NAMA : DEWI RAHMAWATI

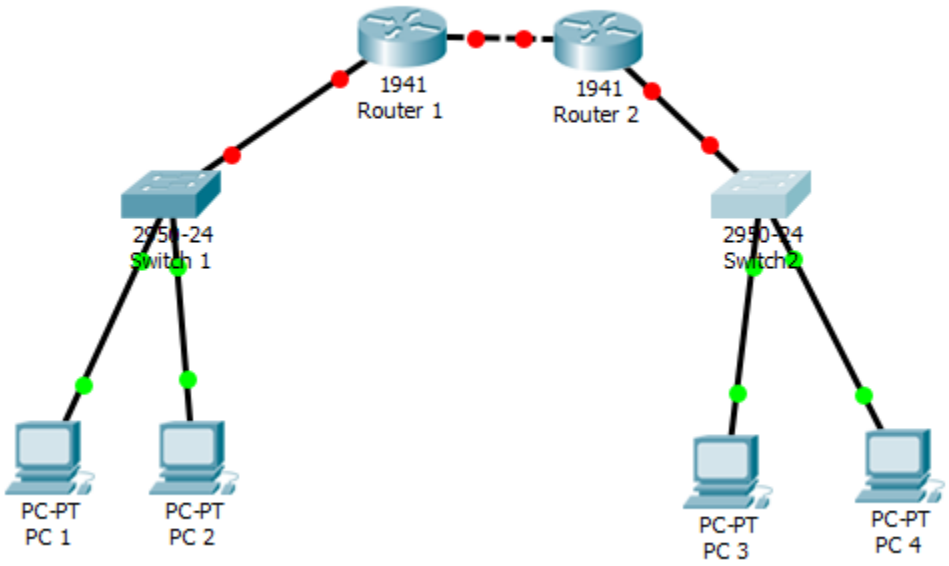
NIM : L200170188

KELAS : D

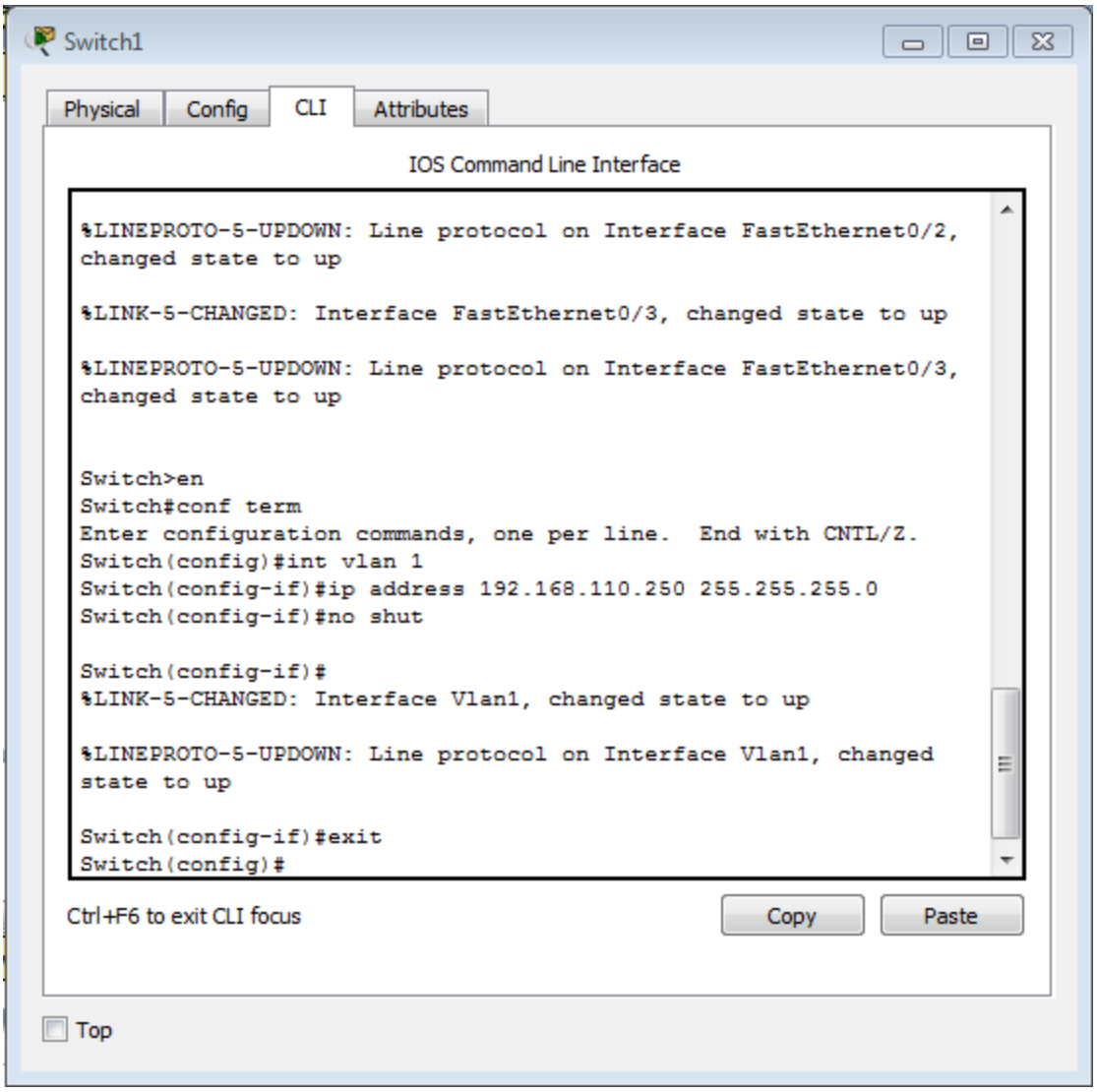
JARINGAN KOMPUTER

Modul 8

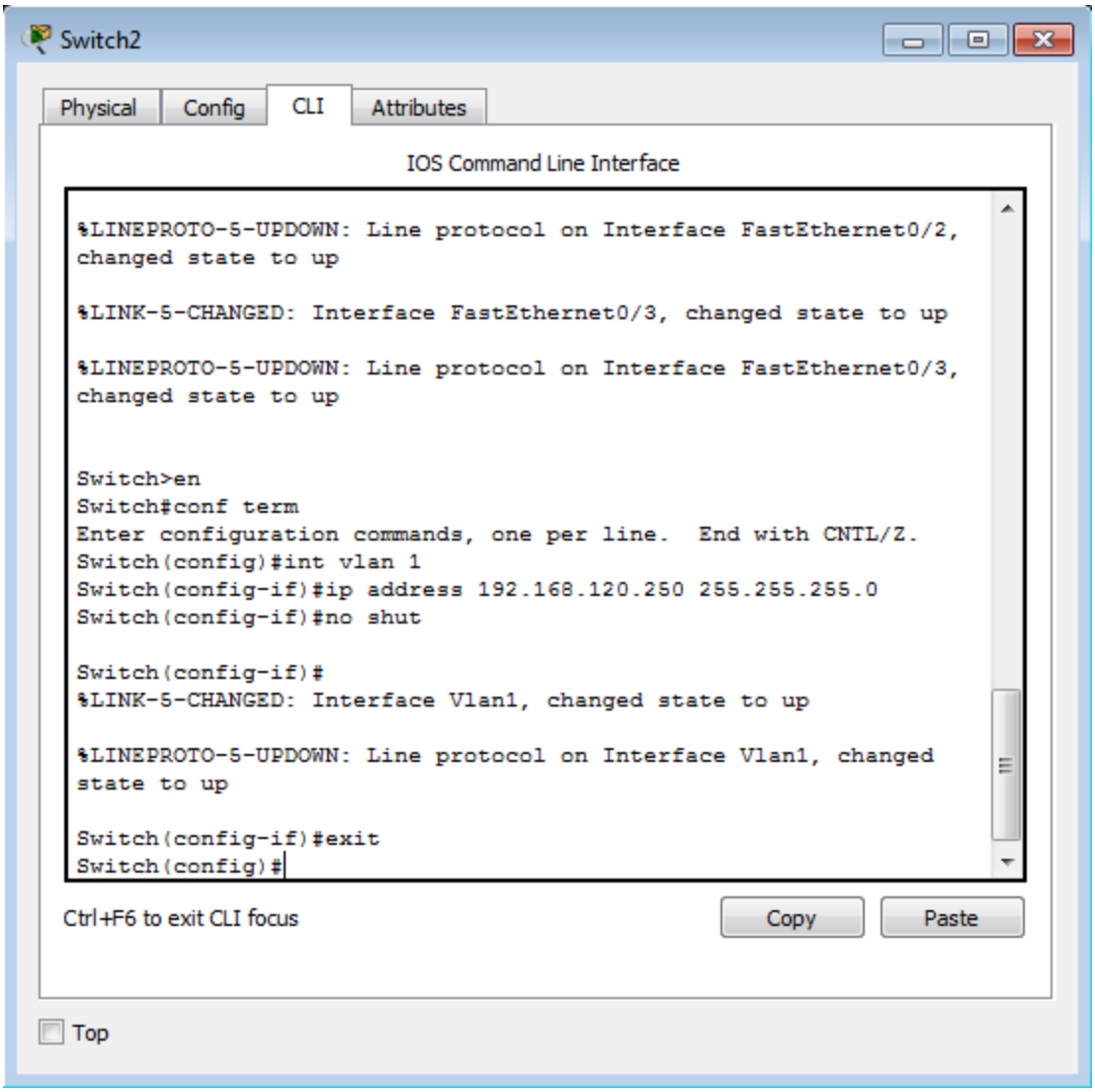
Kegiatan 1.



