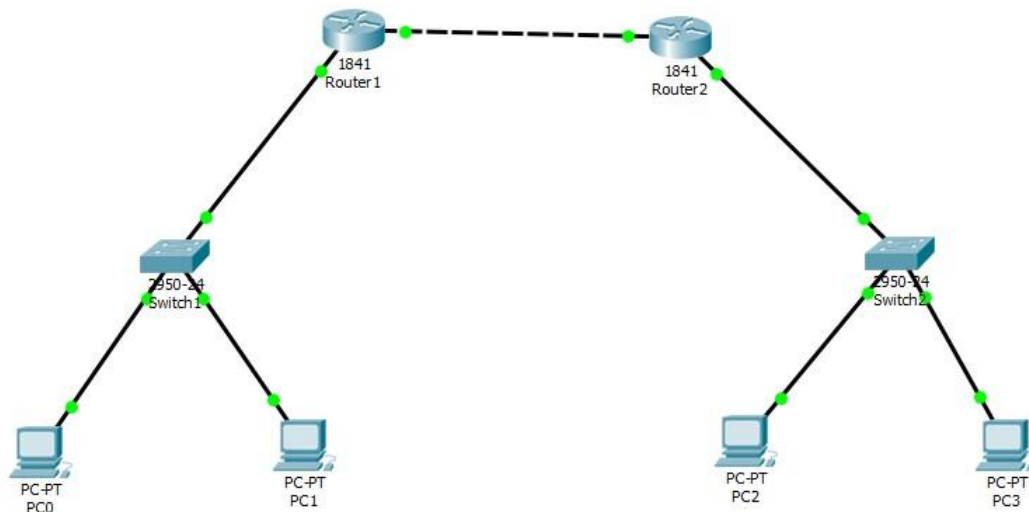


NAMA : FEBRIANTO RIDWAN SYAH
NIM : L200170121
KELAS : C
MODUL : 8



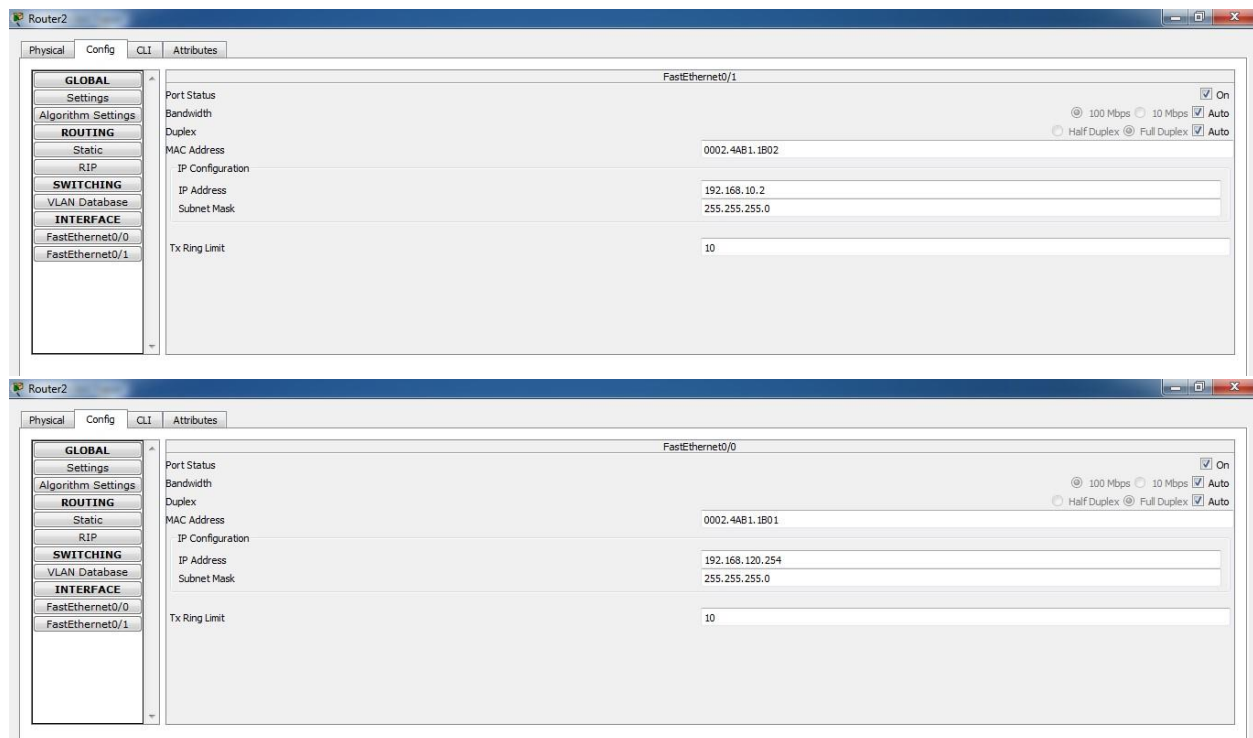
1. Router

Router1 Configuration - FastEthernet0/0

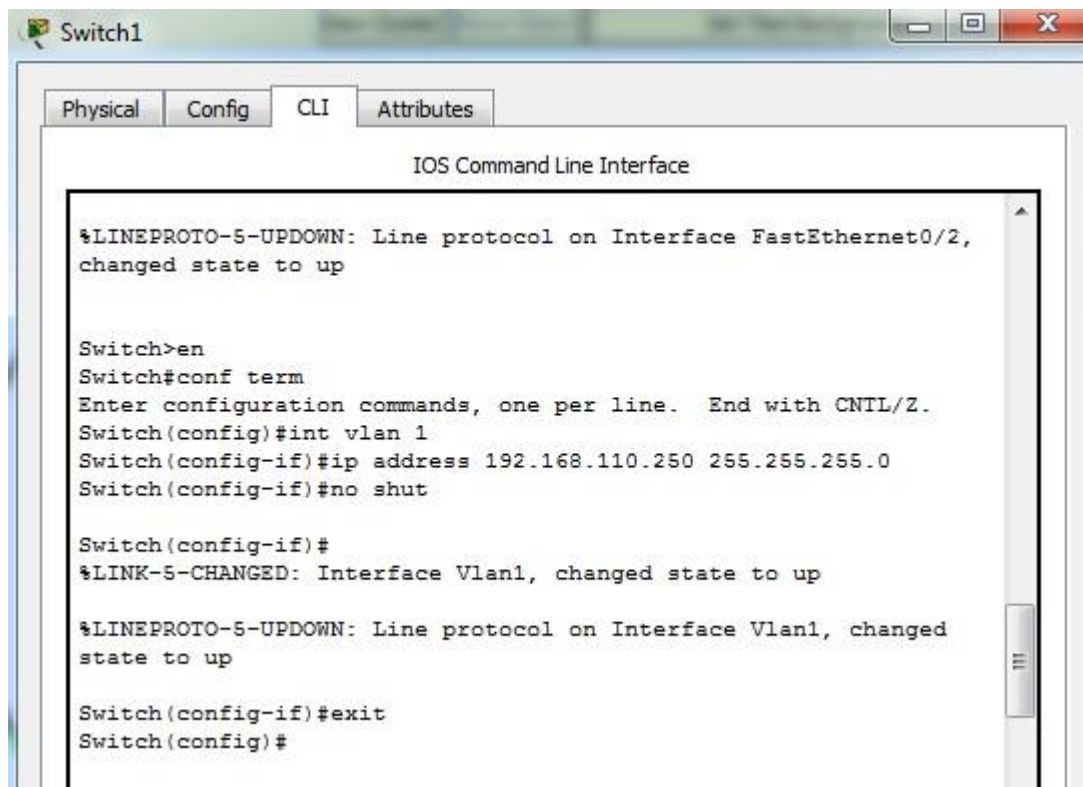
Section	Parameter	Value
GLOBAL	Port Status	On
	Bandwidth	100 Mbps
	Duplex	Full Duplex
	MAC Address	0060.5CAC.1301
ROUTING	Static	
	RIP	
SWITCHING	VLAN Database	
	INTERFACE	
FastEthernet0/0	IP Configuration	
	IP Address	192.168.110.254
	Subnet Mask	255.255.255.0
	Tx Ring Limit	10

