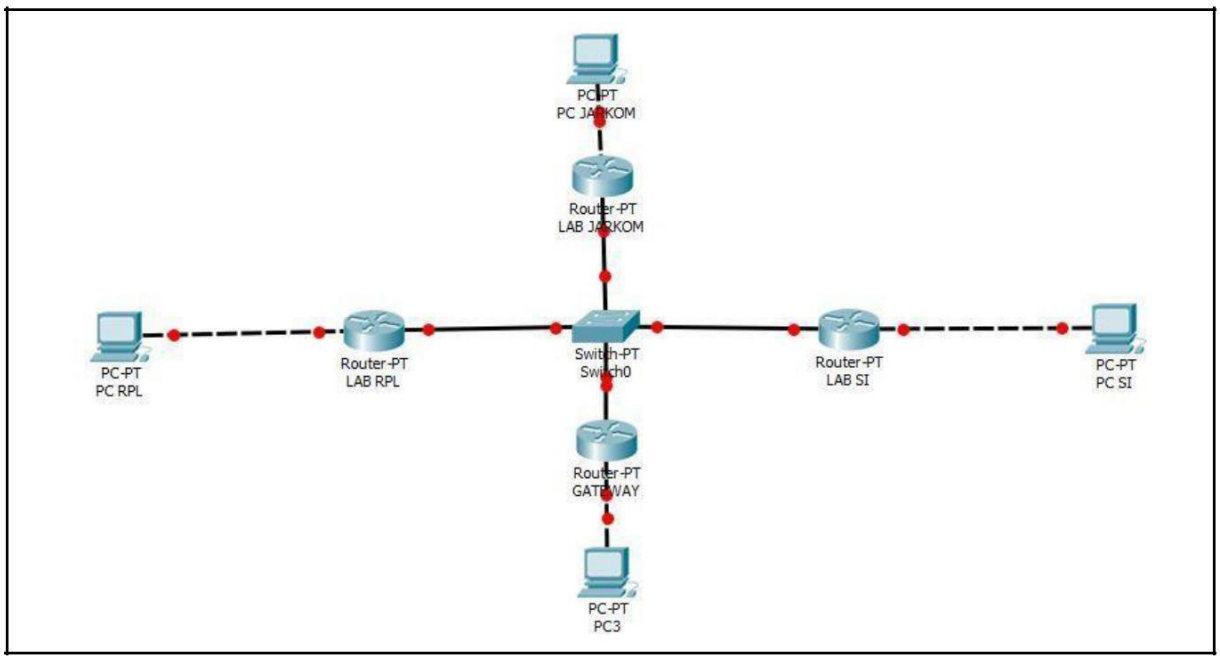
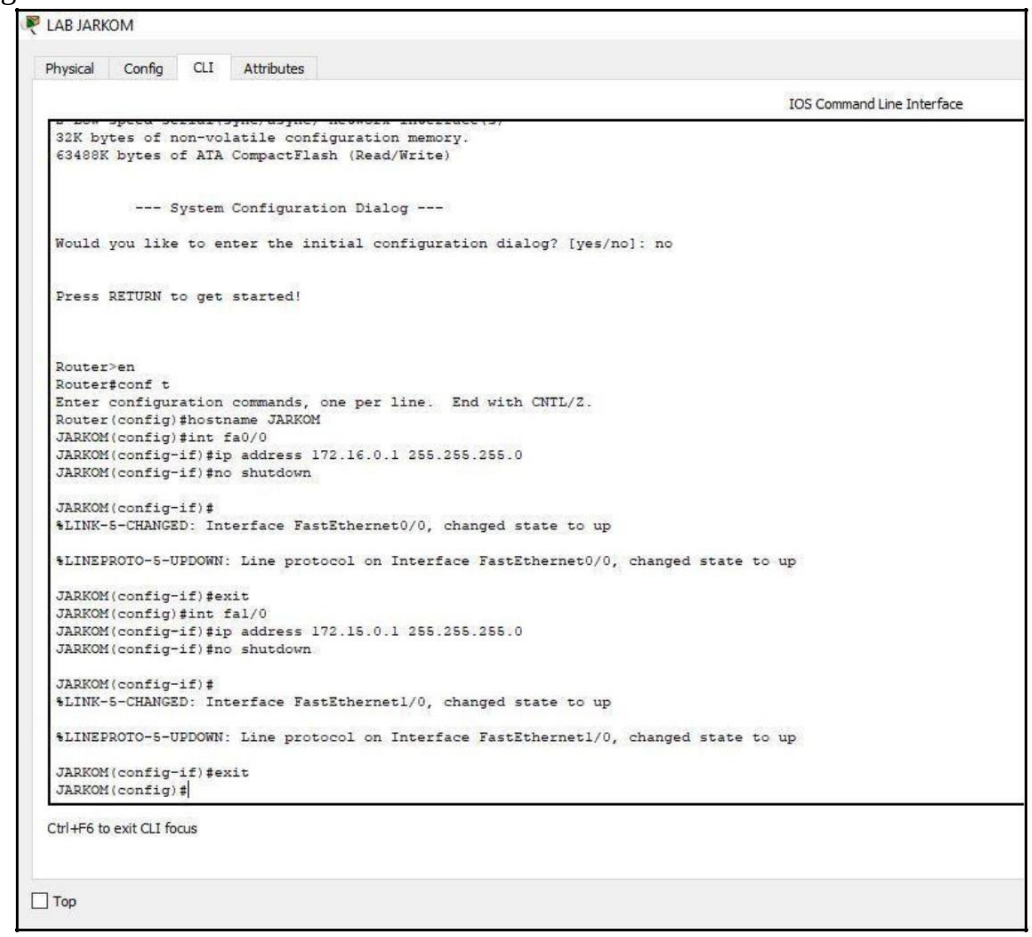
Ivanovitcz A.A.
L200170153
Kelas D
Modul 11