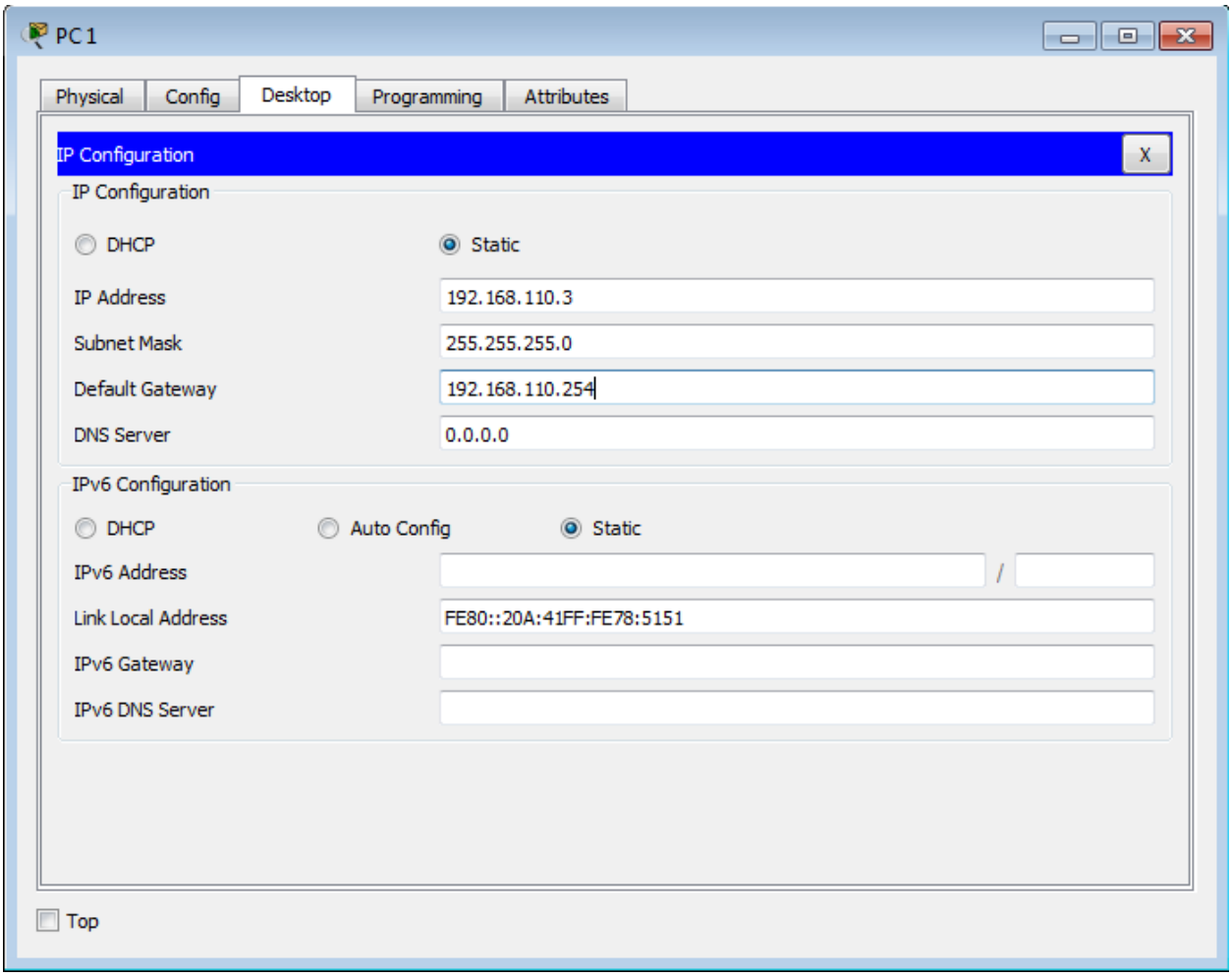
3. Memberikan alamat IP pada masing-masing switch.
a. Switch 1.

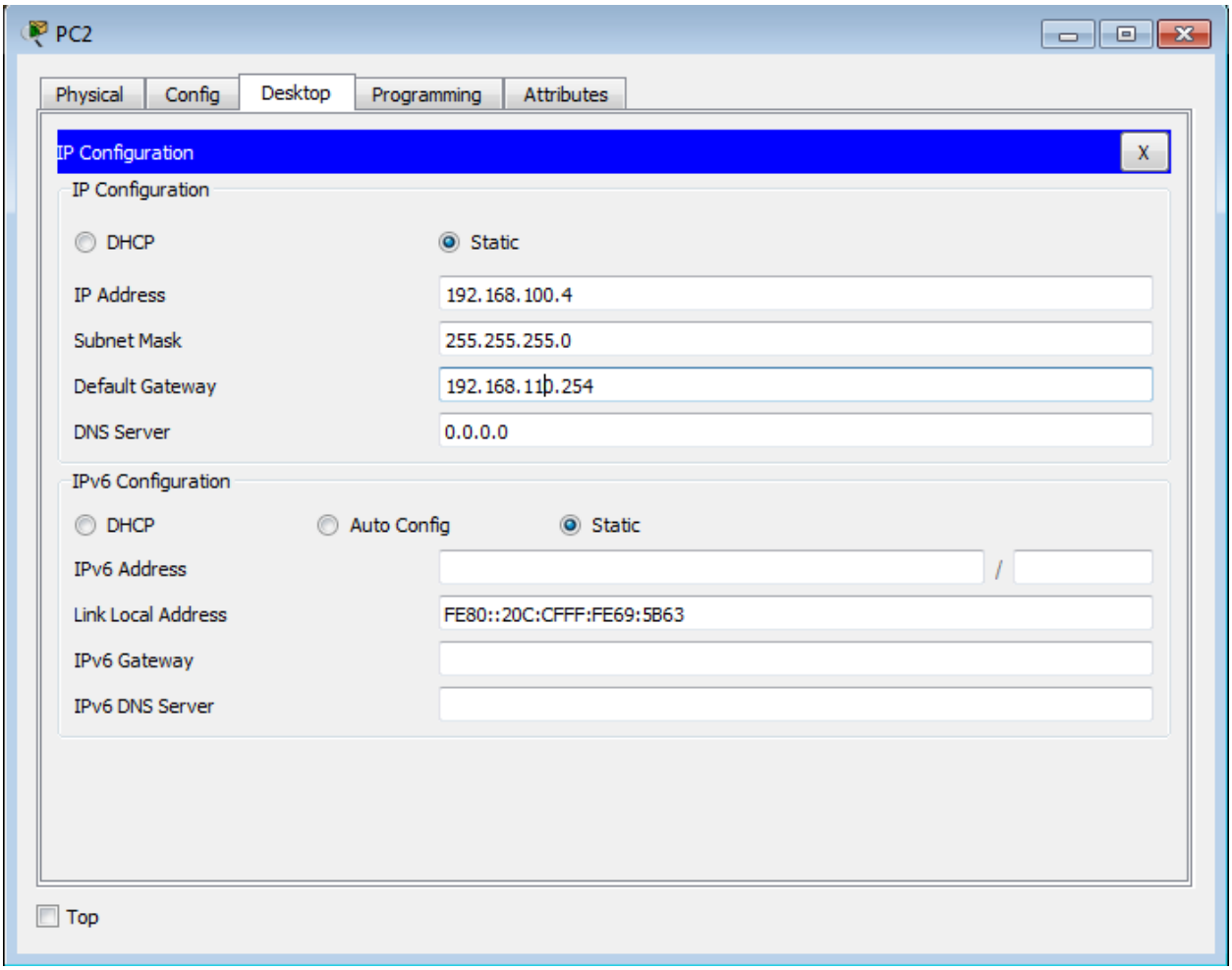

Switch1
Physical
Config
CLI
Attributes
IOS Command Line Interface
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/2, changed state to up
%LINK-5-CHANGED: Interface FastEthernet0/3, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/3, changed state to up
Switch>en
Switch#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#int vlan 1
Switch(config-if)#ip address 192.168.110.250 255.255.255.0
Switch(config-if)#no shut
Switch(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up
Switch(config-if)#exit
Switch(config)#
Ctrl+F6 to exit CLI focus
Copy
Paste
Top

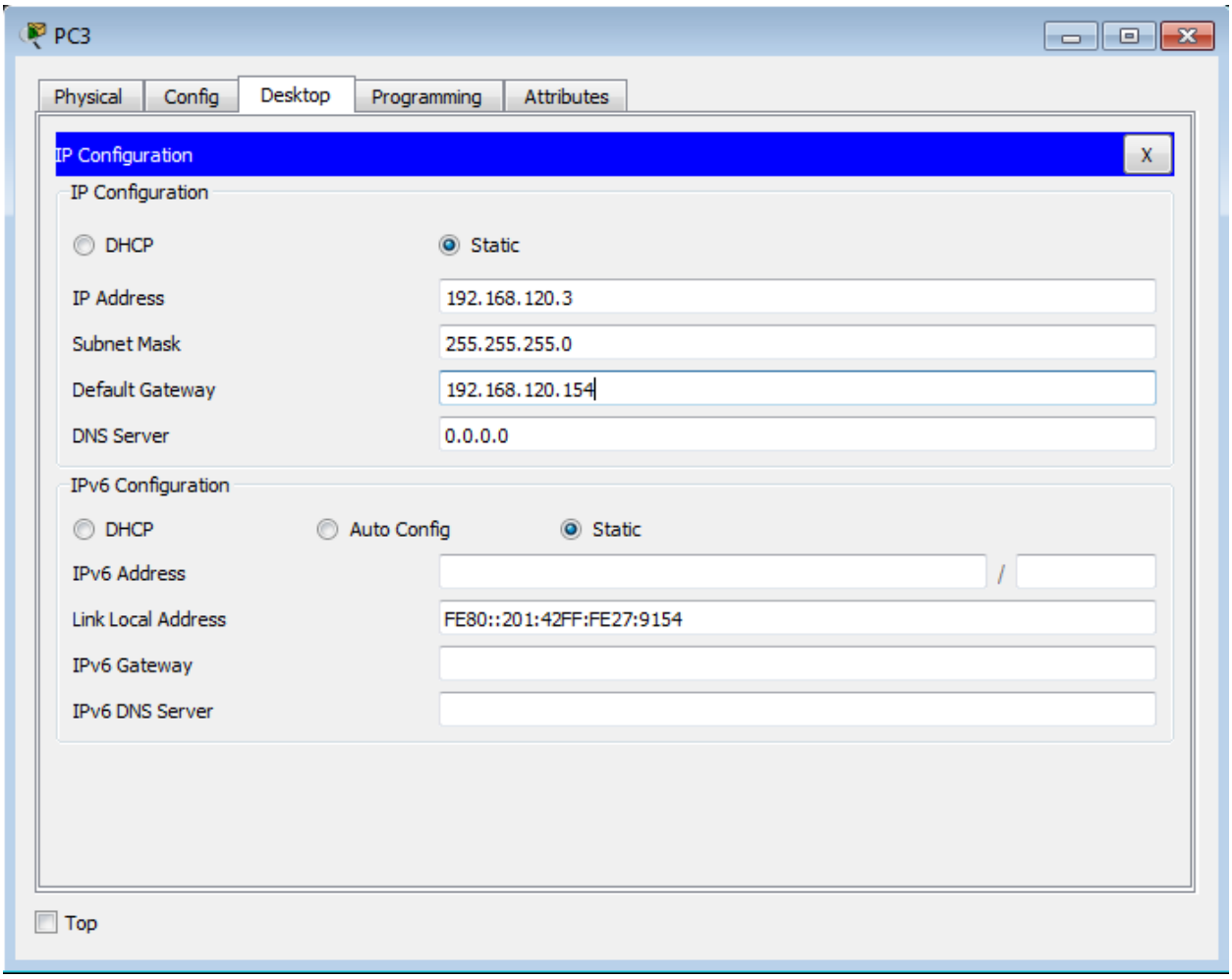
b. Switch 2.