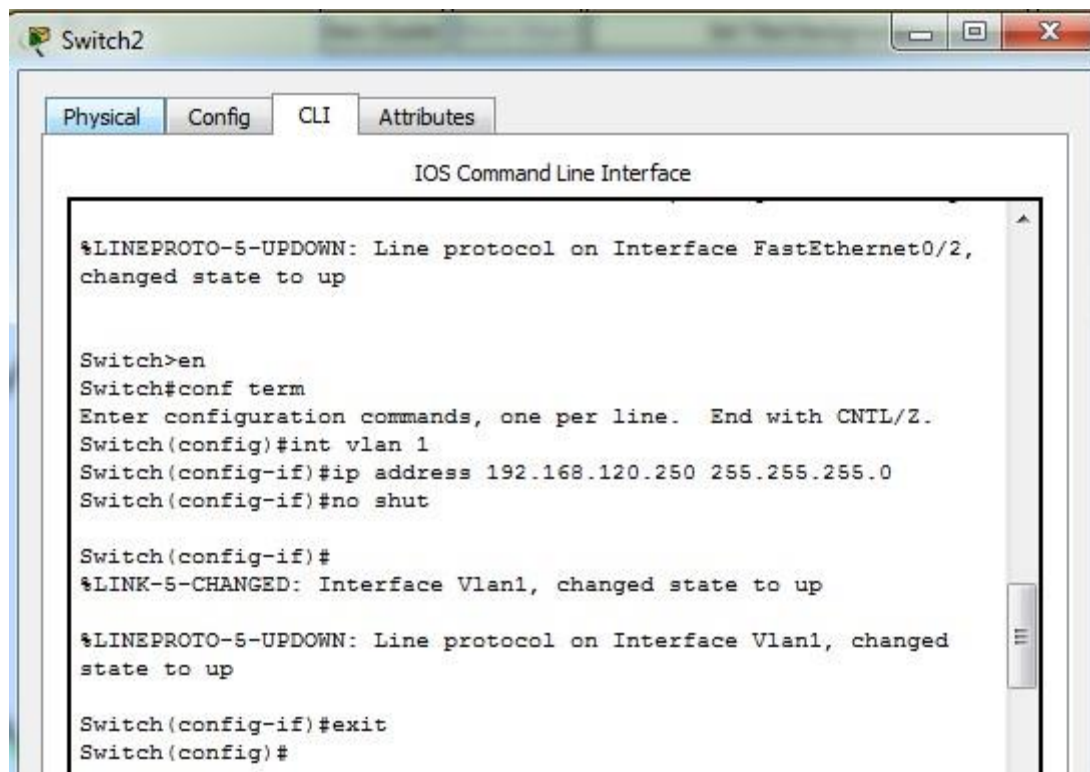
Router1 Configuration - FastEthernet0/1

Section	Parameter	Value
GLOBAL	Port Status	On
	Bandwidth	100 Mbps
	Duplex	Full Duplex
	MAC Address	0060.5CAC.1302
ROUTING	Static	
	RIP	
SWITCHING	VLAN Database	
	INTERFACE	
FastEthernet0/1	IP Configuration	
	IP Address	192.168.10.1
	Subnet Mask	255.255.255.0
	Tx Ring Limit	10

