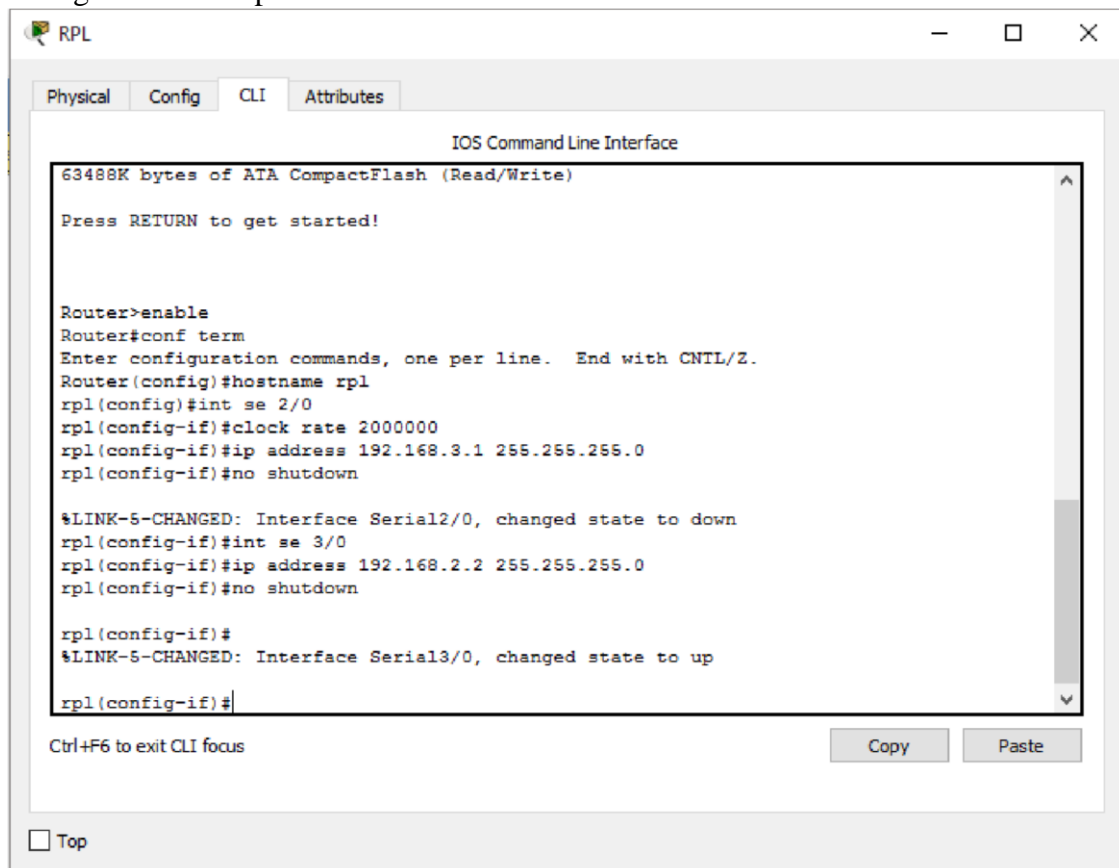
2. Konfigurasi router gateway



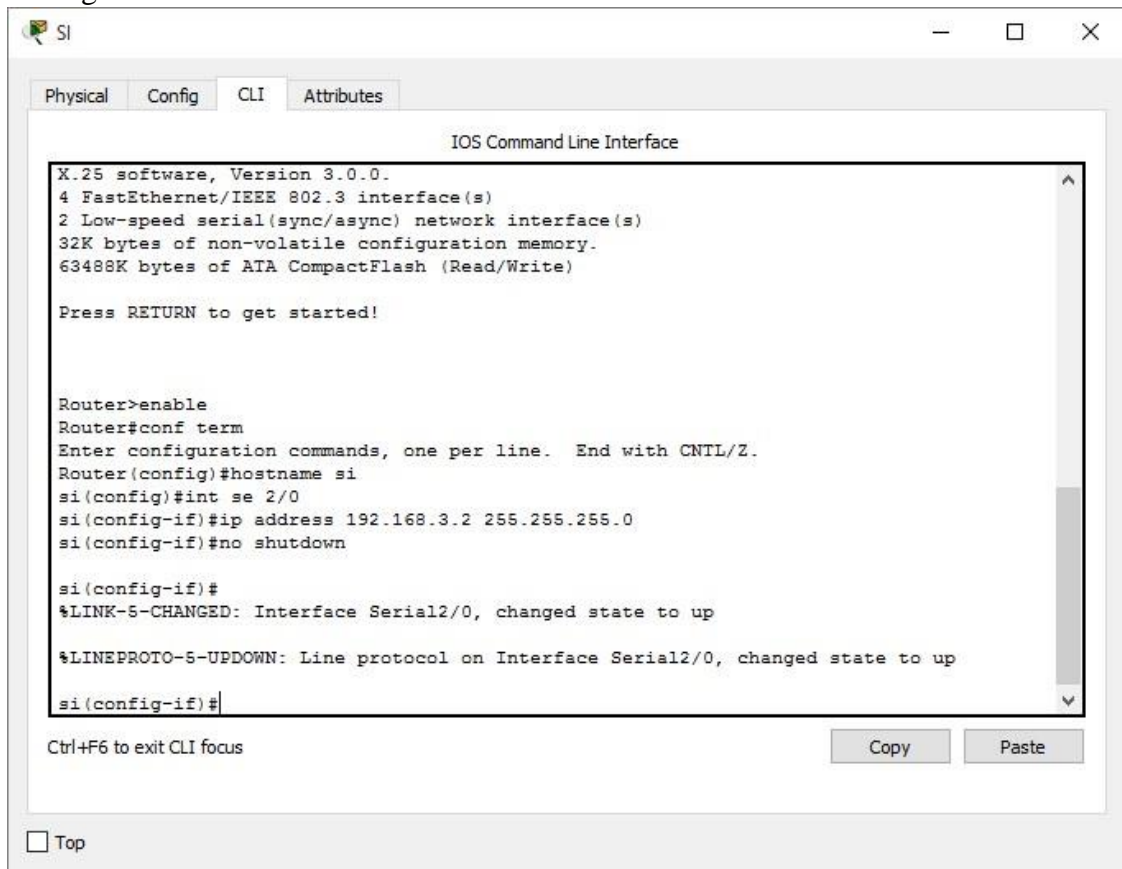
3. Konfigurasi router jarkom



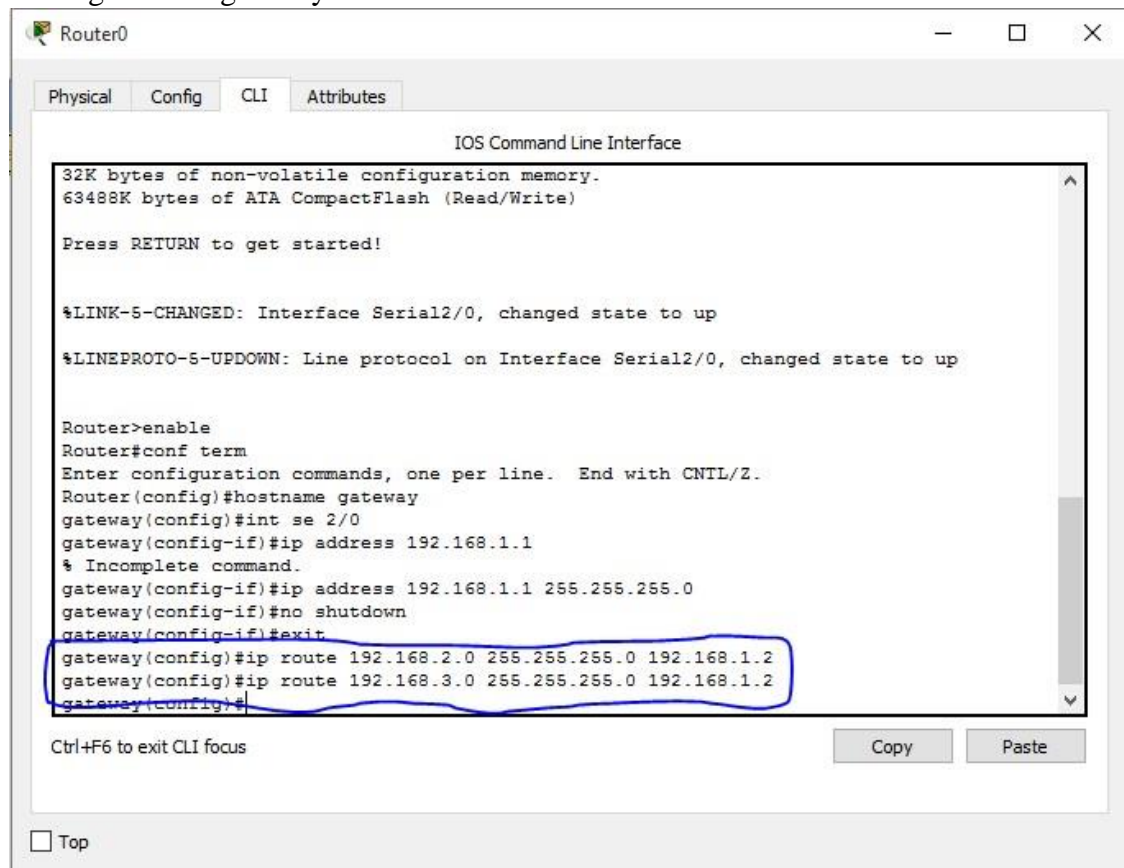
4. Konfigurasi router rpl



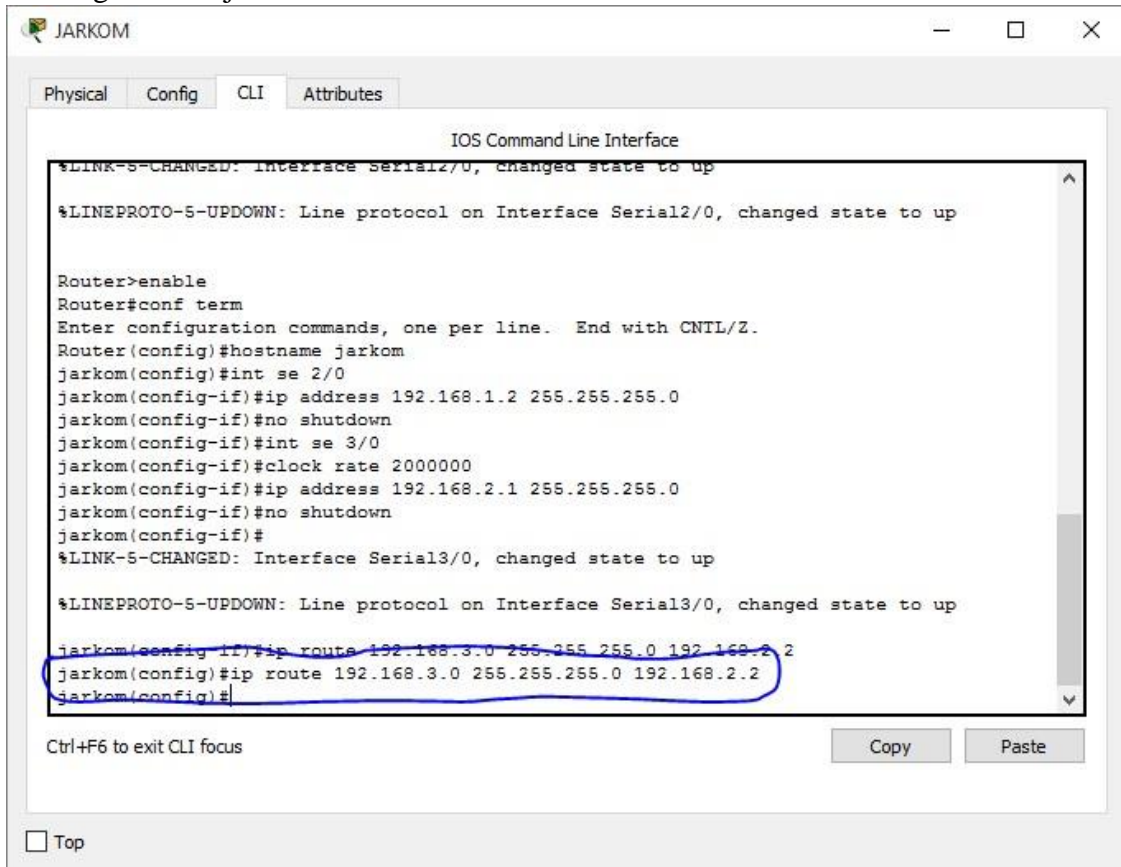
5. Konfigurasi router si



6. Routing – router gateway



7. Routing – router jarkom



The screenshot shows the JARKOM router CLI interface. The window title is "JARKOM". The tabs are "Physical", "Config", "CLI", and "Attributes". The "CLI" tab is selected, and the title bar says "IOS Command Line Interface". The terminal output shows the following commands and responses:

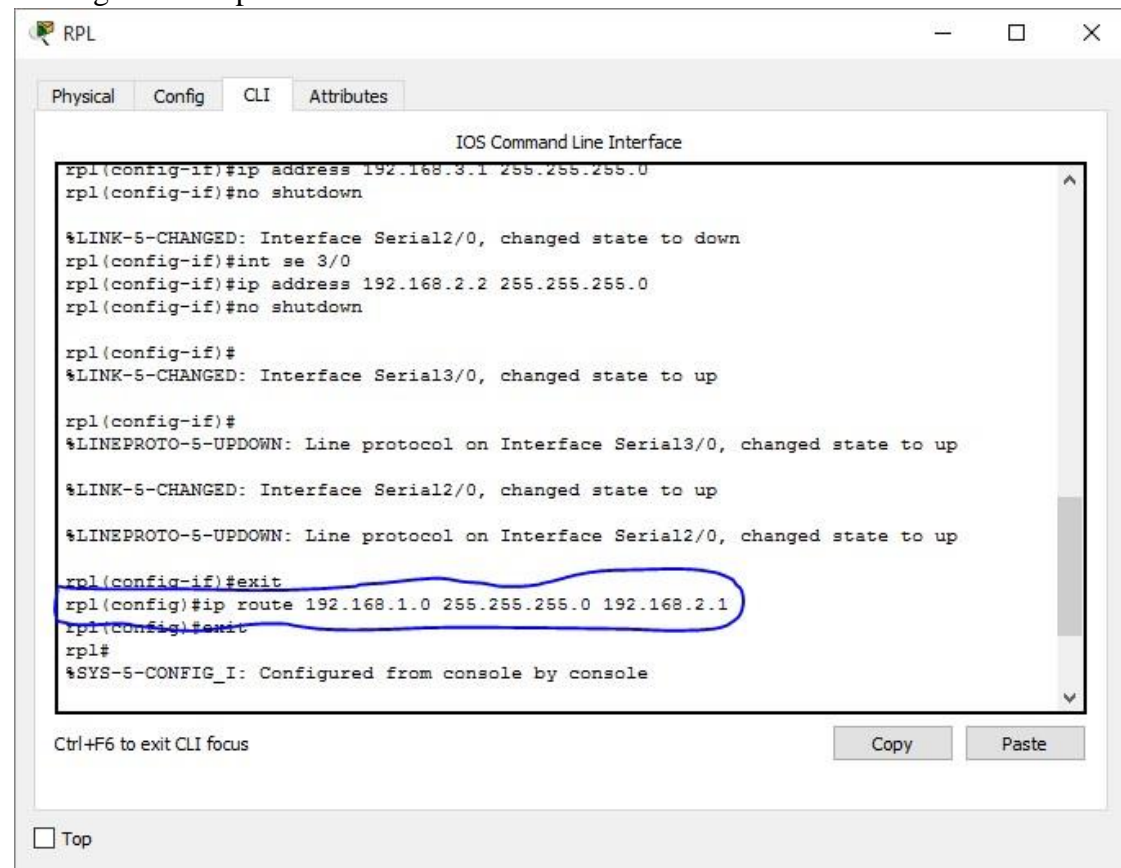
```
%LINK-5-CHANGED: Interface Serial2/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up

Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTRL/Z.
Router(config)#hostname jarkom
jarkom(config)#int se 2/0
jarkom(config-if)#ip address 192.168.1.2 255.255.255.0
jarkom(config-if)#no shutdown
jarkom(config-if)#int se 3/0
jarkom(config-if)#clock rate 2000000
jarkom(config-if)#ip address 192.168.2.1 255.255.255.0
jarkom(config-if)#no shutdown
jarkom(config-if)#
%LINK-5-CHANGED: Interface Serial3/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up

jarkom(config-if)#ip route 192.168.3.0 255.255.255.0 192.168.2.2
jarkom(config)#ip route 192.168.3.0 255.255.255.0 192.168.2.2
jarkom(config)#
```