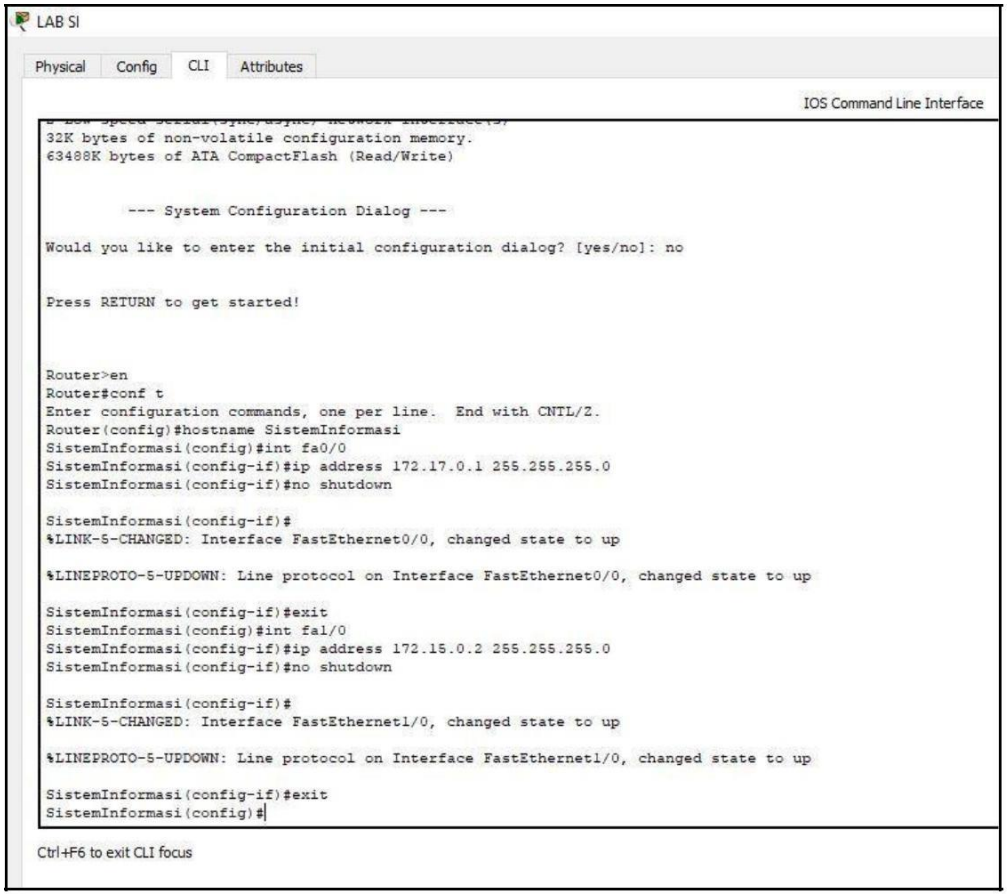
1. Buat topologi seperti pada gambar.