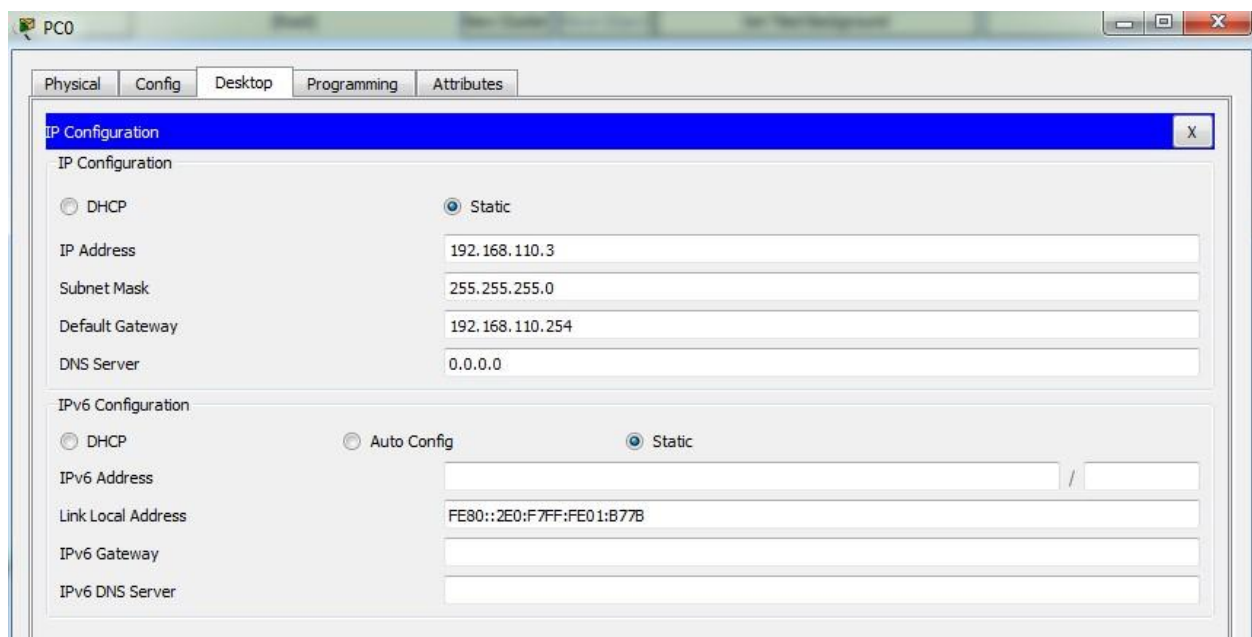


2. Memberi alamat ip pada setiap switch





3. Memberikan alamat ip, subnet mask, dan default gateway pada setiap pc



PC1

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::200:CFF:FE16:BA2

IPv6 Gateway

IPv6 DNS Server

Top

PC2

Physical Config Desktop Programming Attributes

IP Configuration

IP Configuration

☐ DHCP ☒ Static

IP Address 192.168.120.3

Subnet Mask 255.255.255.0

Default Gateway 192.168.120.254

DNS Server 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

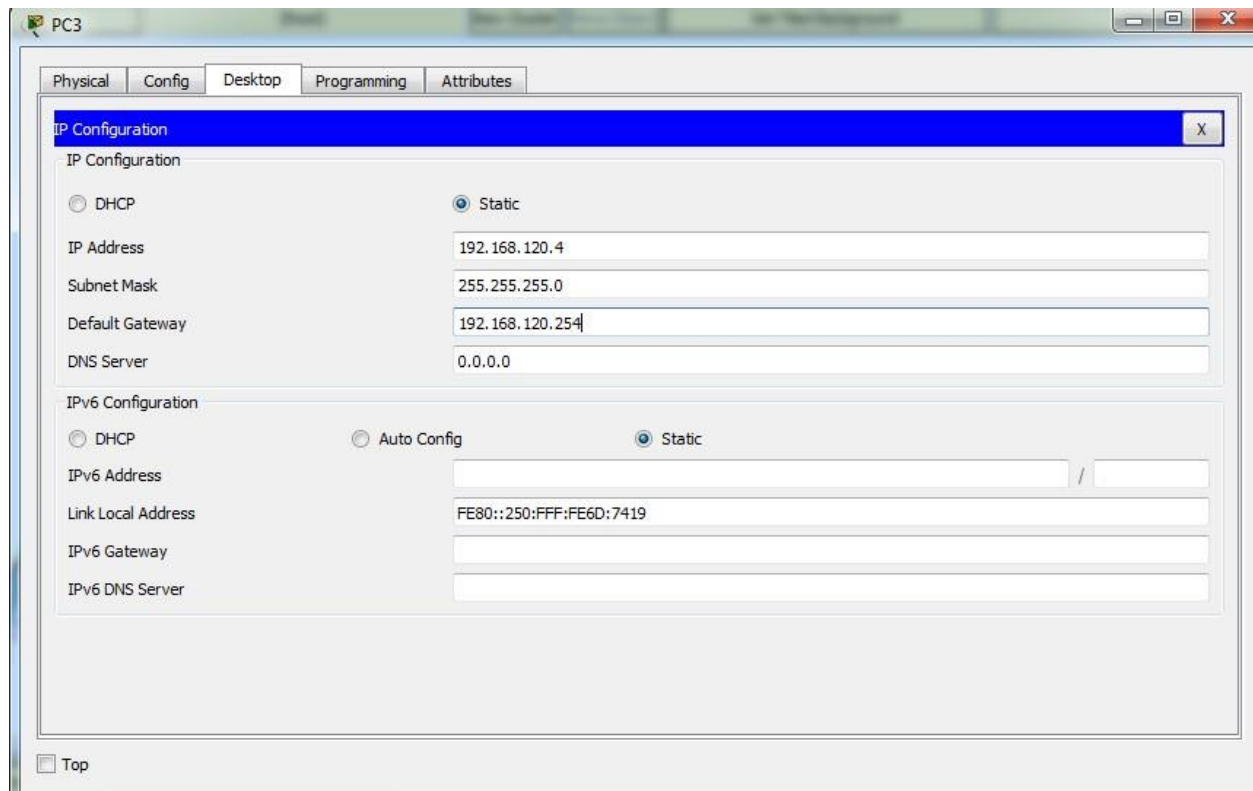
IPv6 Address /

Link Local Address FE80::230:A3FF:FE5A:79A5

IPv6 Gateway

IPv6 DNS Server

Top



4. Pembuatan routing dengan protocol rip pada kedua jaringan

```

Router1
Physical Config CLI Attributes
IOS Co

