

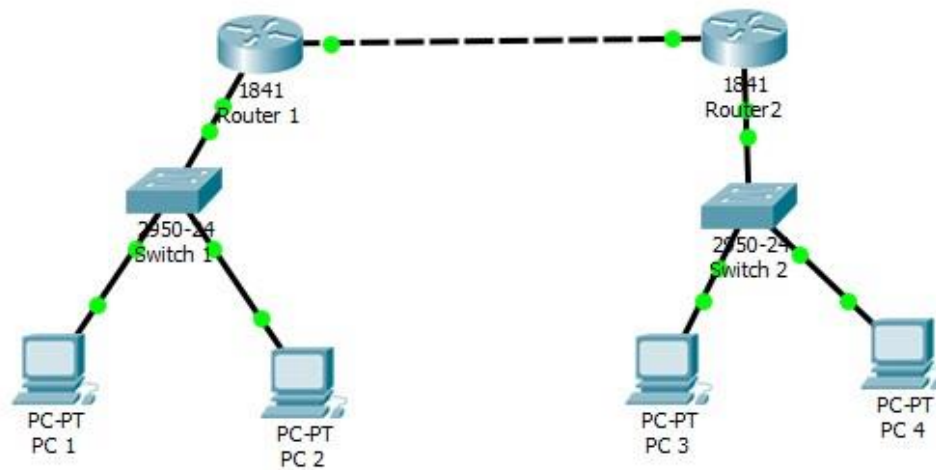
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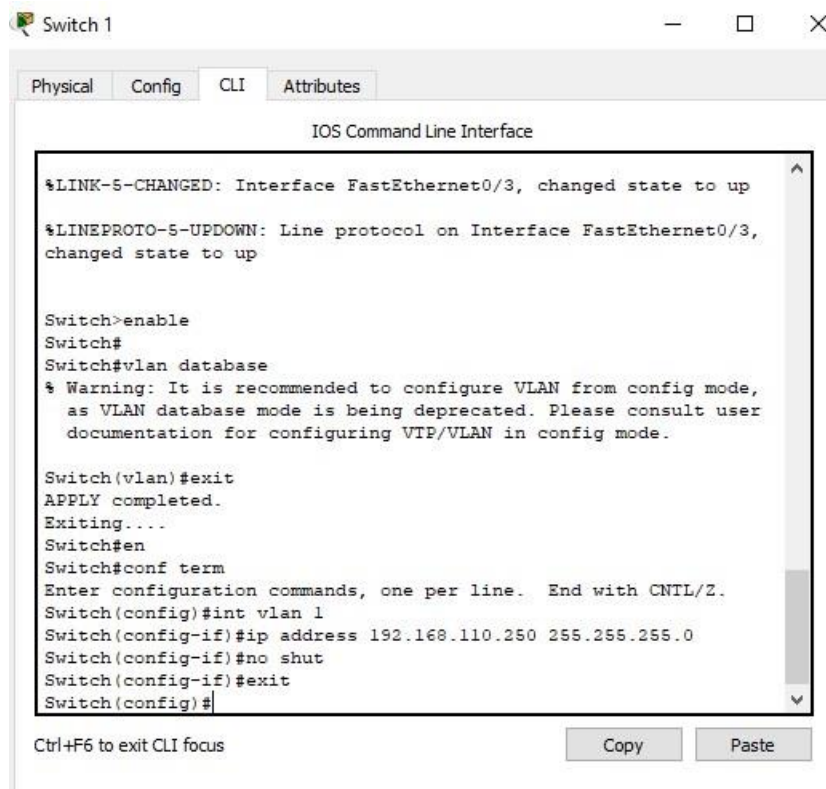
Modul : 8

Kegiatan I (Konfigurasi Access List)