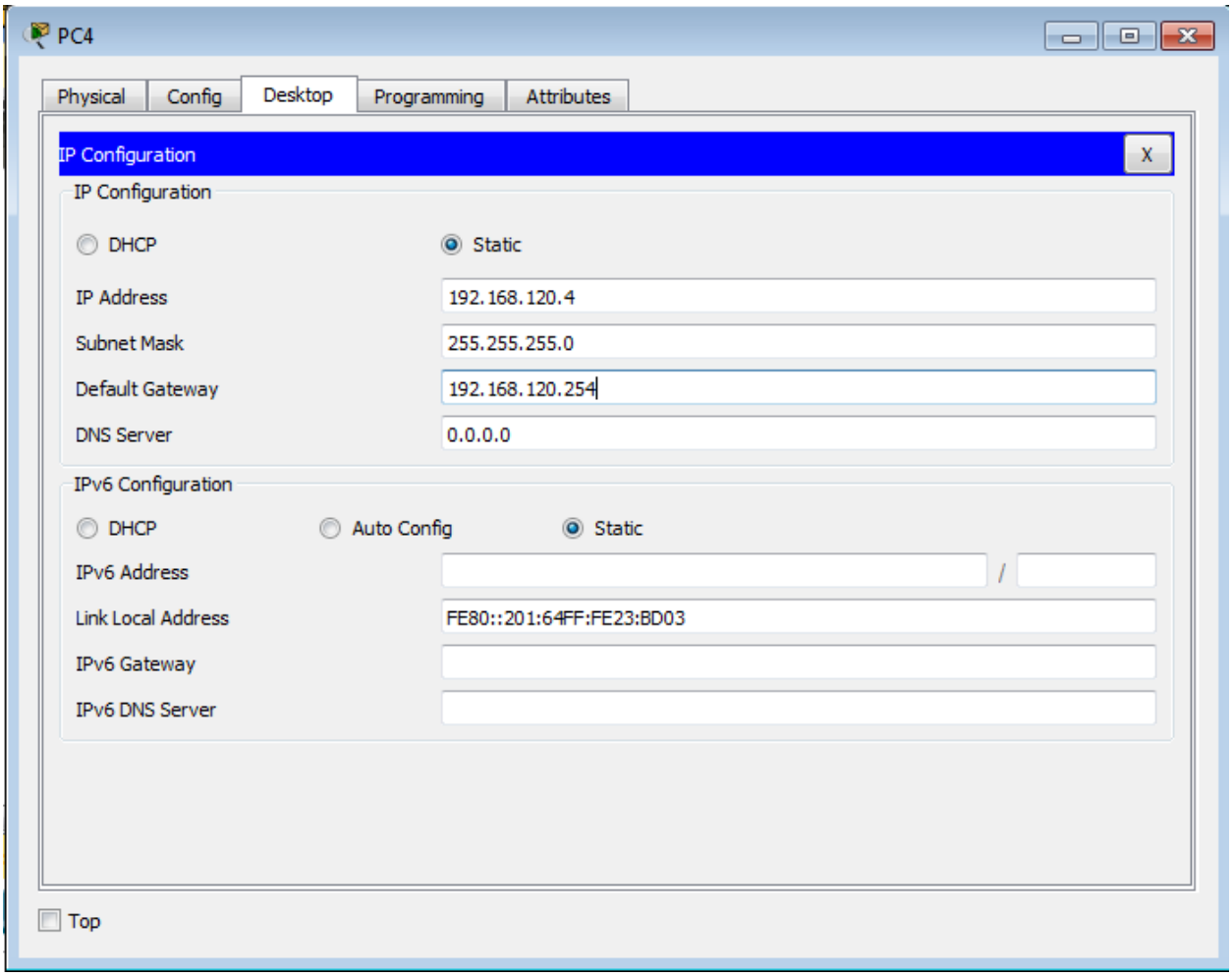


4. Memberikan IP Address, Subnet Mask, dan Default Gateway pada masing-masing komputer.


PC 1
Physical
Config
Desktop
Programming
Attributes
IP Configuration
X
IP Configuration
DHCP
Static
IP Address
192.168.110.3
Subnet Mask
255.255.255.0
Default Gateway
192.168.110.254
DNS Server
0.0.0.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address
FE80::20A:41FF:FE78:5151
IPv6 Gateway
IPv6 DNS Server
Top

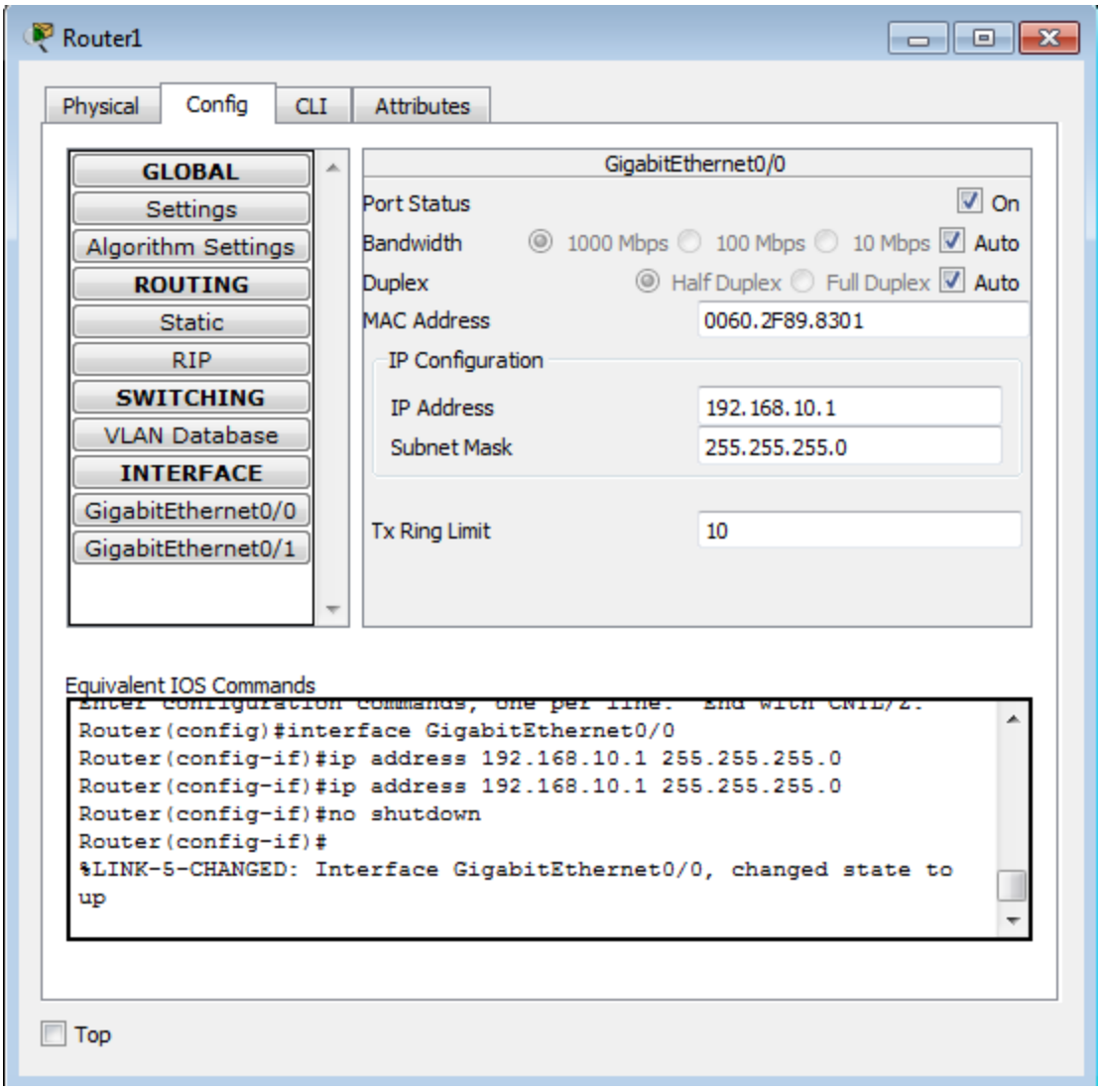

PC2
Physical
Config
Desktop
Programming
Attributes
IP Configuration
X
IP Configuration
DHCP
Static
IP Address
192.168.100.4
Subnet Mask
255.255.255.0
Default Gateway
192.168.110.254
DNS Server
0.0.0.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address
FE80::20C:CFFF:FE69:5B63
IPv6 Gateway
IPv6 DNS Server
Top