At the bottom, there is a "Ctrl+F6 to exit CLI focus" message and "Copy" and "Paste" buttons. A "Top" button is also visible at the bottom left.

8. Routing – router rpl



The screenshot shows the RPL router CLI interface. The window title is "RPL". The tabs are "Physical", "Config", "CLI", and "Attributes". The "CLI" tab is selected, and the title bar says "IOS Command Line Interface". The terminal output shows the following commands and responses:

```
rpl(config-if)#ip address 192.168.3.1 255.255.255.0
rpl(config-if)#no shutdown

%LINK-5-CHANGED: Interface Serial2/0, changed state to down
rpl(config-if)#int se 3/0
rpl(config-if)#ip address 192.168.2.2 255.255.255.0
rpl(config-if)#no shutdown

rpl(config-if)#
%LINK-5-CHANGED: Interface Serial3/0, changed state to up

rpl(config-if)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up

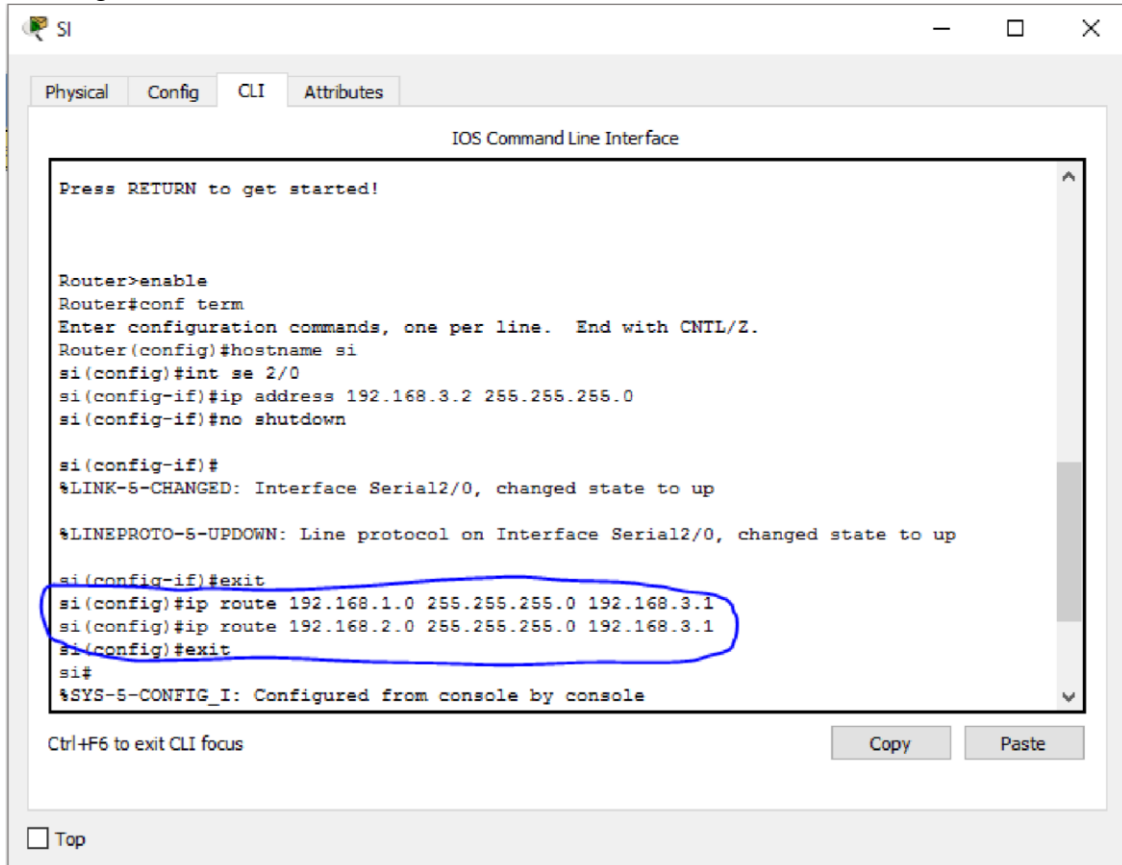
%LINK-5-CHANGED: Interface Serial2/0, changed state to up

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

rpl(config-if)#exit
rpl(config)#ip route 192.168.1.0 255.255.255.0 192.168.2.1
rpl(config)#exit
rpl#
%SYS-5-CONFIG_I: Configured from console by console
```