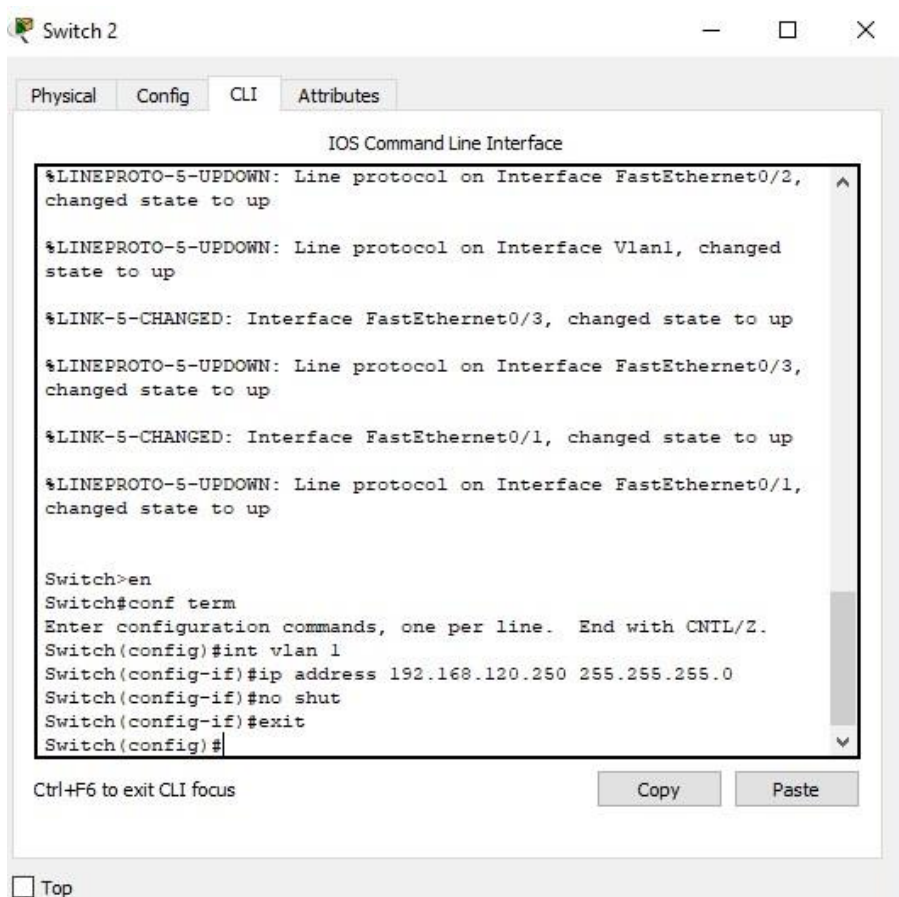


1. Memberikan alamat Ip (Switch 1 dan Switch 2) untuk digunakan sebagai default gateway bagi semua komputer.

Switch 1



Switch 2



2. memberikan Alamat Ip, subnet mask, dan gateway default pada masing-masing PC **PC**