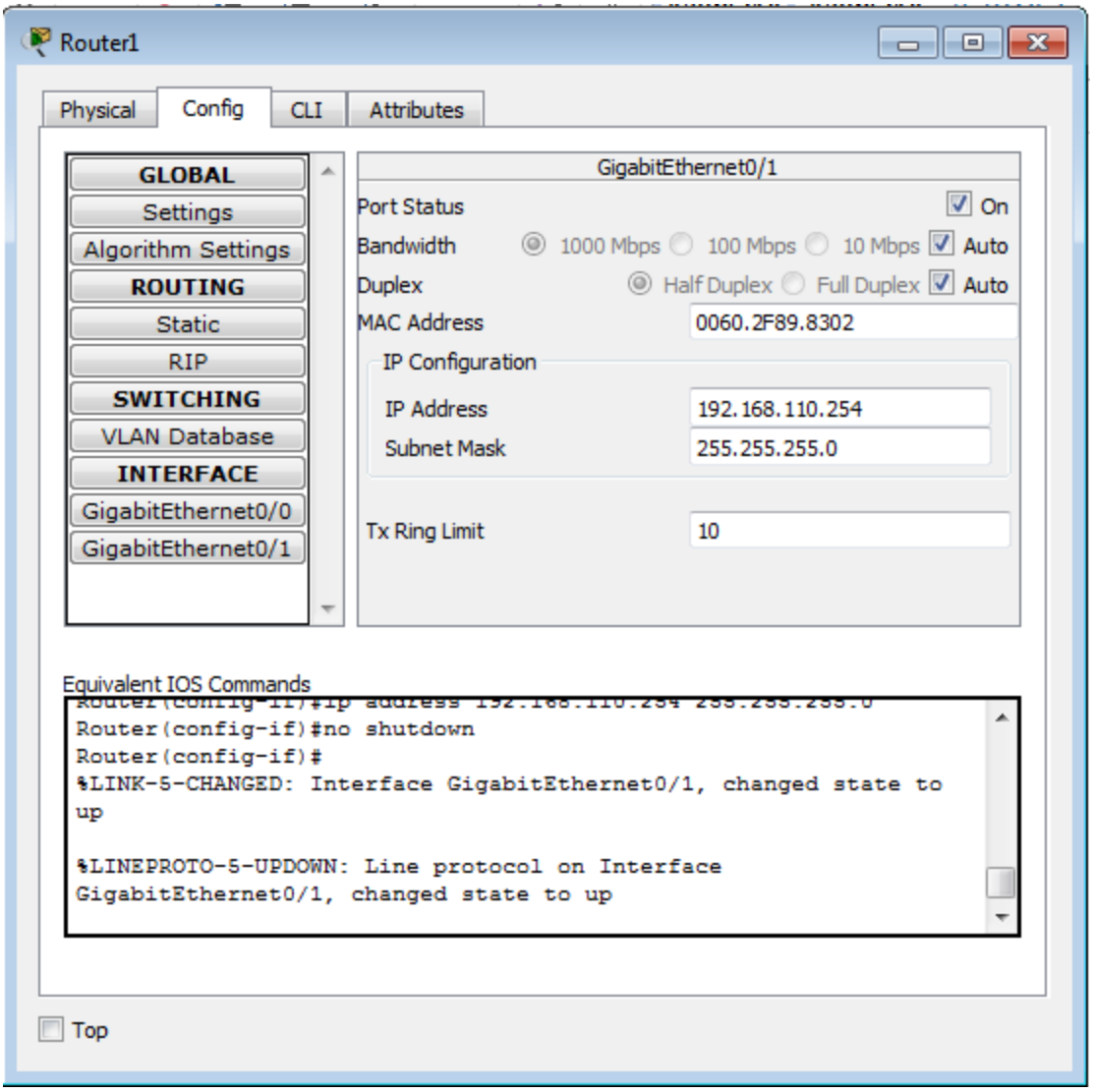

PC3
Physical
Config
Desktop
Programming
Attributes
IP Configuration
X
IP Configuration
DHCP
Static
IP Address
192.168.120.3
Subnet Mask
255.255.255.0
Default Gateway
192.168.120.154
DNS Server
0.0.0.0
IPv6 Configuration
DHCP
Auto Config
Static
IPv6 Address
/
Link Local Address
FE80::201:42FF:FE27:9154
IPv6 Gateway
IPv6 DNS Server
Top

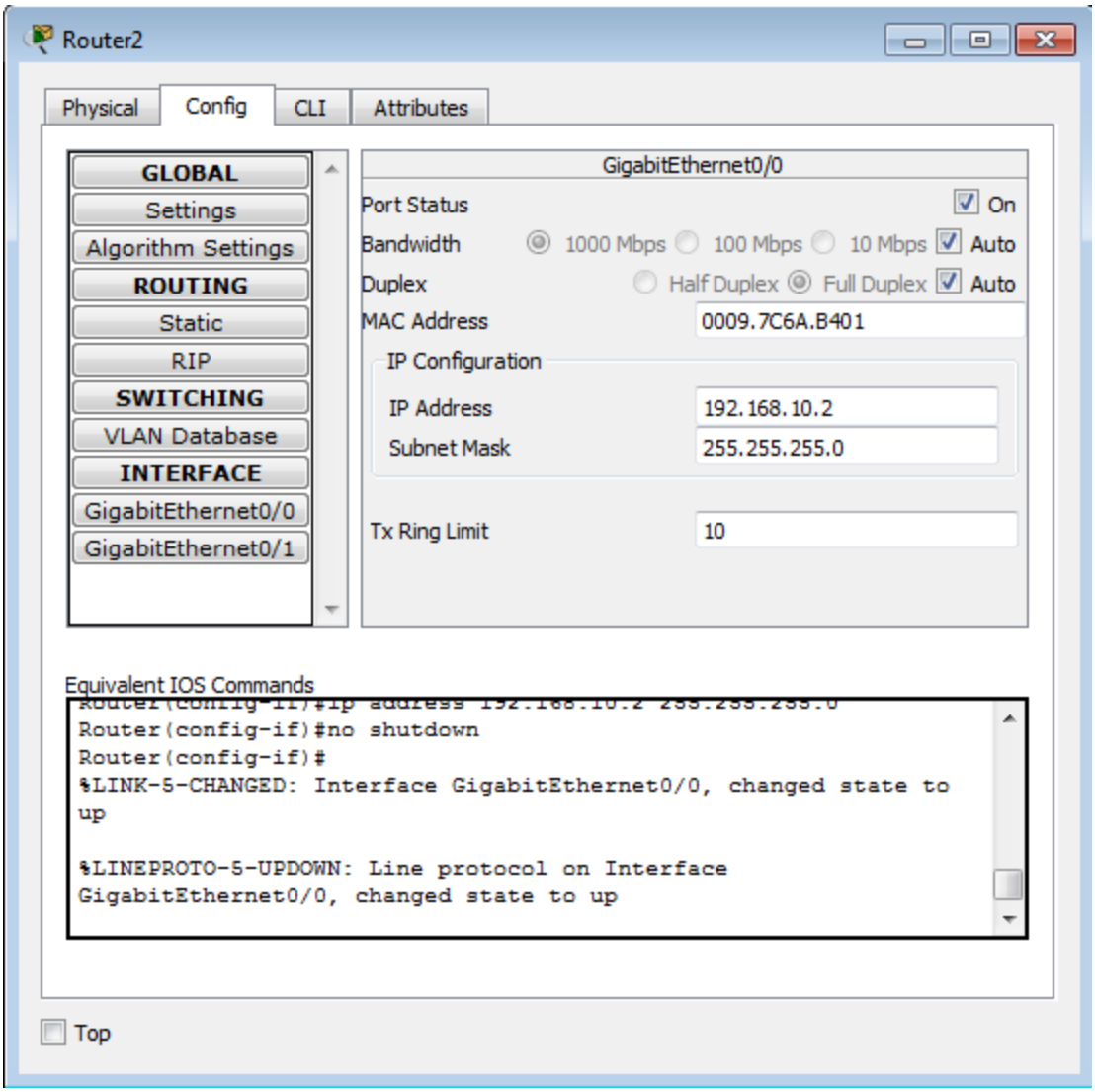


5. Melakukan routing dengan protokol RIP pada kedua jaringan.

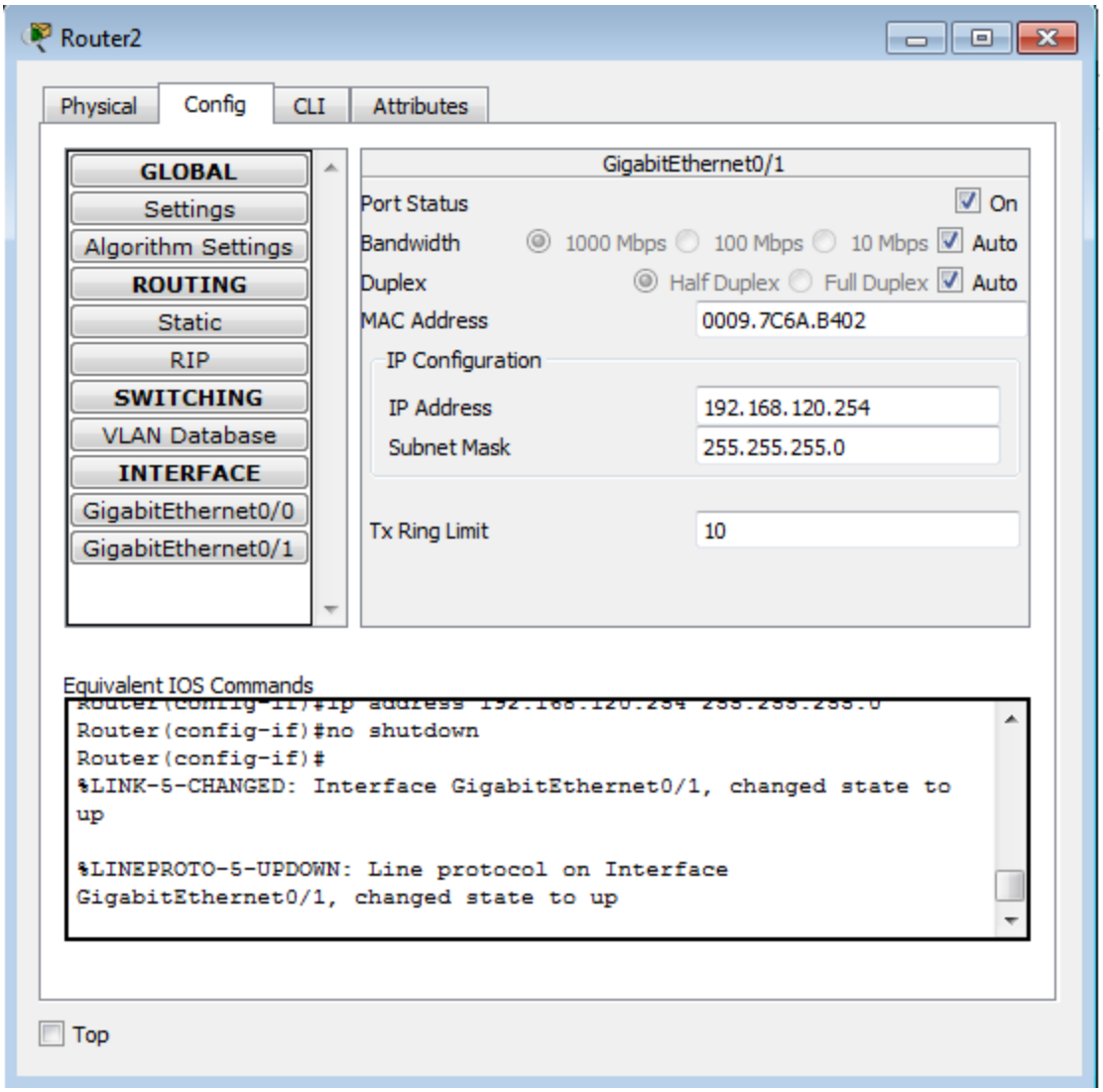
a. Router 1.