At the bottom, there is a "Ctrl+F6 to exit CLI focus" message and "Copy" and "Paste" buttons. A "Top" button is also visible at the bottom left.

9. Routing – router si



The screenshot shows the CLI of a router named 'si'. The configuration process is as follows:

```
Router>enable
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname si
si(config)#int se 2/0
si(config-if)#ip address 192.168.3.2 255.255.255.0
si(config-if)#no shutdown

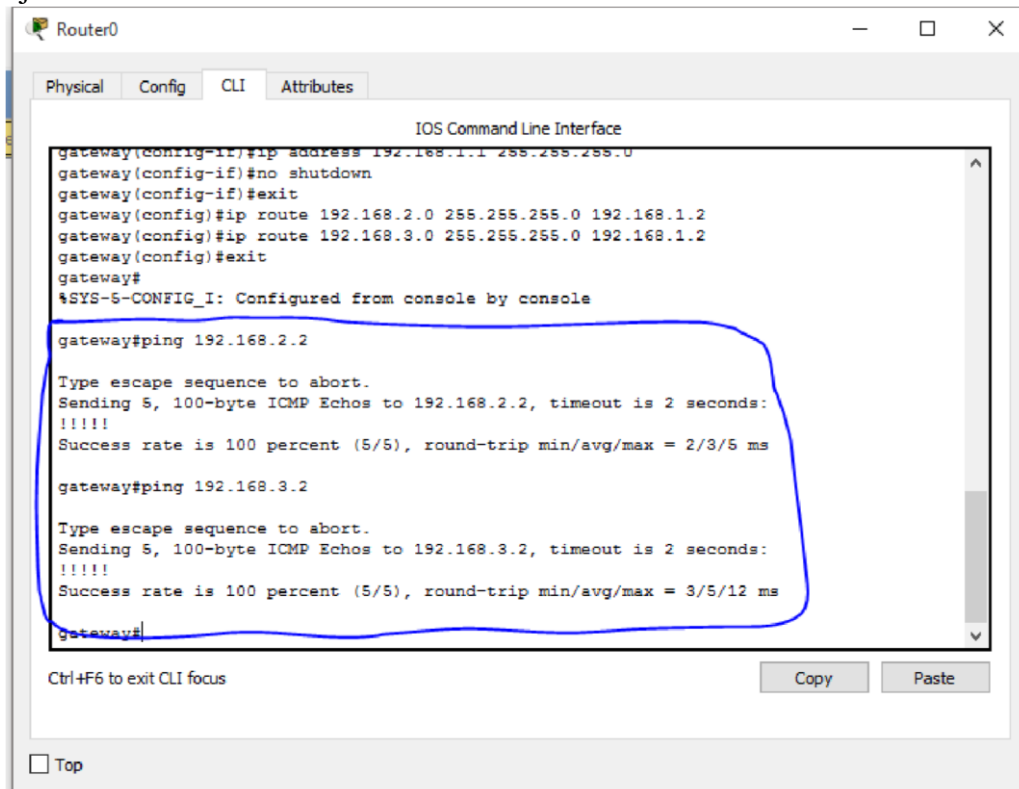
si(config-if)#
%LINK-5-CHANGED: Interface Serial2/0, changed state to up

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

si(config-if)#exit
si(config)#ip route 192.168.1.0 255.255.255.0 192.168.3.1
si(config)#ip route 192.168.2.0 255.255.255.0 192.168.3.1
si(config)#exit
si#
%SYS-5-CONFIG_I: Configured from console by console
```

Below the terminal window, there are buttons for 'Copy' and 'Paste', and a 'Top' link.