1

PC 1

Physical Config Desktop Programming Attributes

IP Configuration

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::2D0:BCFF:FEBD:9AE3

IPv6 Gateway

IPv6 DNS Server

☐ Top

PC 2

PC 2

Physical Config Desktop Programming Attributes

IP Configuration

IP Configuration

☐ DHCP ☒ Static

IP Address 192.168.110.4

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 /

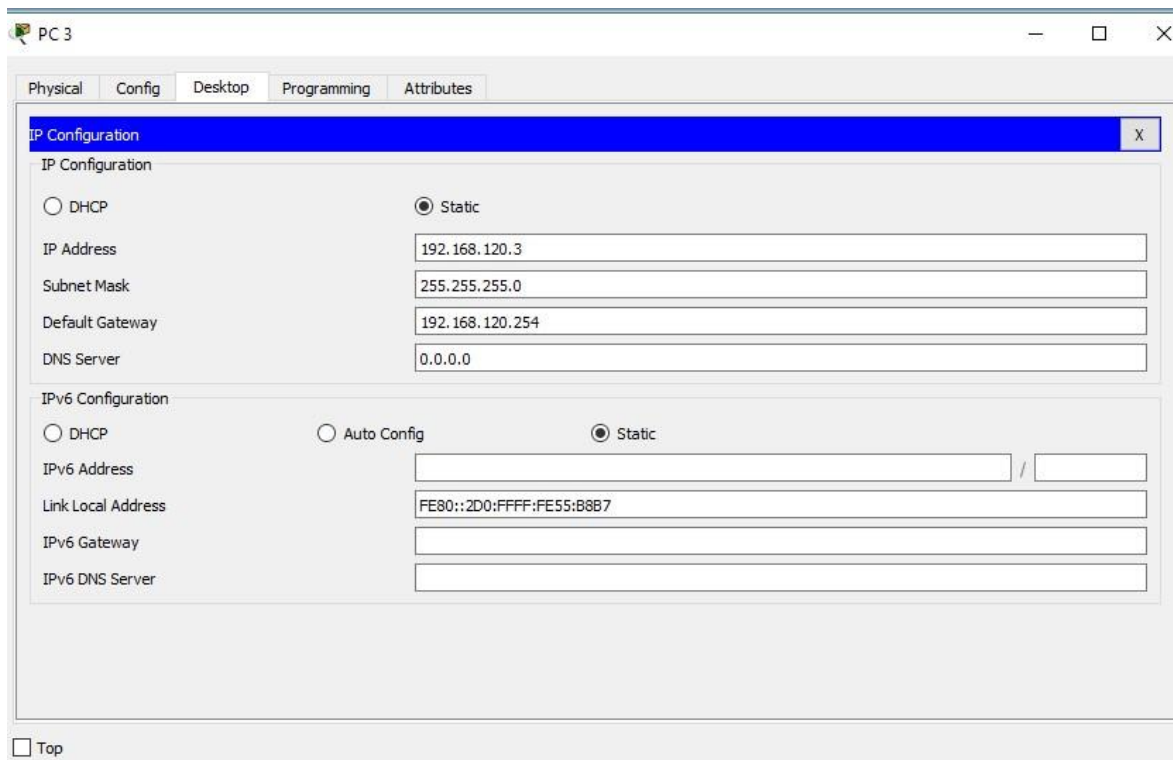
Link Local Address FE80::2E0:B0FF:FE60:7E36