192.168.10.0/24 is directly connected, FastEthernet0/0

Router#
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/1
Router(config-if)#end
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)#router rip
Router(config-router)#network 192.168.110.0
Router(config-router)#network 192.168.10.0
Router(config-router)#
Router(config-router)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#show ip route
Codes: C - connected, S - static, I - IGRP, 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

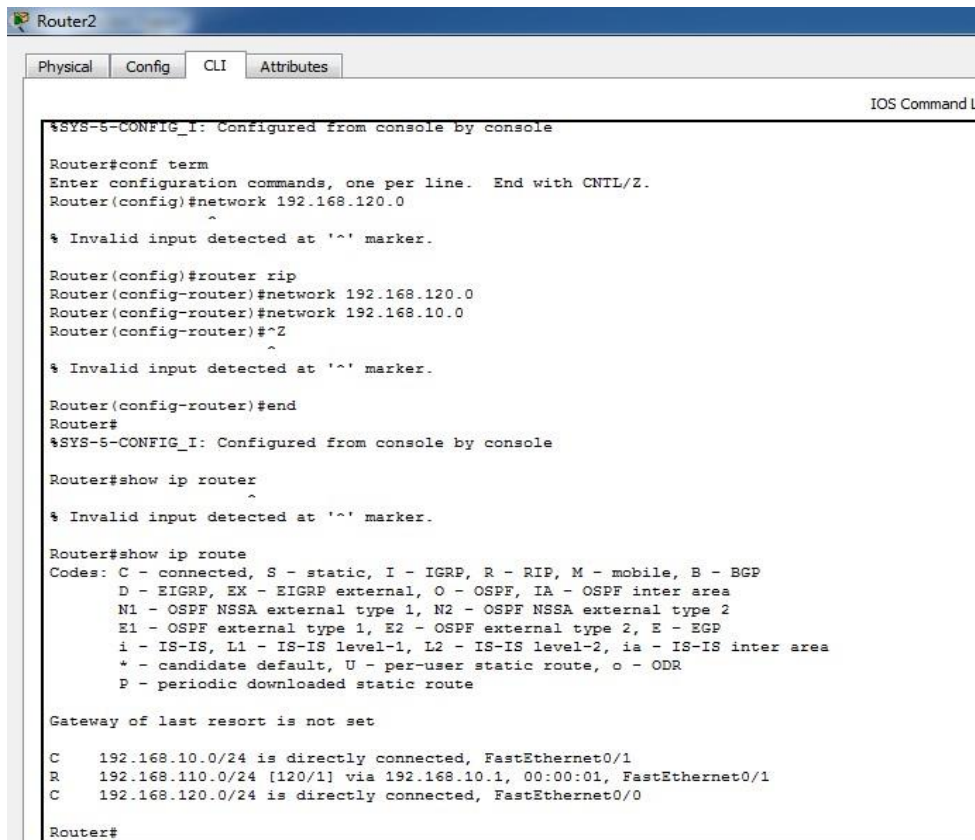
Gateway of last resort is not set

C    192.168.10.0/24 is directly connected, FastEthernet0/1
C    192.168.110.0/24 is directly connected, FastEthernet0/0
R    192.168.120.0/24 [120/1] via 192.168.10.2, 00:00:21, FastEthernet0/1

Router#