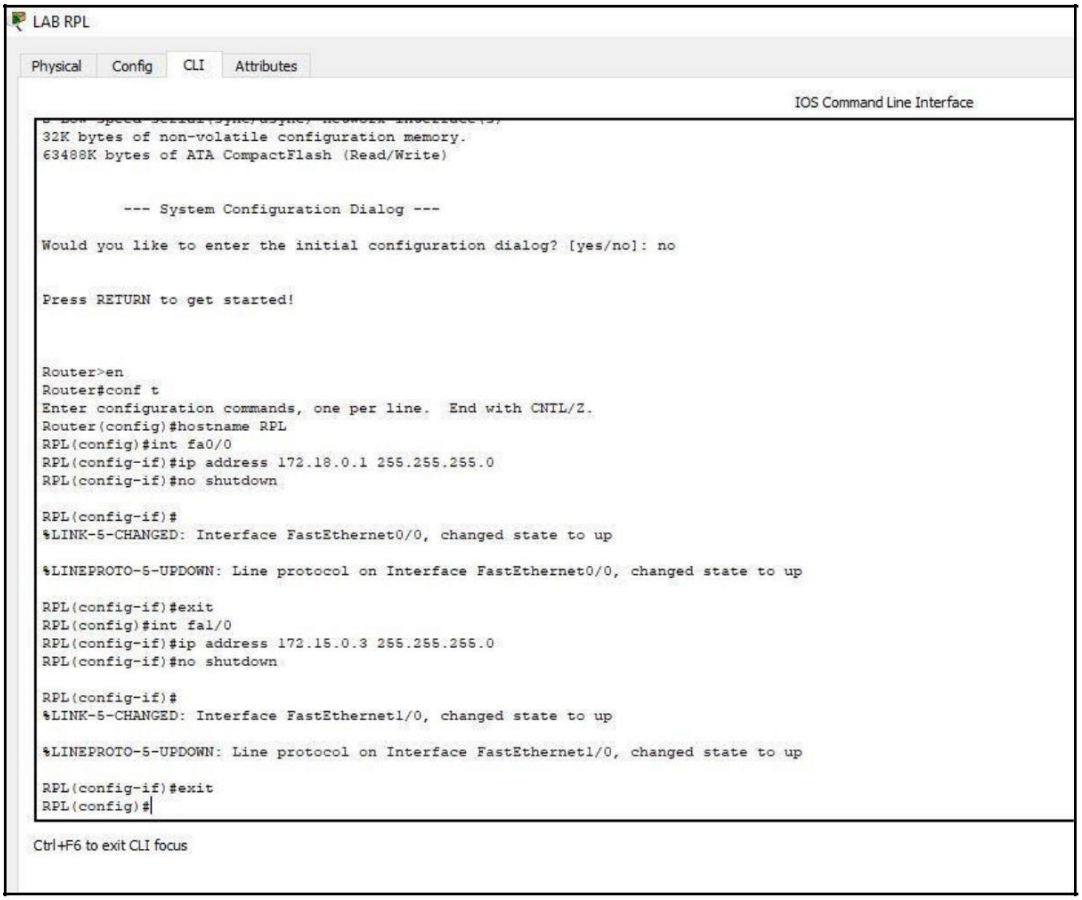
2. Konfigurasi semua router a. Router Jarkom