IPv6 Gateway

IPv6 DNS Server

☐ Top

PC 3

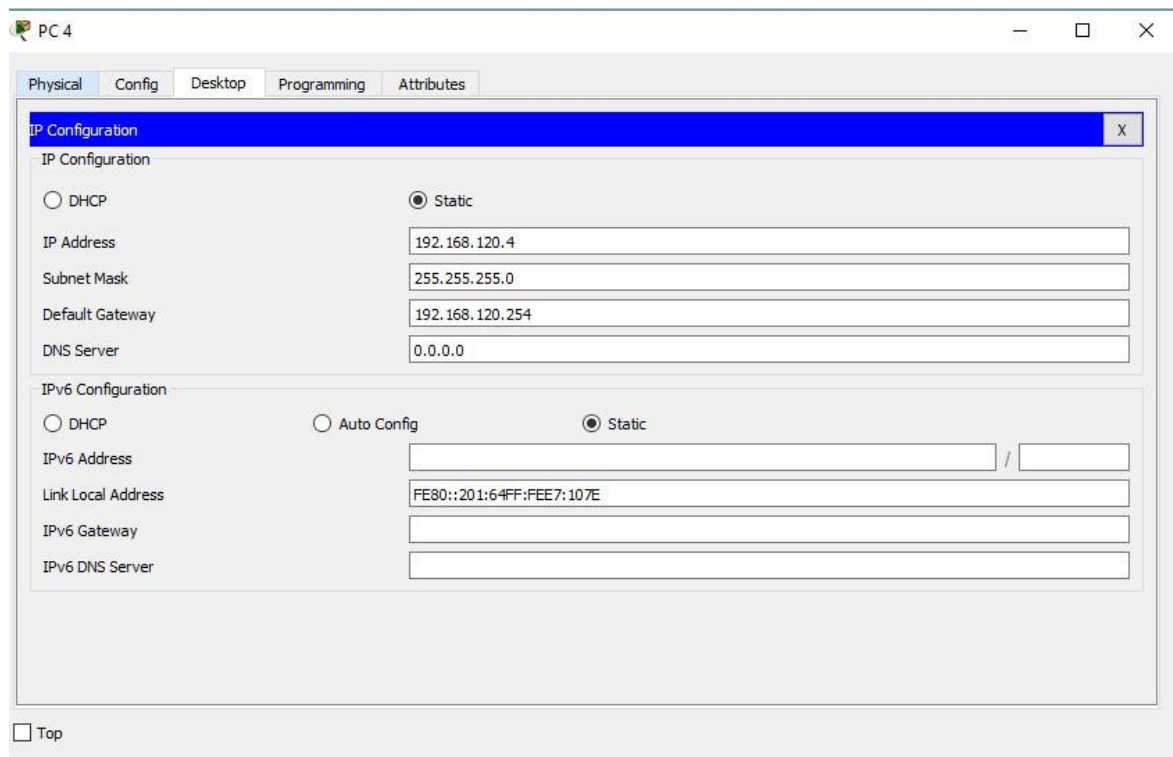


The screenshot shows the configuration window for PC 3. The 'Config' tab is selected. The 'IP Configuration' section is active, showing 'Static' as the selected option. The IP Address is 192.168.120.3, Subnet Mask is 255.255.255.0, Default Gateway is 192.168.120.254, and DNS Server is 0.0.0.0. The 'IPv6 Configuration' section is also visible, with 'Static' selected and a Link Local Address of FE80::2D0:FFFF:FE55:B8B7.

Field	Value
IP Address	192.168.120.3
Subnet Mask	255.255.255.0
Default Gateway	192.168.120.254
DNS Server	0.0.0.0

Field	Value
IPv6 Address	
Link Local Address	FE80::2D0:FFFF:FE55:B8B7
IPv6 Gateway	
IPv6 DNS Server	

PC 4



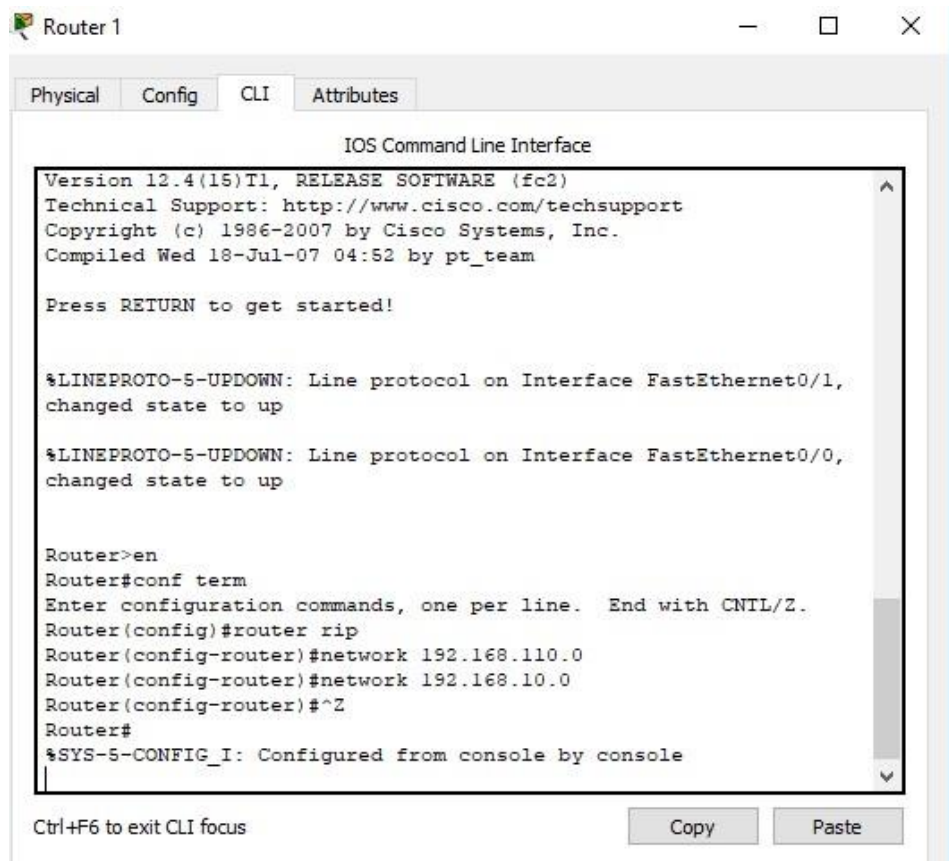
The screenshot shows the configuration window for PC 4. The 'Config' tab is selected. The 'IP Configuration' section is active, showing 'Static' as the selected option. The IP Address is 192.168.120.4, Subnet Mask is 255.255.255.0, Default Gateway is 192.168.120.254, and DNS Server is 0.0.0.0. The 'IPv6 Configuration' section is also visible, with 'Static' selected and a Link Local Address of FE80::201:64FF:FEE7:107E.