10. Uji konektivitas



The screenshot shows the CLI of a router named 'Gateway'. The configuration and testing process is as follows:

```
gateway(config-if)#ip address 192.168.1.1 255.255.255.0
gateway(config-if)#no shutdown
gateway(config-if)#exit
gateway(config)#ip route 192.168.2.0 255.255.255.0 192.168.1.2
gateway(config)#ip route 192.168.3.0 255.255.255.0 192.168.1.2
gateway(config)#exit
gateway#
%SYS-5-CONFIG_I: Configured from console by console

gateway#ping 192.168.2.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.2.2, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 2/3/5 ms

gateway#ping 192.168.3.2

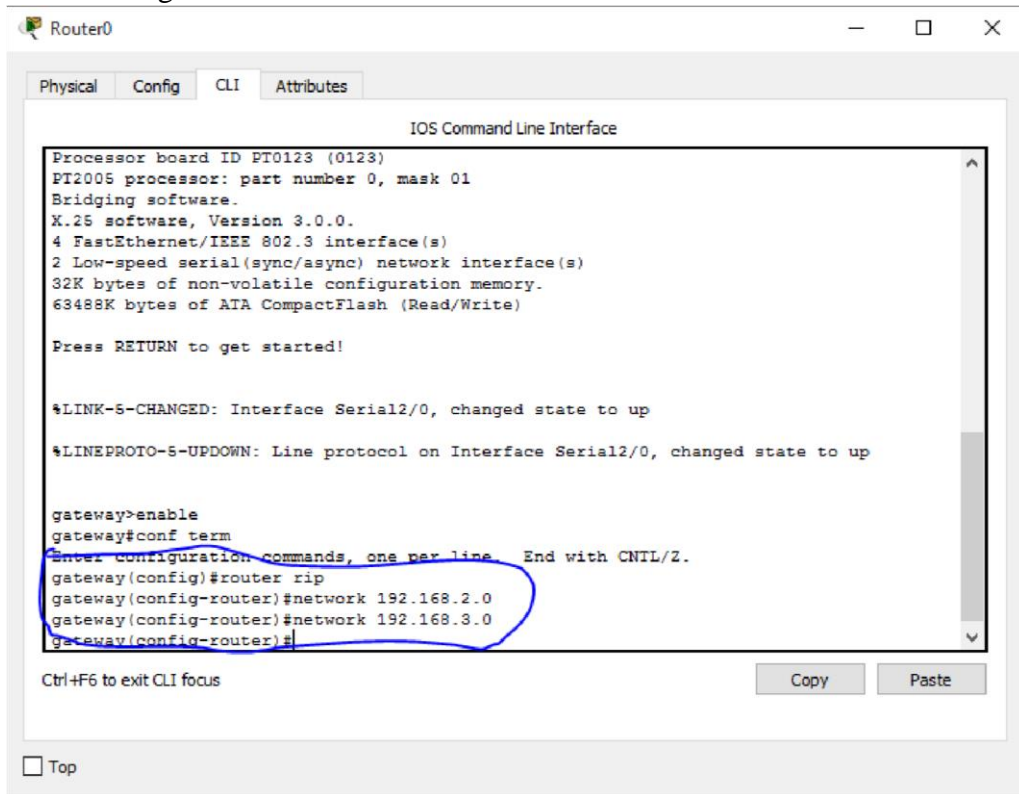
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.3.2, timeout is 2 seconds:
!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 3/5/12 ms

gateway#
```

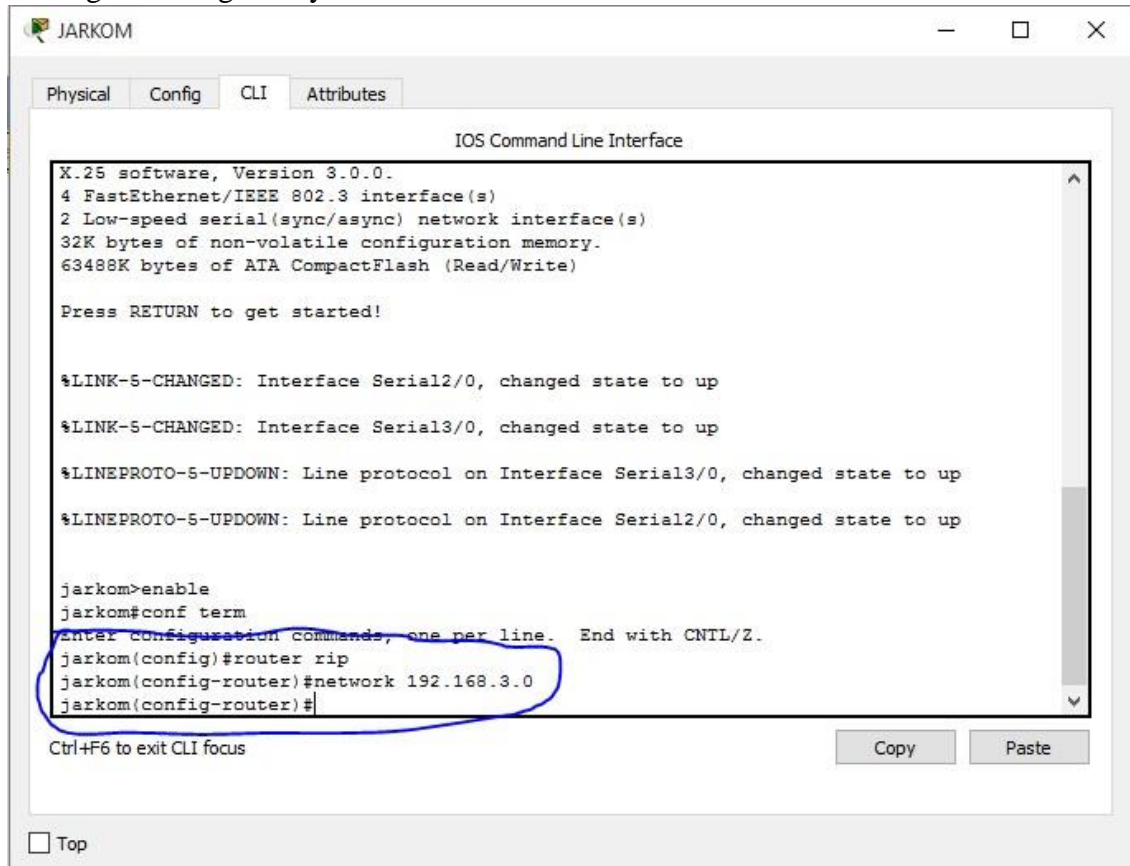
Below the terminal window, there are buttons for 'Copy' and 'Paste', and a 'Top' link.