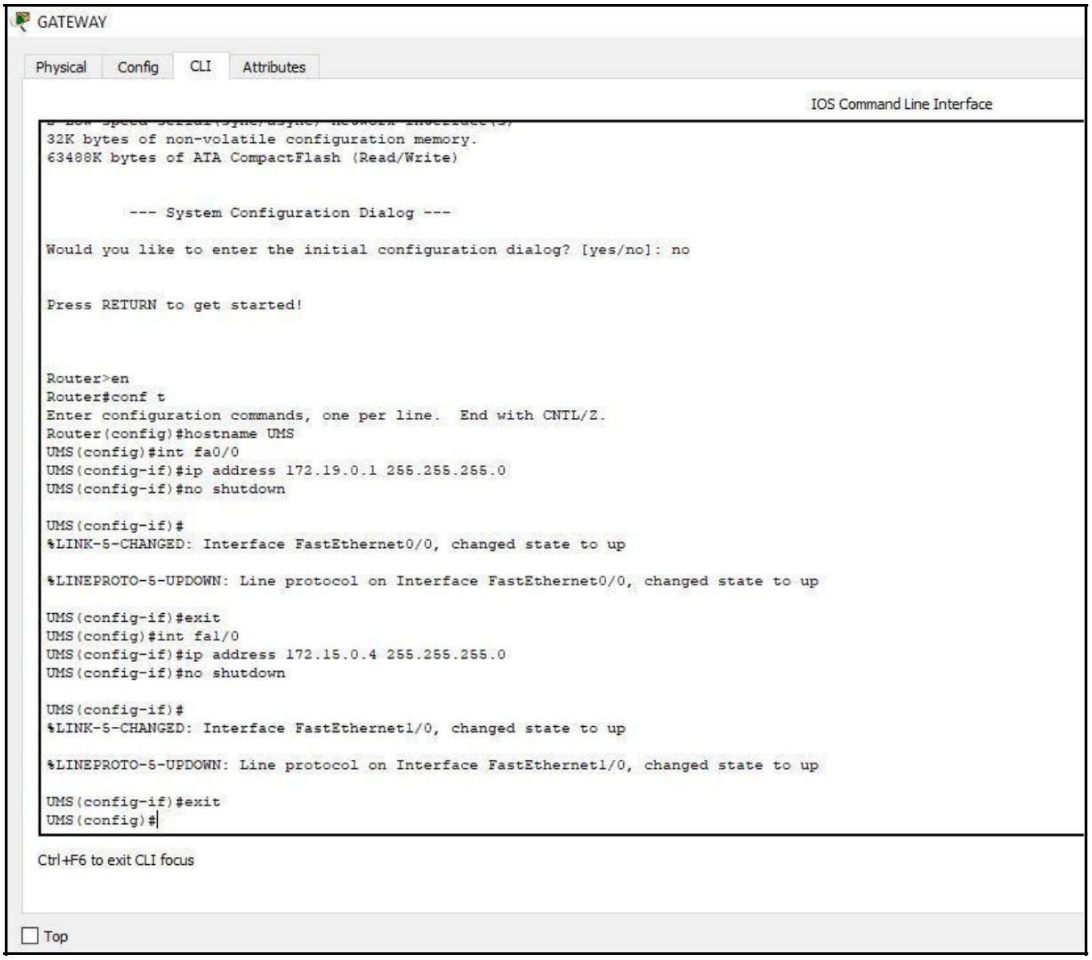
b. Router SI


LAB SI
Physical
Config
CLI
Attributes
IOS Command Line Interface
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 t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname SistemInformasi
SistemInformasi(config)#int fa0/0
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 fa1/0
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)#
Ctrl+F6 to exit CLI focus