Router1
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
GigabitEthernet0/0
GigabitEthernet0/1
GigabitEthernet0/0
Port Status
On
Bandwidth
1000 Mbps
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
0060.2F89.8301
IP Configuration
IP Address
192.168.10.1
Subnet Mask
255.255.255.0
Tx Ring Limit
10
Equivalent IOS Commands
Router(config)#interface GigabitEthernet0/0
Router(config-if)#ip address 192.168.10.1 255.255.255.0
Router(config-if)#ip address 192.168.10.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to
up
Top


Router1
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
GigabitEthernet0/0
GigabitEthernet0/1
GigabitEthernet0/1
Port Status
On
Bandwidth
1000 Mbps
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
0060.2F89.8302
IP Configuration
IP Address
192.168.110.254
Subnet Mask
255.255.255.0
Tx Ring Limit
10
Equivalent IOS Commands
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/1, changed state to up
Top

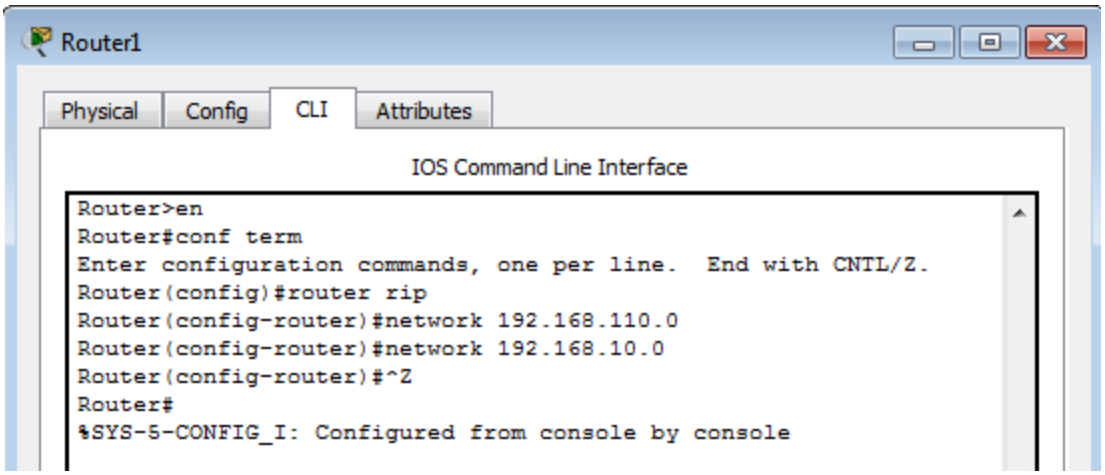

Router2
Physical
Config
CLI
Attributes
GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
SWITCHING
VLAN Database
INTERFACE
GigabitEthernet0/0
GigabitEthernet0/1
GigabitEthernet0/0
Port Status
On
Bandwidth
1000 Mbps
100 Mbps
10 Mbps
Auto
Duplex
Half Duplex
Full Duplex
Auto
MAC Address
0009.7C6A.B401
IP Configuration
IP Address
192.168.10.2
Subnet Mask
255.255.255.0
Tx Ring Limit
10
Equivalent IOS Commands
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up
Top

b. Router 2.

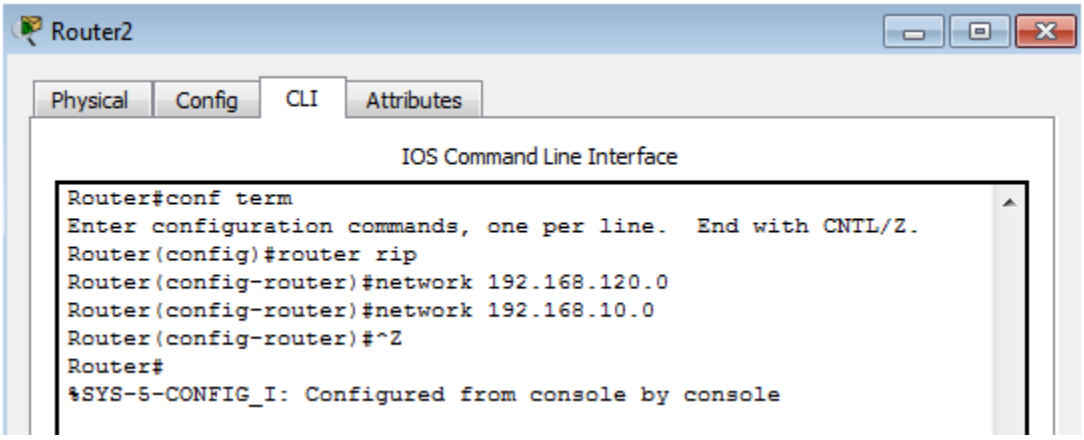


8. Pada Router diberikan network ID untuk digunakan jalur routing.

a. Router 1.

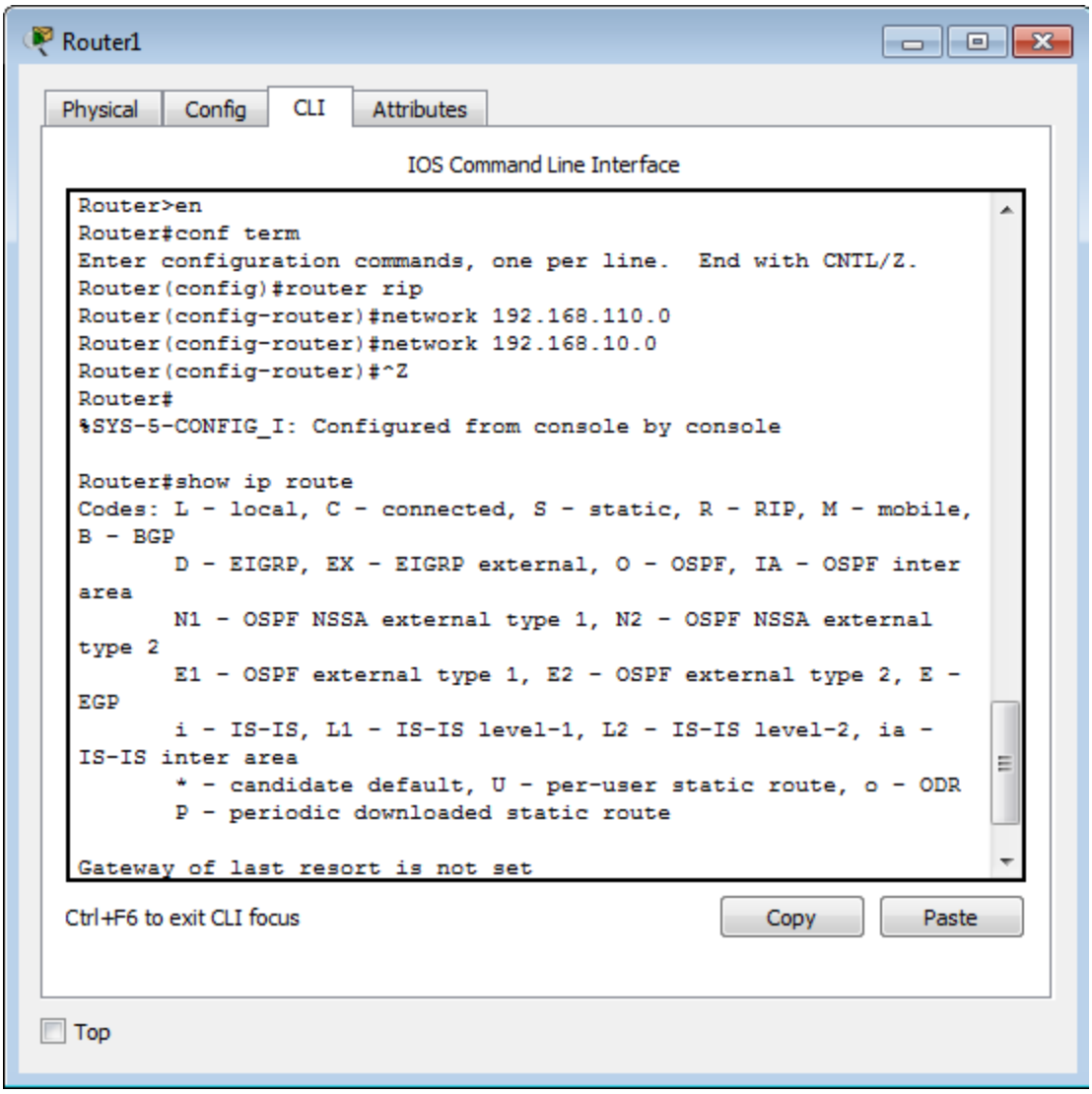


b. Router 2.