```

5.



```
Router2
Physical Config CLI Attributes
IOS Command Line

%SYS-5-CONFIG_I: Configured from console by console

Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#network 192.168.120.0
^
% Invalid input detected at '^' marker.

Router(config)#router rip
Router(config-router)#network 192.168.120.0
Router(config-router)#network 192.168.10.0
Router(config-router)#^Z
^
% Invalid input detected at '^' marker.

Router(config-router)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#show ip router
^
% Invalid input detected at '^' marker.

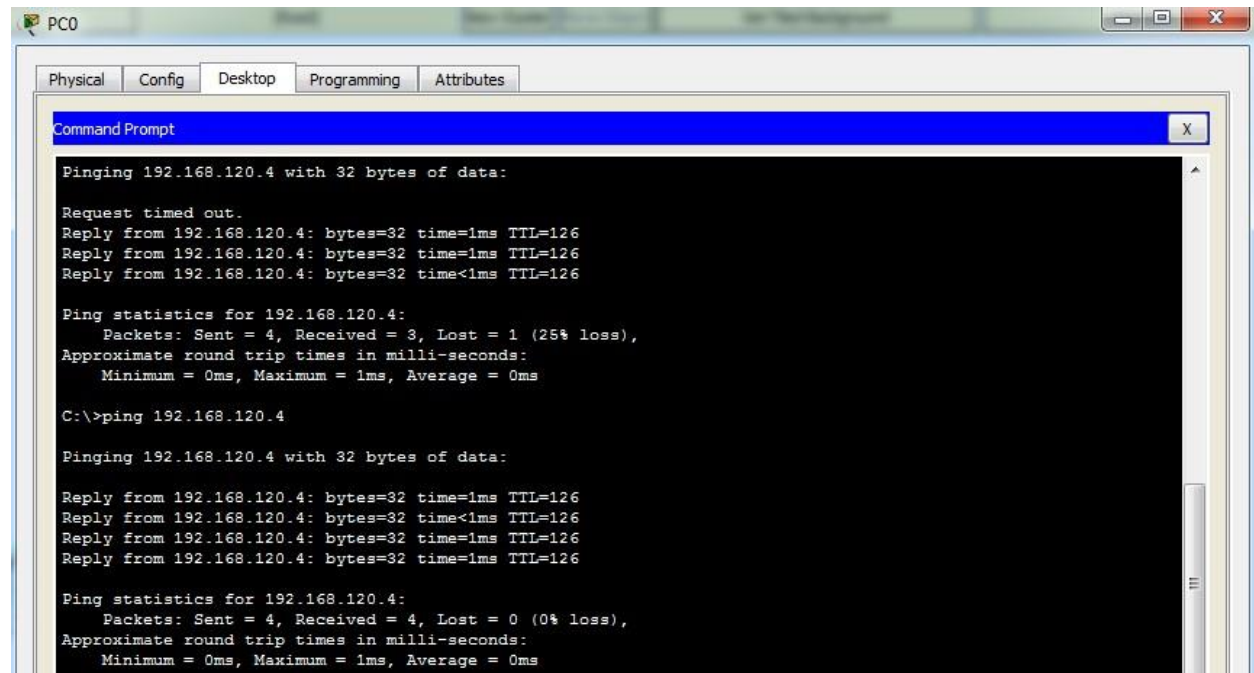
Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B - BGP
        D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
        N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
        E1 - OSPF external type 1, E2 - OSPF external type 2, E - 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

C    192.168.10.0/24 is directly connected, FastEthernet0/1
R    192.168.110.0/24 [120/1] via 192.168.10.1, 00:00:01, FastEthernet0/1
C    192.168.120.0/24 is directly connected, FastEthernet0/0

Router#
```

6. Ping dari pc 1 ke pc 4



```
PC0
Physical Config Desktop Programming Attributes

Command Prompt

Pinging 192.168.120.4 with 32 bytes of data:

Request timed out.
Reply from 192.168.120.4: bytes=32 time=1ms TTL=126
Reply from 192.168.120.4: bytes=32 time=1ms TTL=126
Reply from 192.168.120.4: bytes=32 time<1ms TTL=126

Ping statistics for 192.168.120.4:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

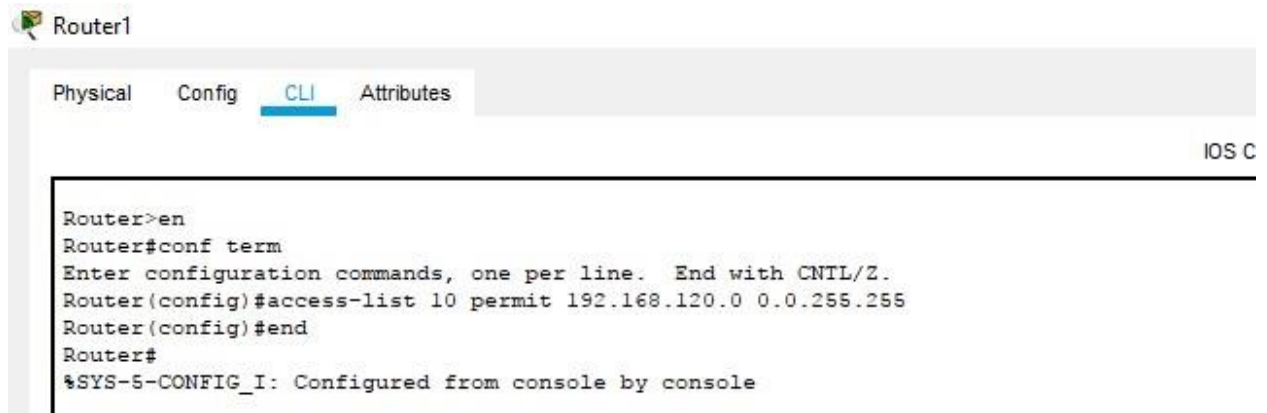