c. Router RPL


LAB RPL
Physical
Config
CLI
Attributes
IOS Command Line Interface
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 t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname RPL
RPL(config)#int fa0/0
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 fal/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)#
Ctrl+F6 to exit CLI focus

d. Router UMS



3. Konfigurasi routing table pada 4 router

a. Router Jarkom

```
JARKOM(config)#router rip
JARKOM(config-router)#network 172.15.0.0
JARKOM(config-router)#networj 172.16.0.0
                           ^
% Invalid input detected at '^' marker.

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)#
```

b. Router SI

```
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)#
```

Ctrl+F6 to exit CLI focus

c. Router RPL

```
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)#
```

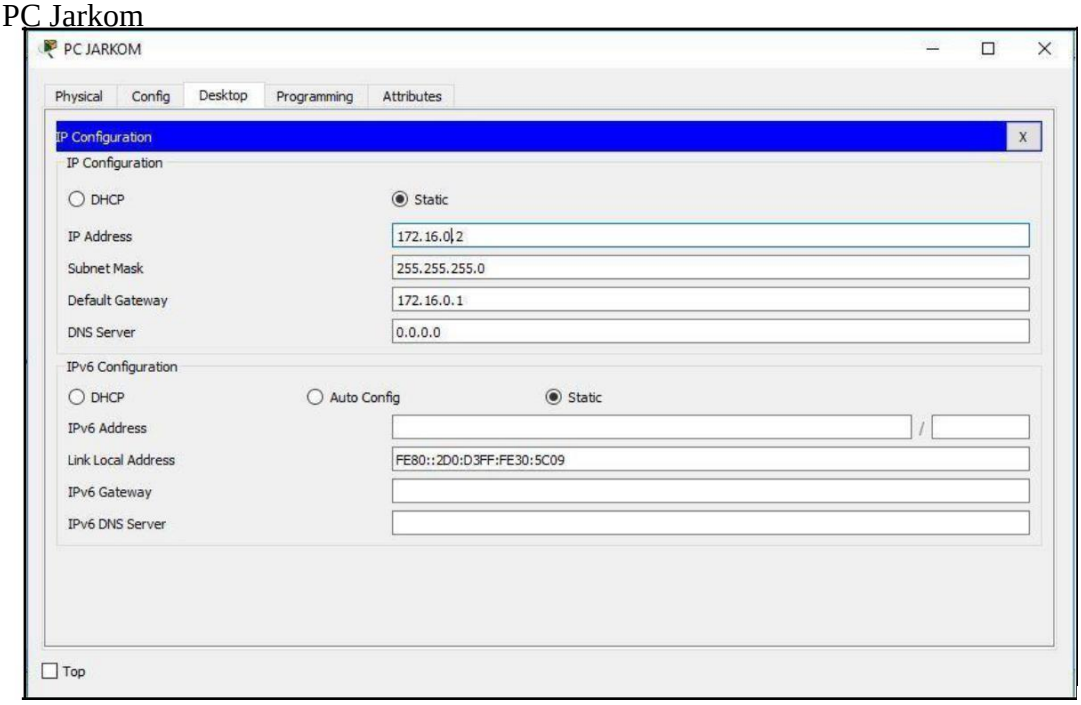
Ctrl+F6 to exit CLI focus

d. Router UMS

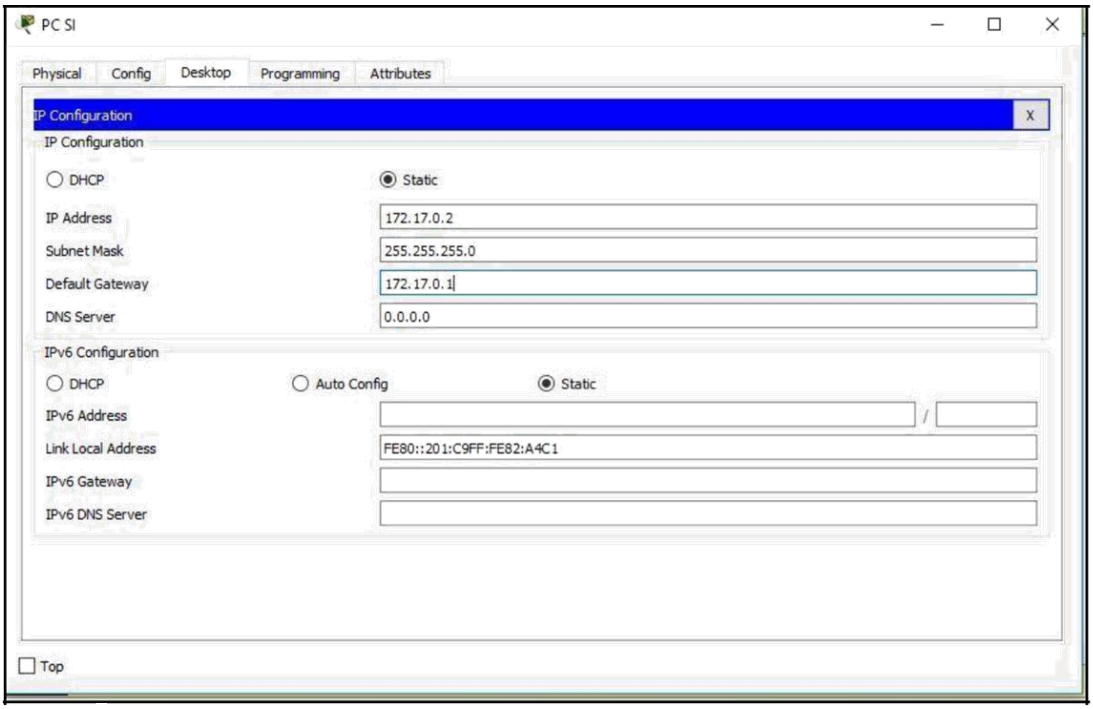
```
UMS(config)#router rip
UMS(config-router)#network 172.15.0.0
UMS(config-router)#network 172.16.0.0
UMS(config-router)#network 172.17.0.0
UMS(config-router)#network 172.18.0.0
UMS(config-router)#network 172.19.0.0
```