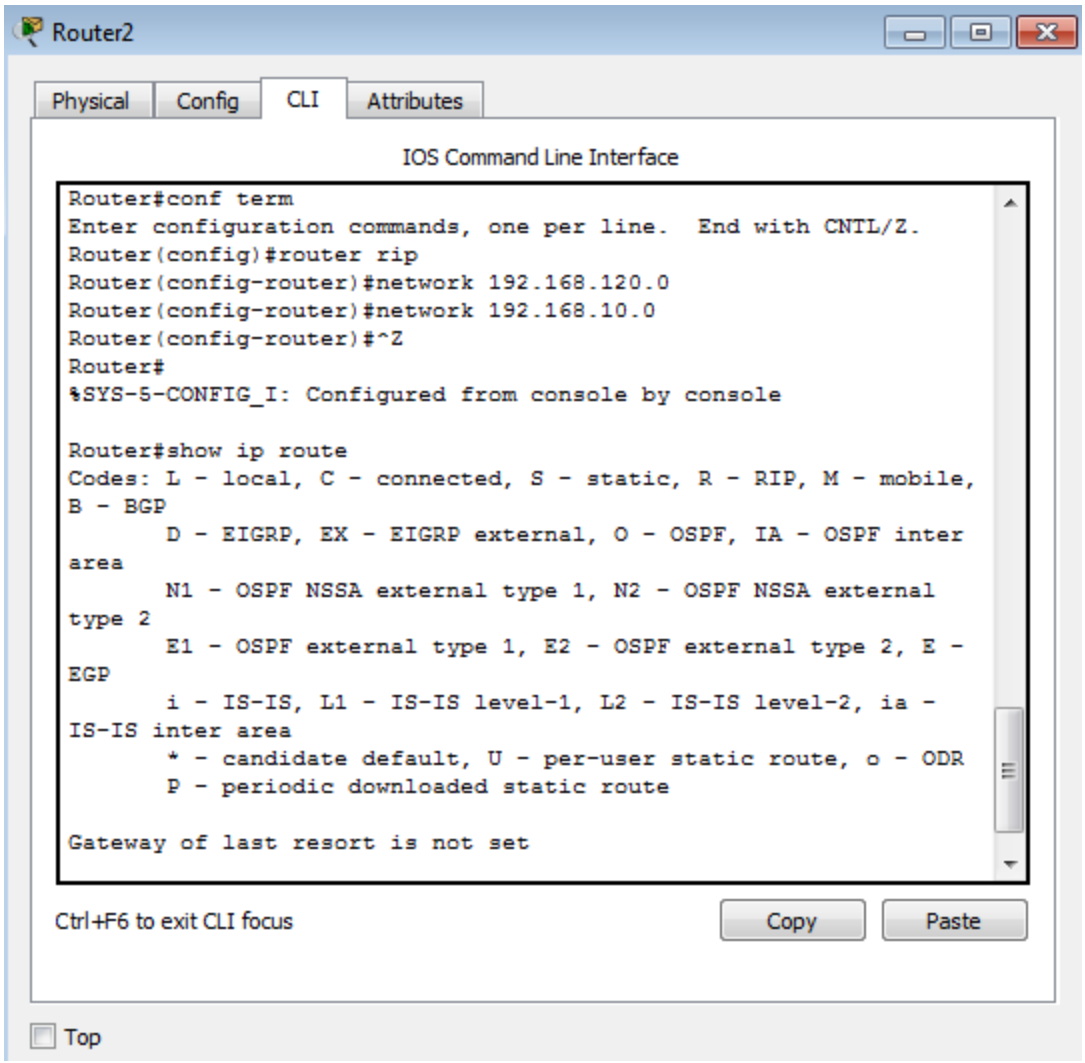


9. Melakukan pengecekan tabel routing pada kedua router tersebut dengan perintah “show ip route”

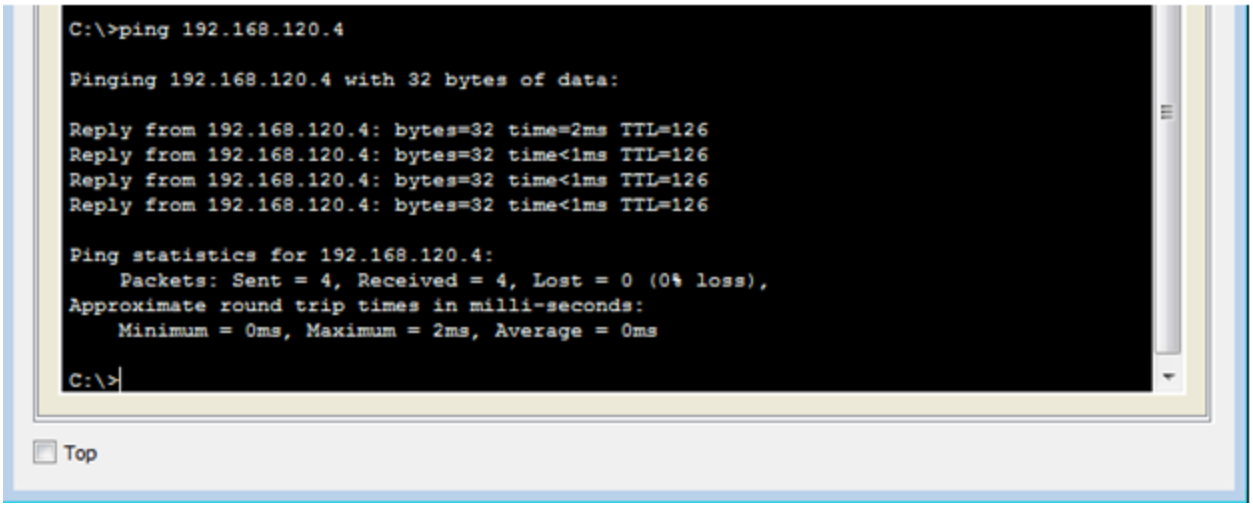
a. Router 1.


Router1
Physical
Config
CLI
Attributes
IOS Command Line Interface
Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router rip
Router(config-router)#network 192.168.110.0
Router(config-router)#network 192.168.10.0
Router(config-router)#^Z
Router#
%SYS-5-CONFIG_I: Configured from console by console
Router#show ip route
Codes: L - local, C - connected, S - static, 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
Ctrl+F6 to exit CLI focus
Copy
Paste
Top

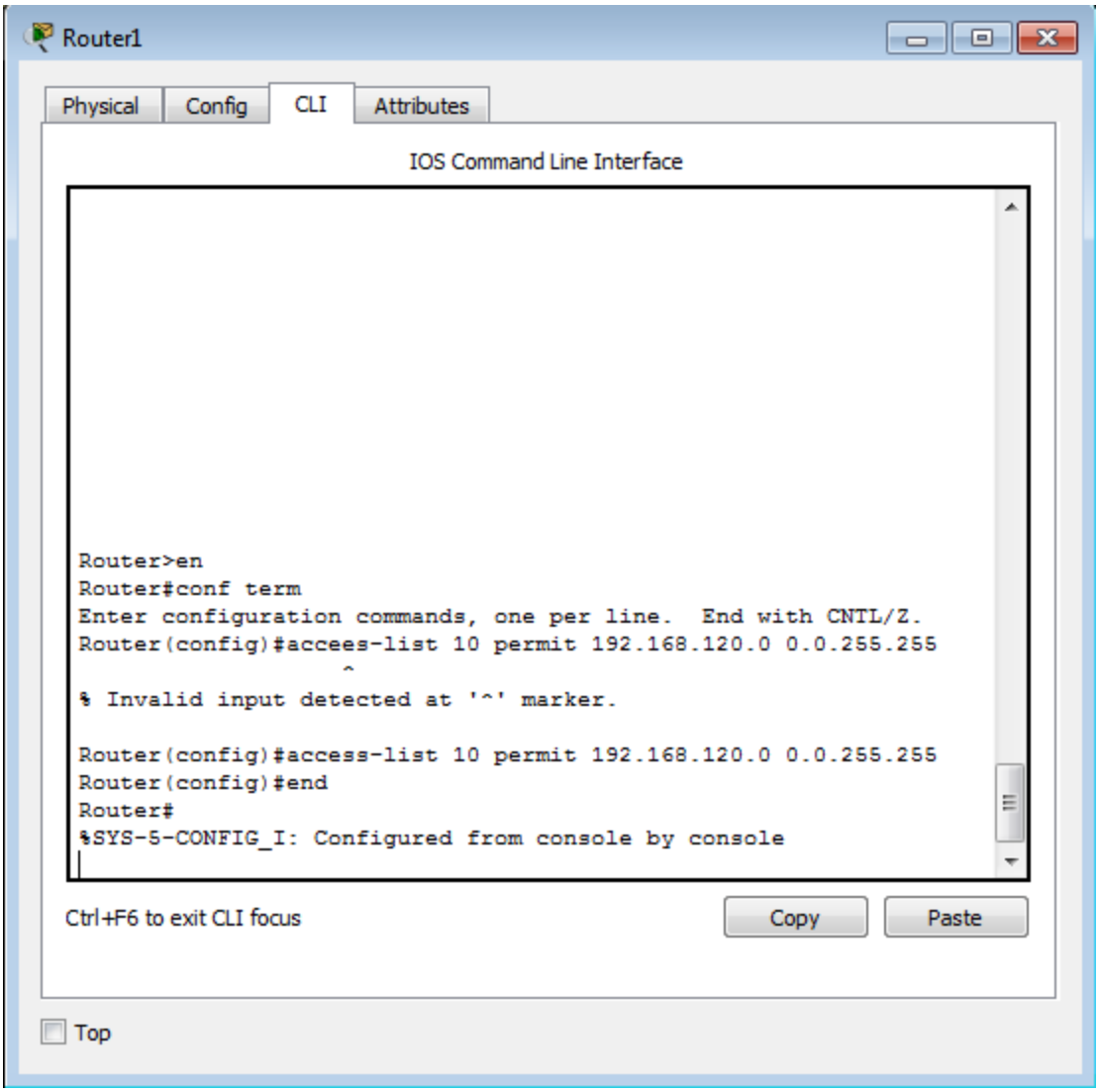
b. Router 2.