Field	Value
IP Address	192.168.120.4
Subnet Mask	255.255.255.0
Default Gateway	192.168.120.254
DNS Server	0.0.0.0

Field	Value
IPv6 Address	
Link Local Address	FE80::201:64FF:FEE7:107E
IPv6 Gateway	
IPv6 DNS Server	

3. Lakukan Routing pada Router 1 dan Router 2

Router 1 diberikan Network ID 192.168.110.0 dan 192.168.10.0



The screenshot shows the 'Router 1' window with the 'CLI' tab selected. The interface displays the IOS Command Line Interface. The text in the terminal window is as follows:

```
Version 12.4(15)T1, RELEASE SOFTWARE (fc2)
Technical Support: http://www.cisco.com/techsupport
Copyright (c) 1986-2007 by Cisco Systems, Inc.
Compiled Wed 18-Jul-07 04:52 by pt_team

Press RETURN to get started!

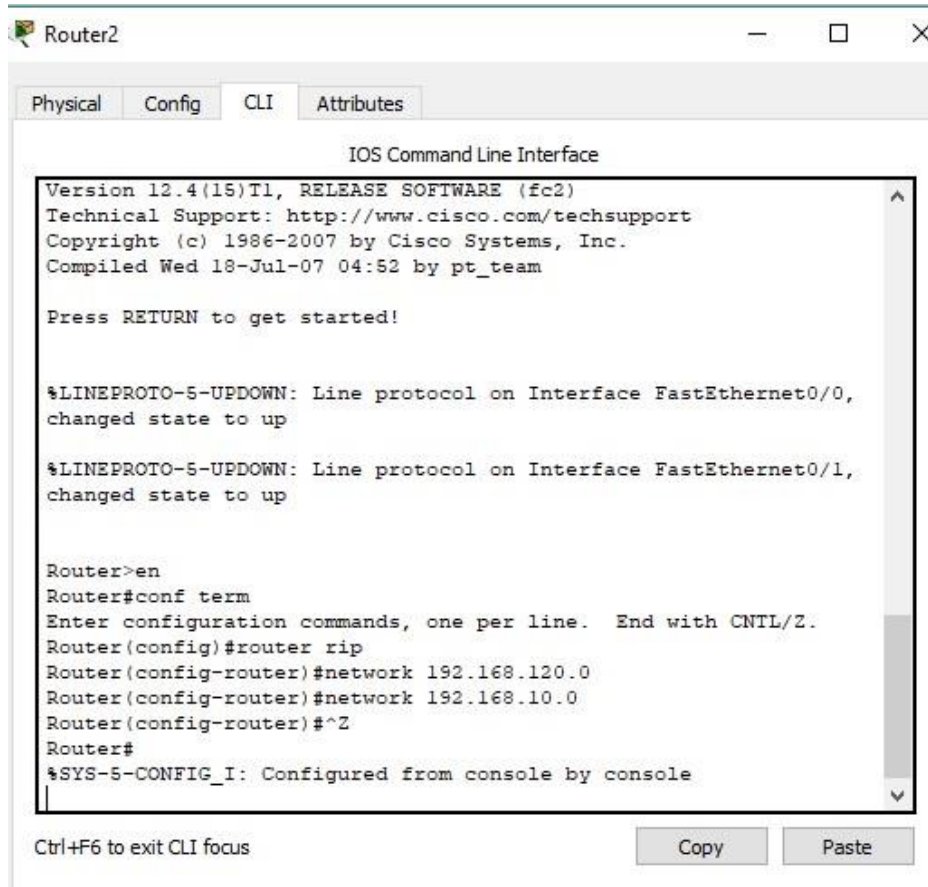
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1,
changed state to up

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

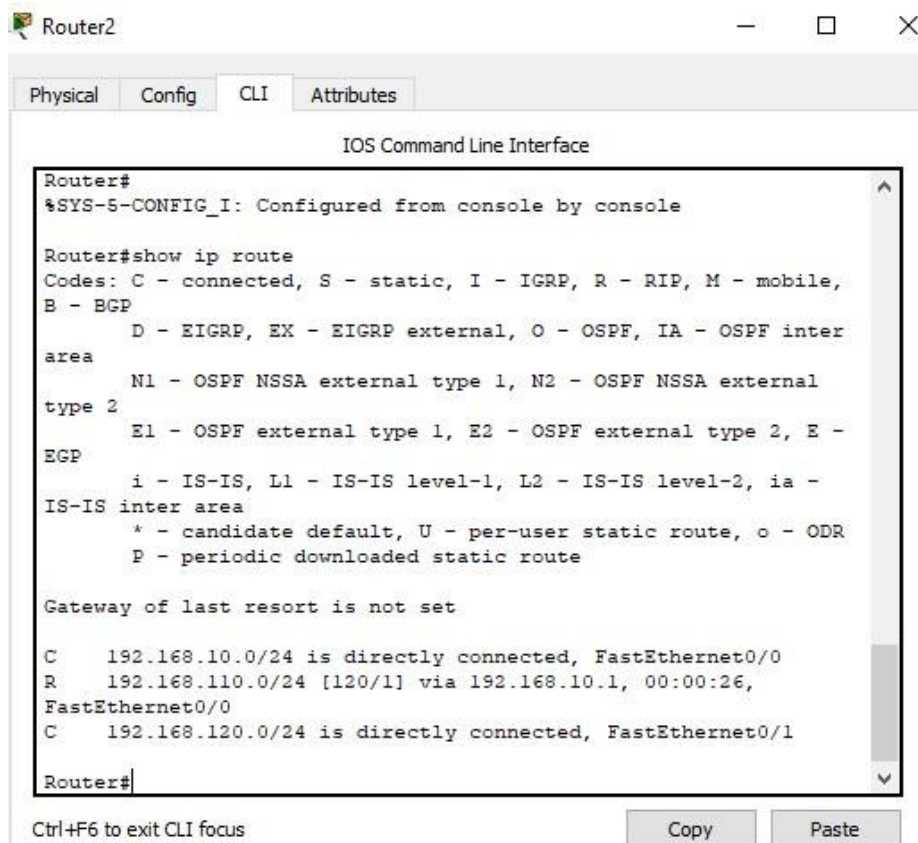
Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#router rip
Router(config-router)#network 192.168.110.0