4. Konfigurasi IP pada masing- masing PC

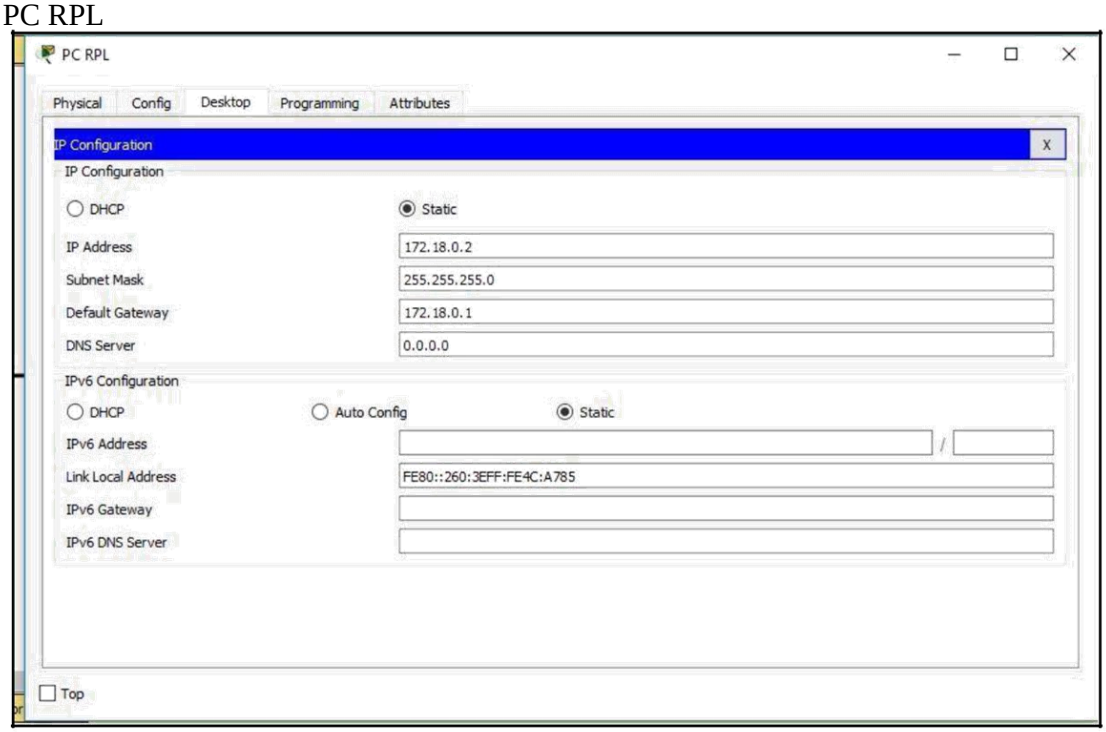
a. PC Jarkom



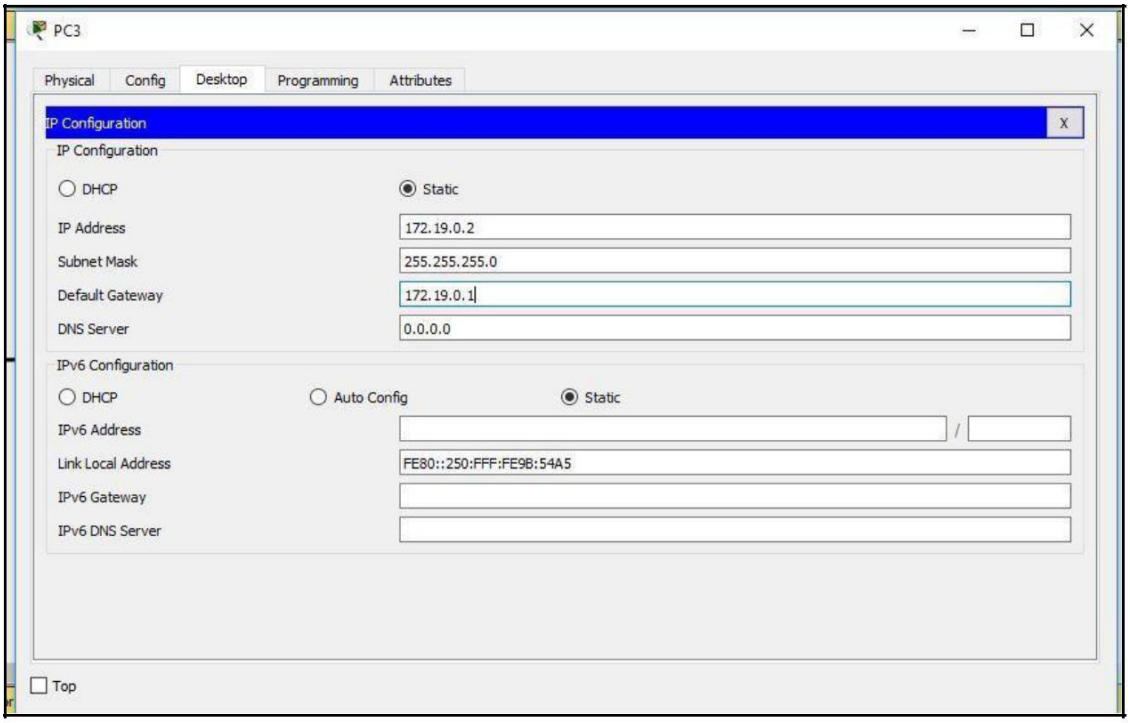
b. PC SI


PC SI
Physical
Config
Desktop
Programming
Attributes
IP Configuration
IP Configuration
DHCP
Static
IP Address
172.17.0.2
Subnet Mask
255.255.255.0
Default Gateway
172.17.0.1
DNS Server
0.0.0.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
Link Local Address
FE80::201:C9FF:FE82:A4C1
IPv6 Gateway
IPv6 DNS Server
Top