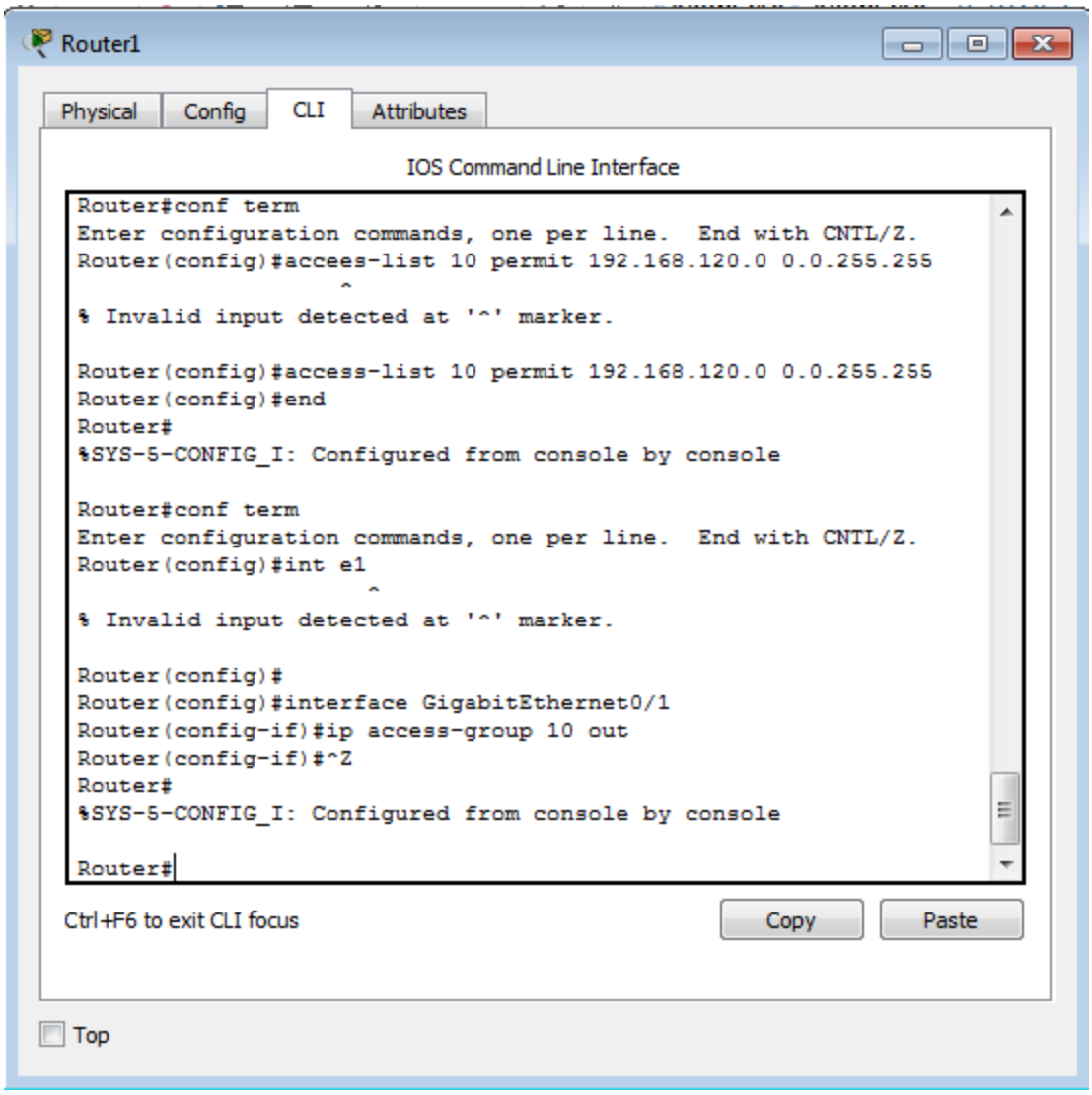
10. Melakukan ter koneksi dari PC 1 ke PC 4 dengan menggunakan perintah ping.



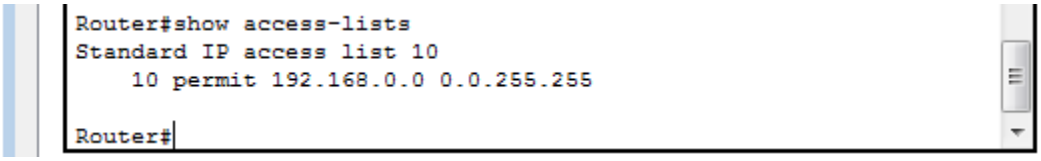
11. Menentukan Access list yang akan diterapkan pada jaringan tersebut.



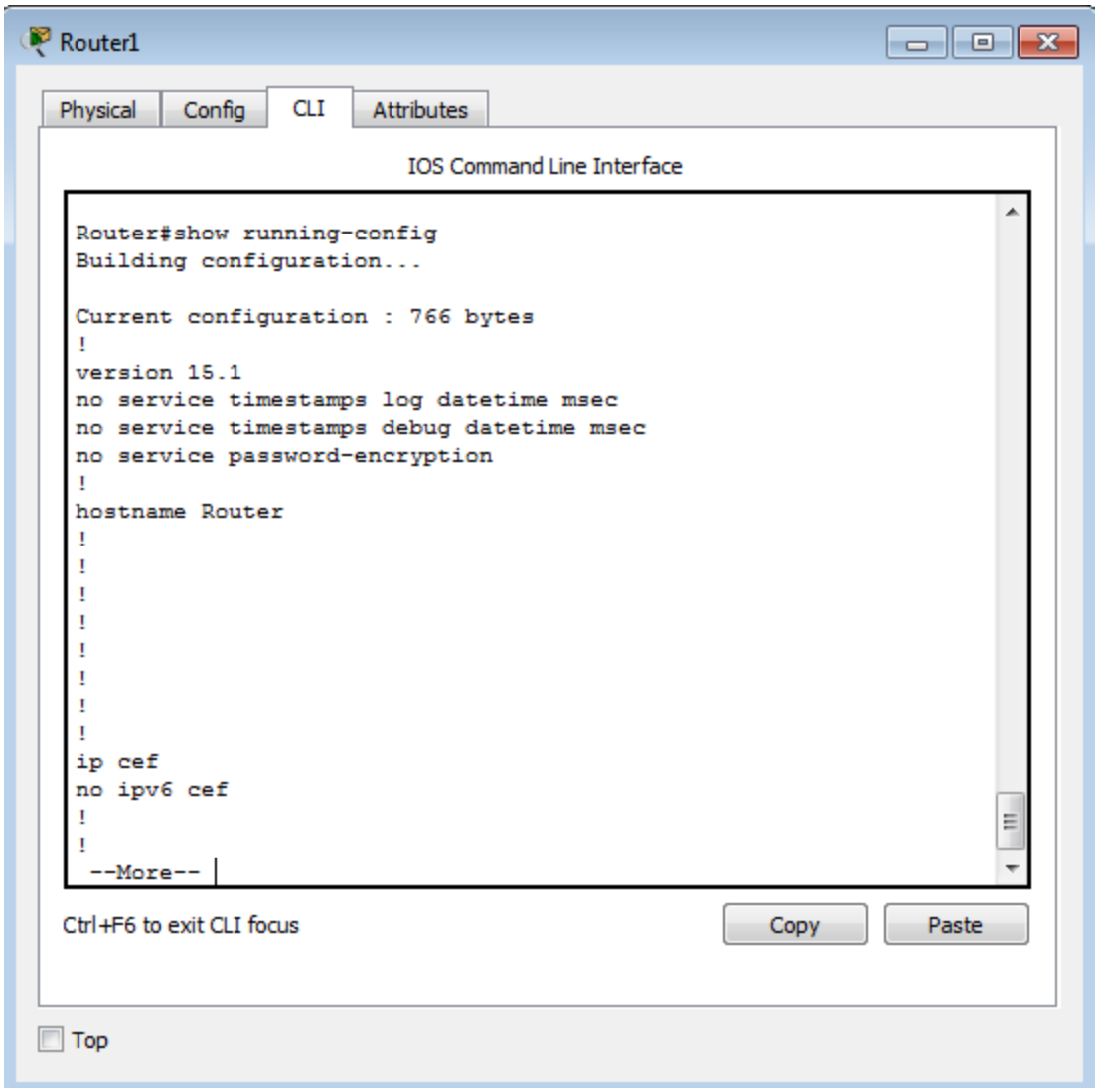
12. menerapkan Access List tersebut ke interface Router 1 dalam hal ini interface e1 yang mengarah ke dalam jaringan 192.168.110.0



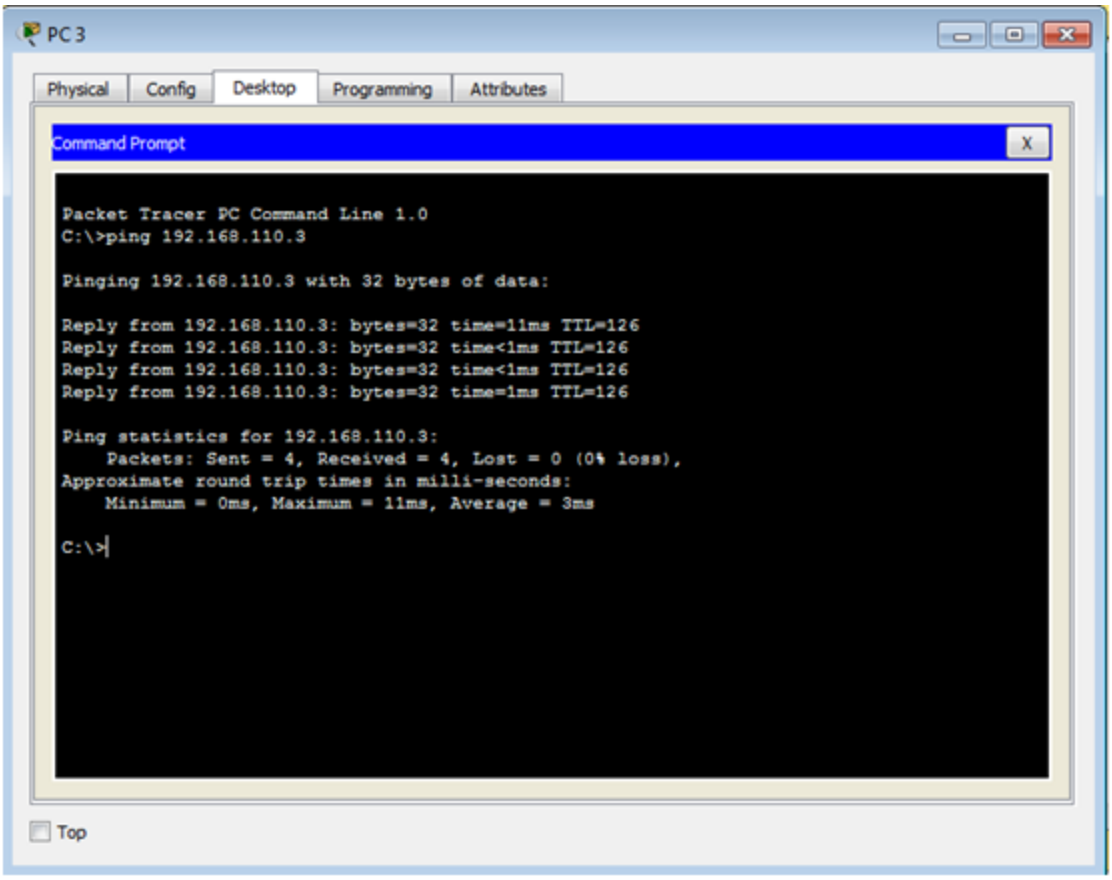
14. Melihat konfigurasi Access List pada Router 1.