C:\>ping 192.168.120.4

Pinging 192.168.120.4 with 32 bytes of data:

Reply from 192.168.120.4: bytes=32 time=1ms TTL=126
Reply from 192.168.120.4: bytes=32 time<1ms TTL=126
Reply from 192.168.120.4: bytes=32 time=1ms TTL=126
Reply from 192.168.120.4: bytes=32 time=1ms TTL=126

Ping statistics for 192.168.120.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

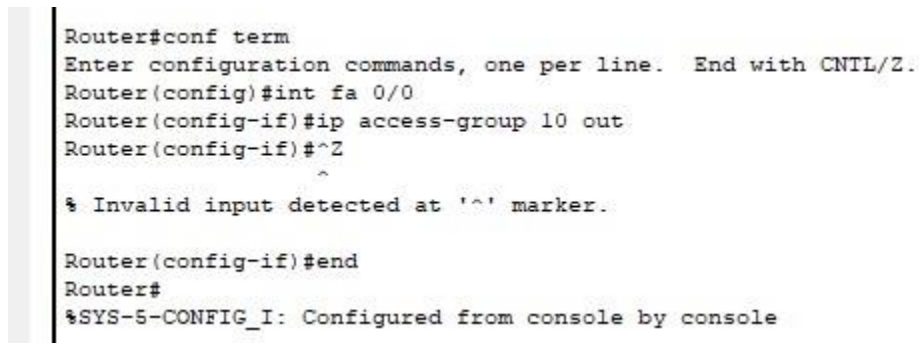

7. Menentukan access list pada router 1



The screenshot shows the CLI interface of Router1. The tabs at the top are Physical, Config, CLI (selected), and Attributes. The text 'IOS C' is visible in the top right corner. The command history shows the user entering 'en' to enter configuration mode, then 'conf term' to enter terminal configuration mode. The user then enters 'access-list 10 permit 192.168.120.0 0.0.255.255' and 'end' to save the configuration. The prompt returns to 'Router#'. A system message at the bottom indicates the configuration was saved from the console.

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

8. Menerapkan access list ke interface router 1

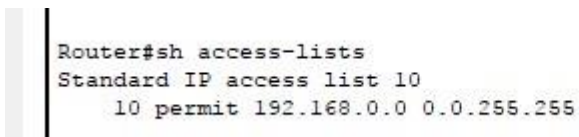


The screenshot shows the CLI interface of Router1. The command history shows the user entering 'conf term' to enter terminal configuration mode, then 'int fa 0/0' to select the interface. The user then enters 'ip access-group 10 out' and '^Z' to save the configuration. The prompt returns to 'Router#'. A system message at the bottom indicates the configuration was saved from the console.