Router(config-router)#network 192.168.10.0
Router(config-router)#^Z
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

At the bottom of the window, there is a status bar that says 'Ctrl+F6 to exit CLI focus' and two buttons labeled 'Copy' and 'Paste'.

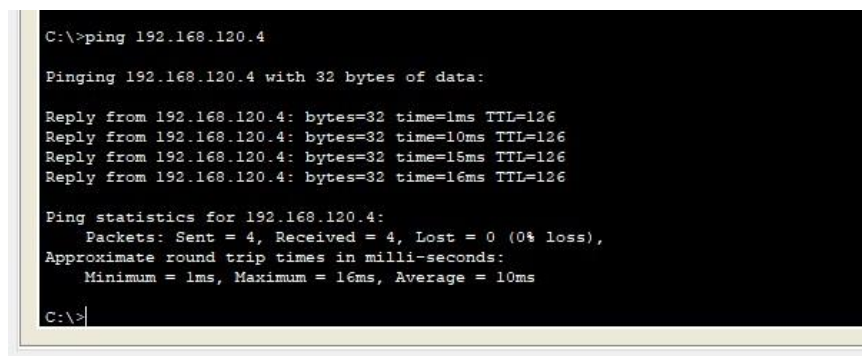
Router 2 diberikan network ID 192.168.120.0 dan 192.168.10.0



4. Lakukan pengecekan tabel routing pada kedua router tersebut dengan perintah [show ip route]



5. Melakukan tes koneksi dari PC 1 ke PC 4 dengan menggunakan perintah ping



6. menentukan access List yang akan diterapkan pada jaringan tersebut. Router 1 akan mengizinkan semua host dari jaringan 192.168.100.0

```

Router(config-if)#exit
Router(config)#access-list 10 permit 192.168.120.0 0.0.255.255
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console

```


7. Menerapkan access list 10 untuk interface e1

```
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa0/0
Router(config-if)#ip access-group 10 out
Router(config-if)#^Z
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