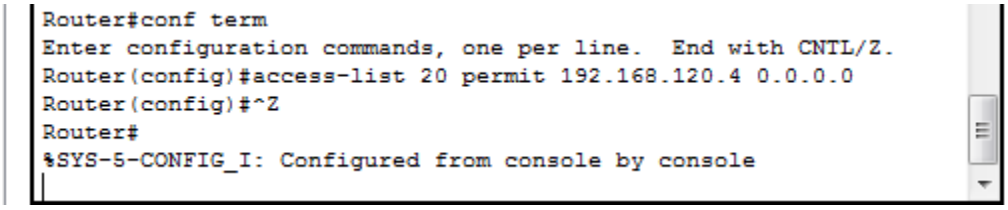
15. Perhatikan konfigurasi Access List pada Ethernet 1 dengan perintah show running-config.



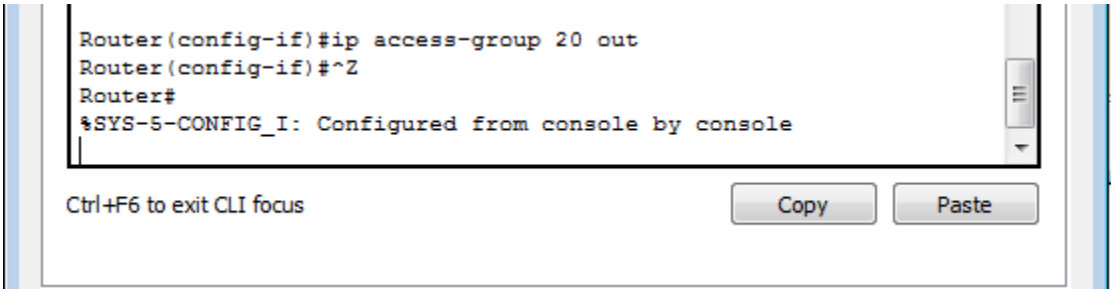
16. Lakukan tes koneksi dua arah antara PC 3 dengan PC 1 yang berada pada jaringan berbeda dengan menggunakan ping.



18. Perintah yang digunakan.



19.



20. Melakukan tes koneksi dari PC 3 ke PC 1 dan PC 2.

a. ke PC 1

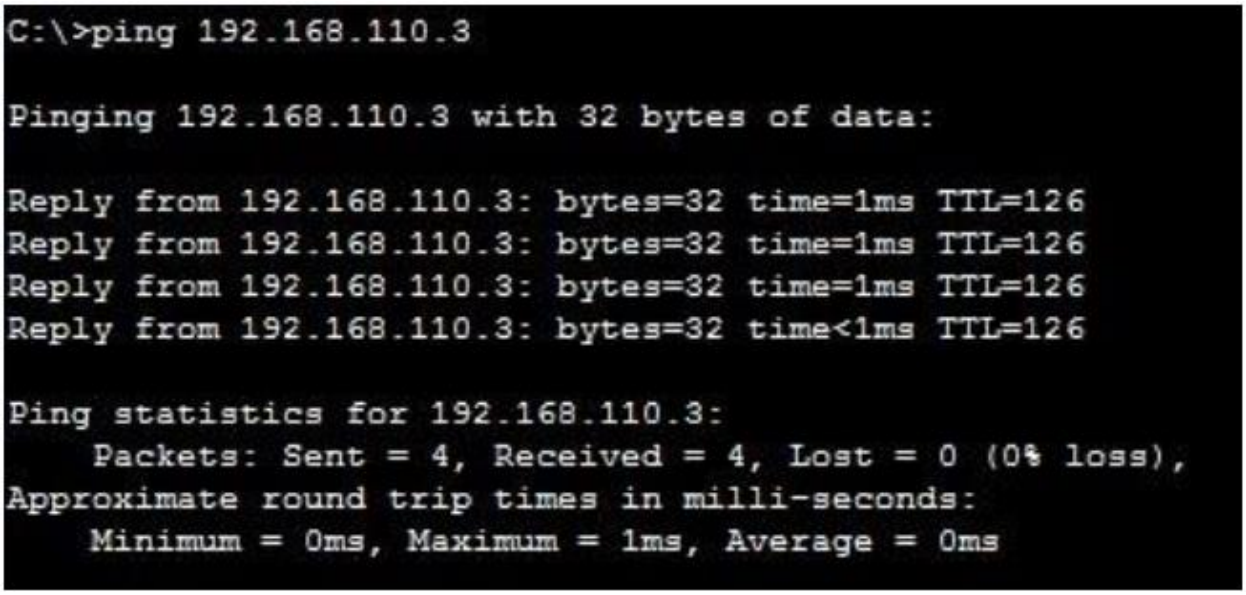
```
C:\>ping 192.168.110.3

Pinging 192.168.110.3 with 32 bytes of data:

Reply from 192.168.10.1: Destination host unreachable.
Reply from 192.168.10.1: Destination host unreachable.
Reply from 192.168.10.1: Destination host unreachable.
Reply from 192.168.10.1: Destination host unreachable.

Ping statistics for 192.168.110.3:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

b. ke PC 2

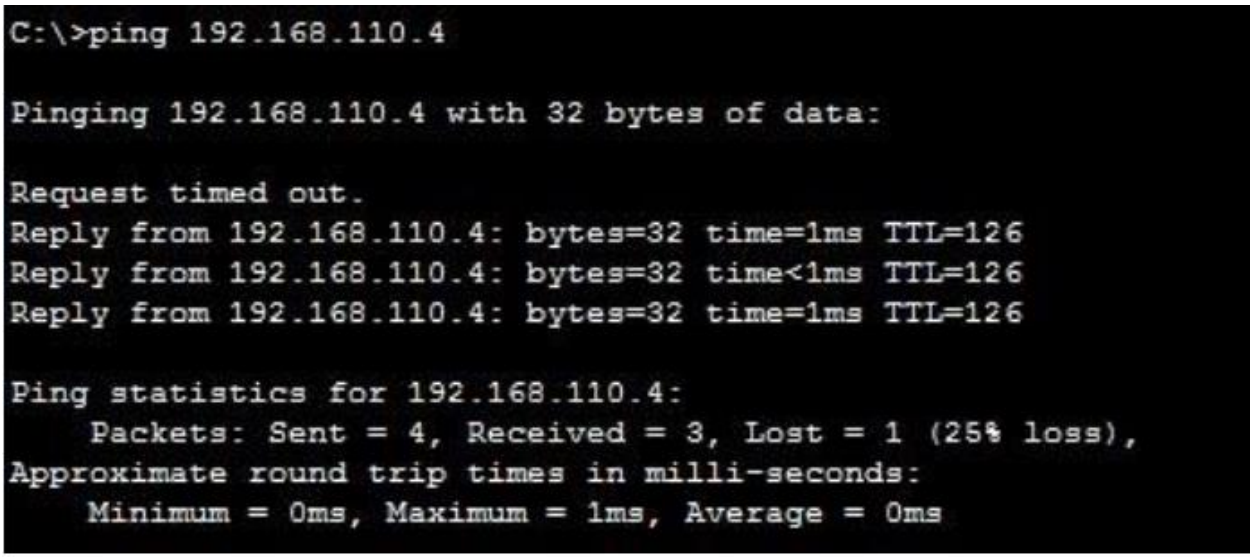
```
C:\>ping 192.168.110.4

Pinging 192.168.110.4 with 32 bytes of data:

Reply from 192.168.10.1: Destination host unreachable.
Reply from 192.168.10.1: Destination host unreachable.
Reply from 192.168.10.1: Destination host unreachable.
Reply from 192.168.10.1: Destination host unreachable.

Ping statistics for 192.168.110.4:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

21. Melakukan tes koneksi dari PC 4 ke PC 1 dan PC 2.

a. ke PC 1.


C:\>ping 192.168.110.3
Pinging 192.168.110.3 with 32 bytes of data:
Reply from 192.168.110.3: bytes=32 time=1ms TTL=126
Reply from 192.168.110.3: bytes=32 time=1ms TTL=126
Reply from 192.168.110.3: bytes=32 time=1ms TTL=126
Reply from 192.168.110.3: bytes=32 time<1ms TTL=126
Ping statistics for 192.168.110.3:
Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 1ms, Average = 0ms

b. ke PC 2.


C:\>ping 192.168.110.4
Pinging 192.168.110.4 with 32 bytes of data:
Request timed out.
Reply from 192.168.110.4: bytes=32 time=1ms TTL=126
Reply from 192.168.110.4: bytes=32 time<1ms TTL=126
Reply from 192.168.110.4: bytes=32 time=1ms TTL=126
Ping statistics for 192.168.110.4:
Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
Minimum = 0ms, Maximum = 1ms, Average = 0ms

Kegiatan 2.

1. Melakukan konfigurasi Extended Access List dengan mengijinkan (permit) paket telnet dari semua host yang ada di jaringan **192.168.120.0** ke host **192.168.110.3**.

```
Router>en
Router#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#access-list 100 permit tcp 192.168.120.0 0.0.0.255 192.168.110.3 0.0.0.0 eq telnet
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

2. Menerapkan Access List ke interface router.

```
Router#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#int fa0/1
Router(config-if)#ip access-group 100 in
Router(config-if)#^Z
Router#
%SYS-5-CONFIG_I: Configured from console by console
```