```
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa 0/0
Router(config-if)#ip access-group 10 out
Router(config-if)#^Z
^
% Invalid input detected at '^' marker.

Router(config-if)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

9. Lihat konfig access list router 1



The screenshot shows the CLI interface of Router1. The command history shows the user entering 'sh access-lists' to display the access list configuration. The output shows 'Standard IP access list 10' with the rule '10 permit 192.168.0.0 0.0.255.255'.

```
Router#sh access-lists
Standard IP access list 10
 10 permit 192.168.0.0 0.0.255.255
```

10. Show running config


```

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)#end
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)#fa 0/0
      ^
% Invalid input detected at '^' marker.

Router(config)#int fa 0/0
Router(config-if)#ip access-group 20 out
Router(config-if)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console

```

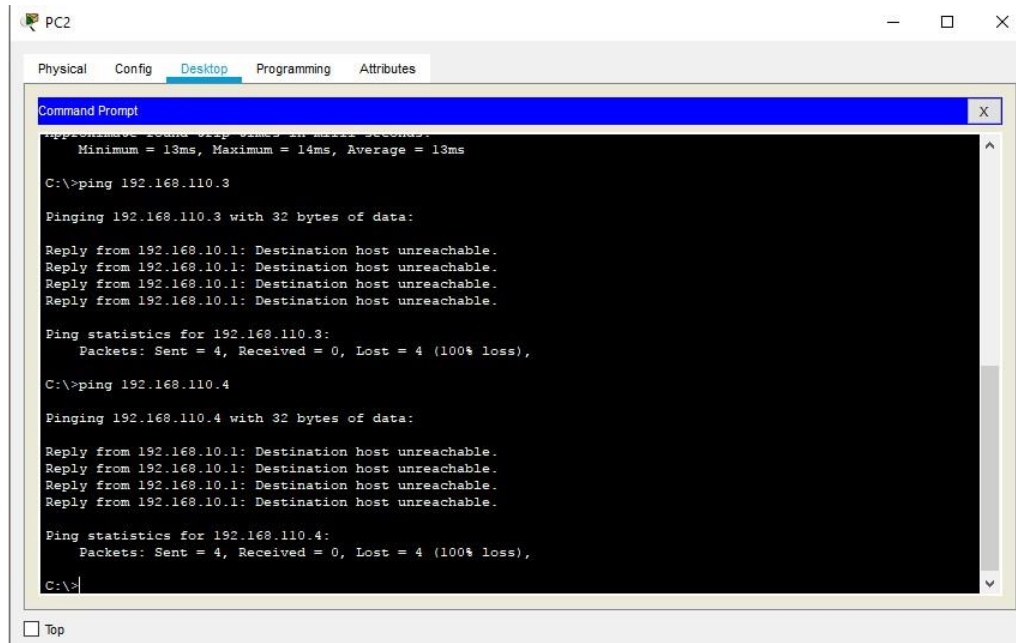
13. Menerapkan access list 20 tersebut pada interface Ethernet pada Router.

```

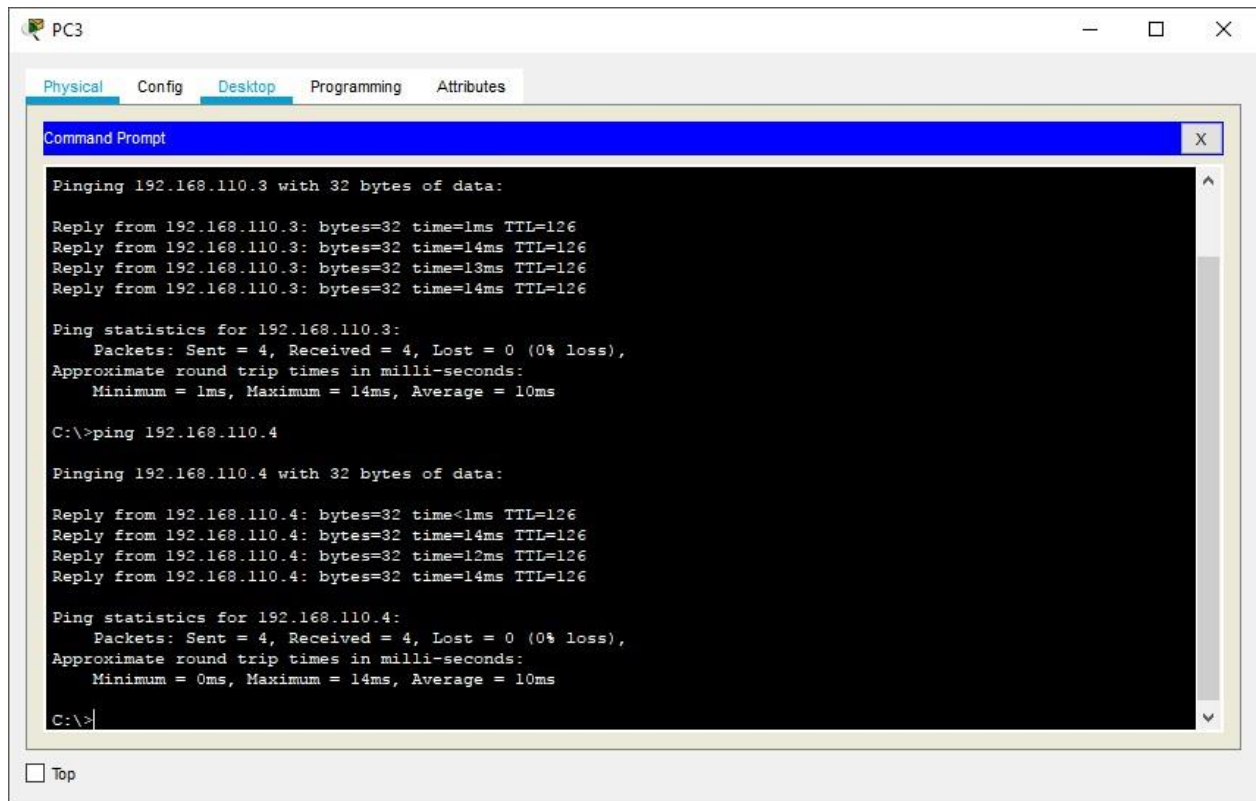
Router#sh access-lists
Standard IP access list 10
  10 permit 192.168.0.0 0.0.255.255 (8 match(es))
Standard IP access list 20
  10 permit host 192.168.120.4
Router#

```

14. Melakukan ping dari pc 3 ke pc 1 dan 2



15. Melakukan ping dari pc 4 ke pc 1 dan 2



KEGIATAN 2

1. Konfigurasi extended access-list

```
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 tersebut ke interface router

```
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa 0/1
Router(config-if)#ip access-group 100 in
Router(config-if)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
```