8. Kemudian lihat konfigurasi access list tersebut pada router 1

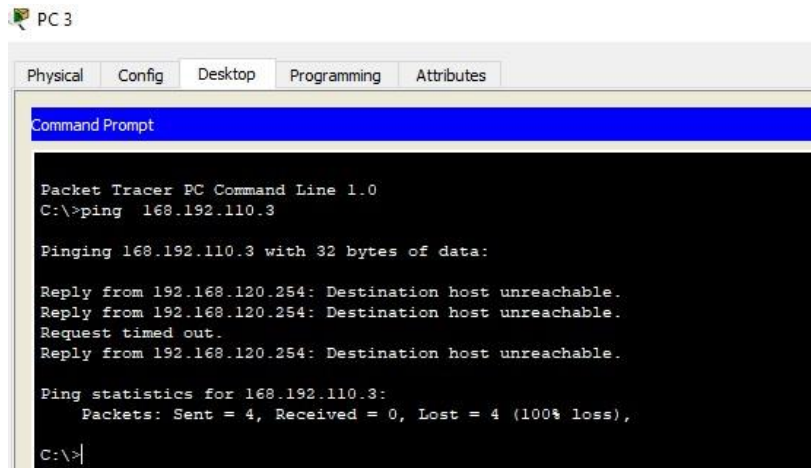
```
Router#show access-lists
Standard IP access list 10
  10 permit 192.168.0.0 0.0.255.255
Standard IP access list 20
  10 permit host 192.168.120.4 (7 match(es))
  20 permit 192.168.0.0 0.0.255.255 (8 match(es))
```

9. lakukan perintah [show running-config]

```
Router#show running-config
Building configuration...

Current configuration : 821 bytes
!
version 12.4
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname Router
!
!
!
!
!
!
!
ip cef
no ipv6 cef
!
!
!
```

10. tes koneksi dengan cara melakukan ping antara PC 3 dan PC 1



Replay karena jaringan 192.168.120.0 dapat mengakses jaringan 192.168.100.0. 11.

Memberikan akses hanya pada 1 host PC 4 dengan alamat ip 192.168.120.4

```
Router#en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#access-list 20 permit 192.168.120.4 0.0.0.0
Router(config)#^Z
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int FastEthernet0/1
Router(config-if)#ip access-group 20 out
Router(config-if)#^Z
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

12. tes koneksi dari PC 3 192.168.120.0 ke PC 1 dan PC 2 192.168.110.0

```

C:\>ping 168.192.110.3

Pinging 168.192.110.3 with 32 bytes of data:

Reply from 192.168.120.254: Destination host unreachable.
Reply from 192.168.120.254: Destination host unreachable.
Reply from 192.168.120.254: Destination host unreachable.
Reply from 192.168.120.254: Destination host unreachable.

Ping statistics for 168.192.110.3:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ping 168.192.110.4

Pinging 168.192.110.4 with 32 bytes of data:

Reply from 192.168.120.254: Destination host unreachable.
Reply from 192.168.120.254: Destination host unreachable.
Reply from 192.168.120.254: Destination host unreachable.
Reply from 192.168.120.254: Destination host unreachable.

Ping statistics for 168.192.110.4:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
|
C:\>

```

13. tes koneksi dari PC 4 192.168.120.0 ke PC 1 dan PC 2 192.168.110.0

```

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=12ms TTL=126
Reply from 192.168.110.3: bytes=32 time=1ms TTL=126
Reply from 192.168.110.3: bytes=32 time=12ms 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 = 1ms, Maximum = 12ms, Average = 6ms

```

```

C:\>ping 192.168.110.4

Pinging 192.168.110.4 with 32 bytes of data:

Reply from 192.168.110.4: bytes=32 time<1ms TTL=126
Reply from 192.168.110.4: bytes=32 time=13ms TTL=126
Reply from 192.168.110.4: bytes=32 time=11ms TTL=126
Reply from 192.168.110.4: bytes=32 time=3ms TTL=126

Ping statistics for 192.168.110.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 13ms, Average = 6ms

C:\>

```

Kegiatan 2 (Konfigurasi Extended Access List)

1.

```
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#access-list 100 permit tcp
% Incomplete command.
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)#int FastEthernet0/0
Router(config-if)#ip access-group 100 in
Router(config-if)#
```