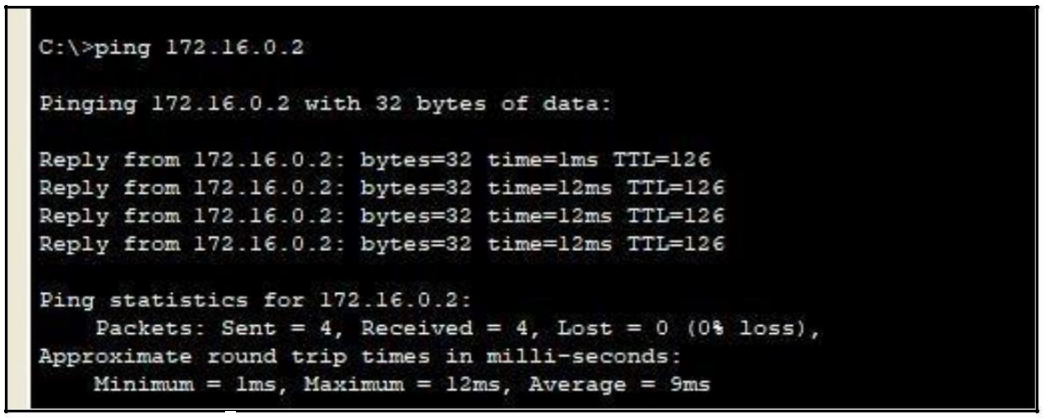
c. PC RPL


PC RPL
Physical
Config
Desktop
Programming
Attributes
IP Configuration
IP Configuration
DHCP
Static
IP Address
172.18.0.2
Subnet Mask
255.255.255.0
Default Gateway
172.18.0.1
DNS Server
0.0.0.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
Link Local Address
FE80::260:3EFF:FE4C:A785
IPv6 Gateway
IPv6 DNS Server
Top

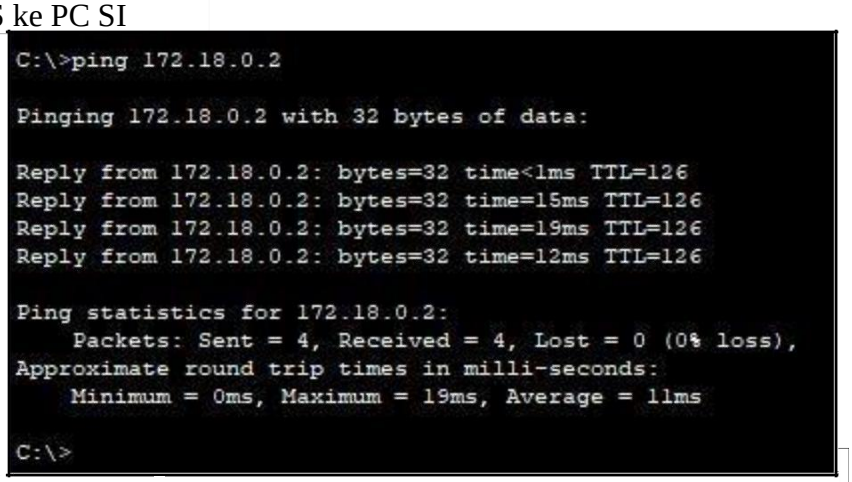
d. PC UMS



2. Lakukan pengujian ICMP request(ping) untuk test koneksi a. PC UMS ke PC Jarkom



b. PC UMS ke PC SI



c. PC UMS ke PC RPL

```
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=19ms TTL=126
Reply from 172.17.0.2: bytes=32 time=10ms 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 = 19ms, Average = 10ms
```