NOMOR 2 – DINAMIS (RIP)

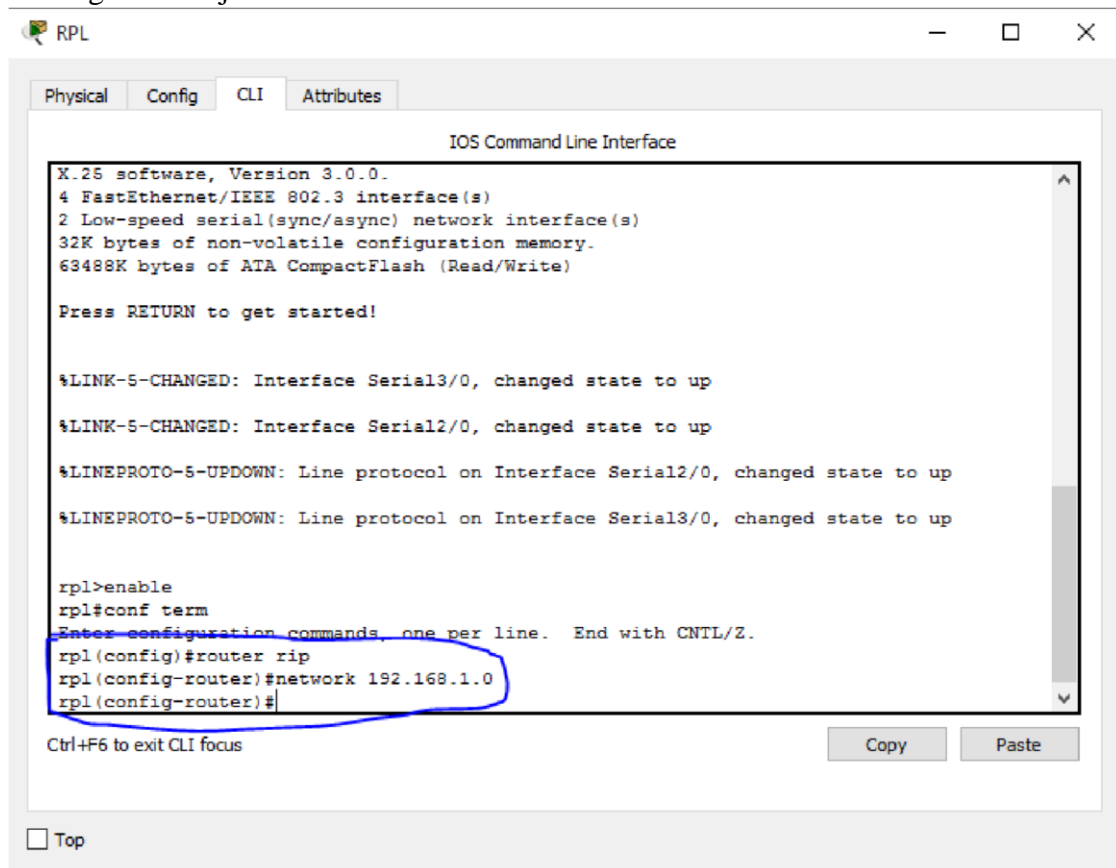
1. Desain Jaringan



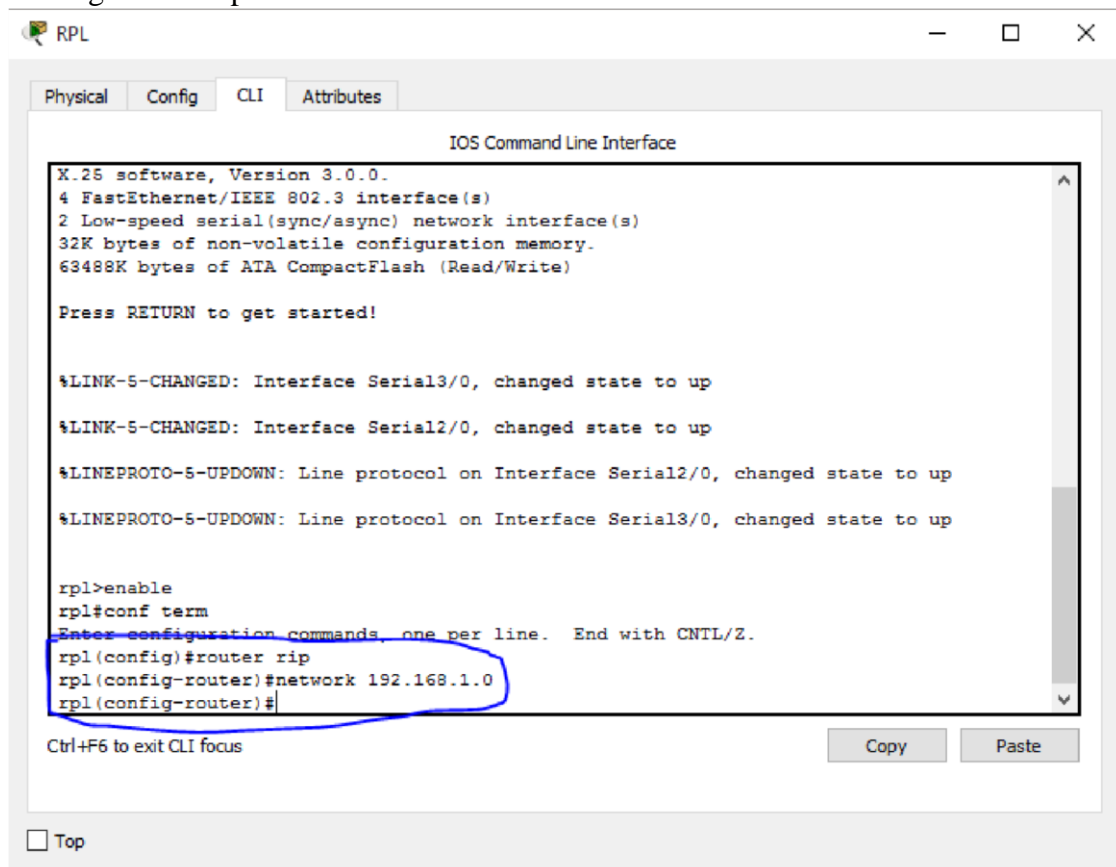
2. Routing – router gateway



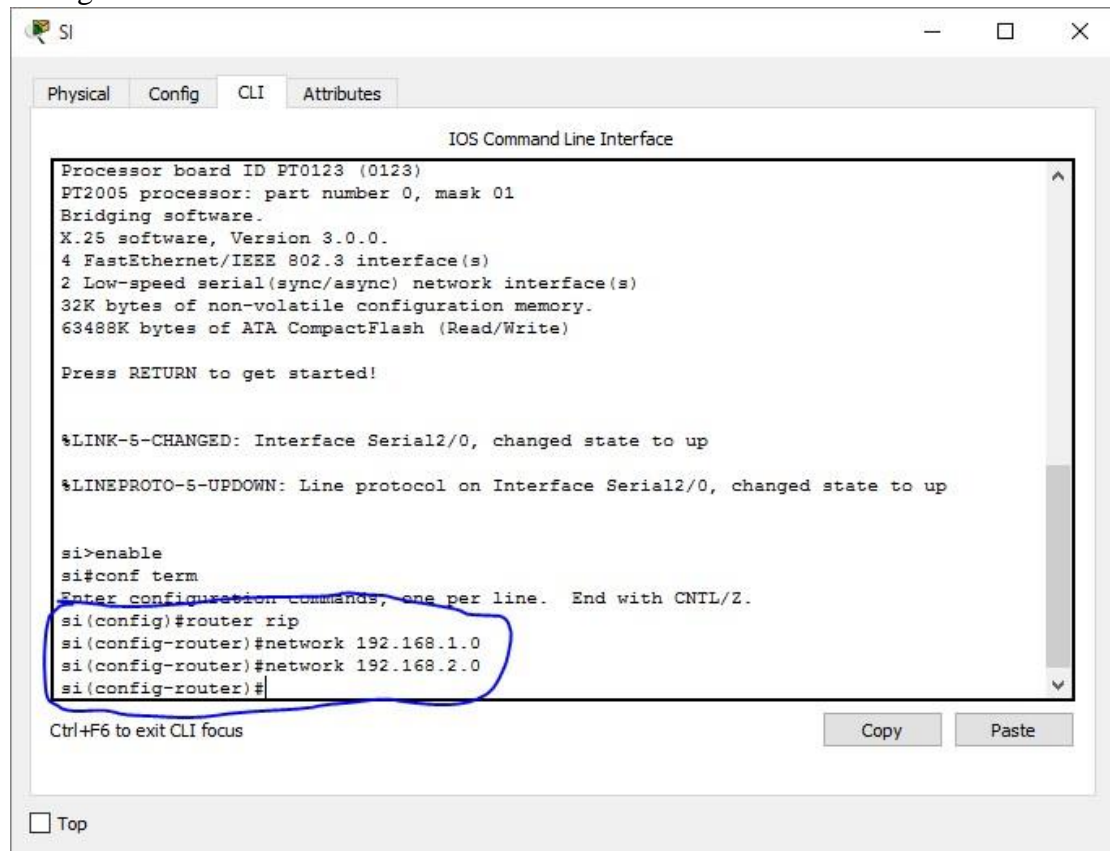
3. Routing – router jarkom



4. Routing – router rpl



5. Routing – router si



6. Uji konektivitas

