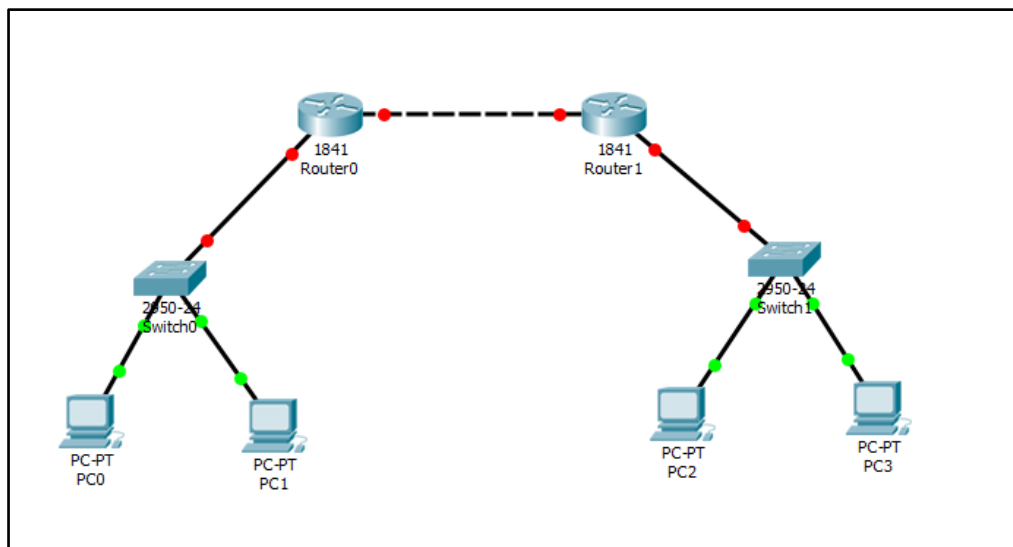


Tugas Praktikum Jarkom
Modul 8
Packet Filtering dengan Access List

Kegiatan 1. Konfigurasi Access List

Ikuti langkah-langkah berikut ini mengkonfigurasi Access List pada ilustrasi tersebut :

- Desain jaringan



- Memberikan alamat IP yang digunakan sebagai default gateway bagi semua komputer.
- Switch 0

```
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 1

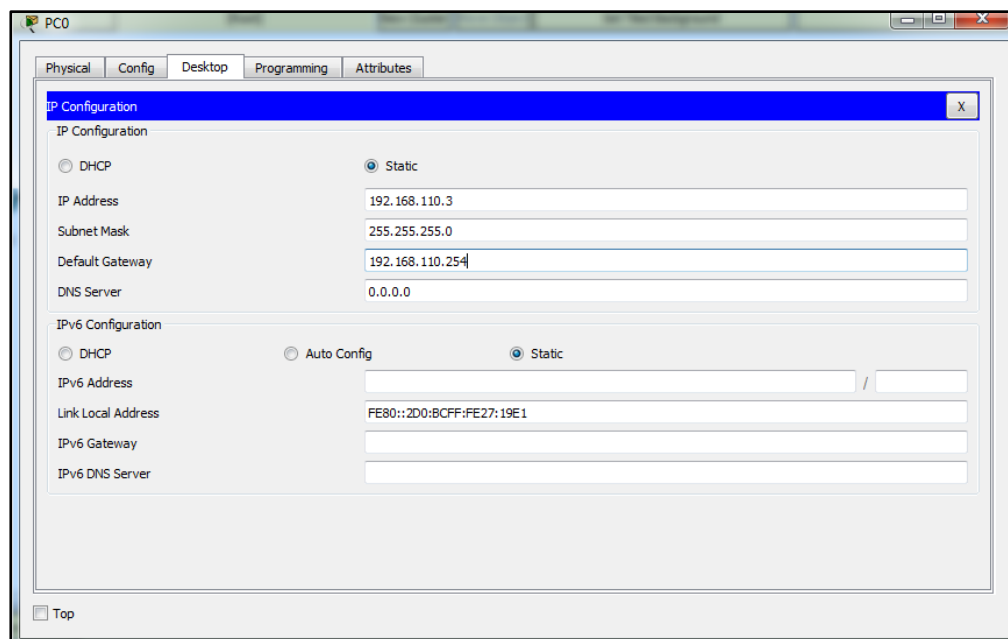
```
Switch>en
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#int vlan 1
Switch(config-if)#ip address 192.168.120.250 255.255.255.0
Switch(config-if)#no shut

Switch(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed
state to up

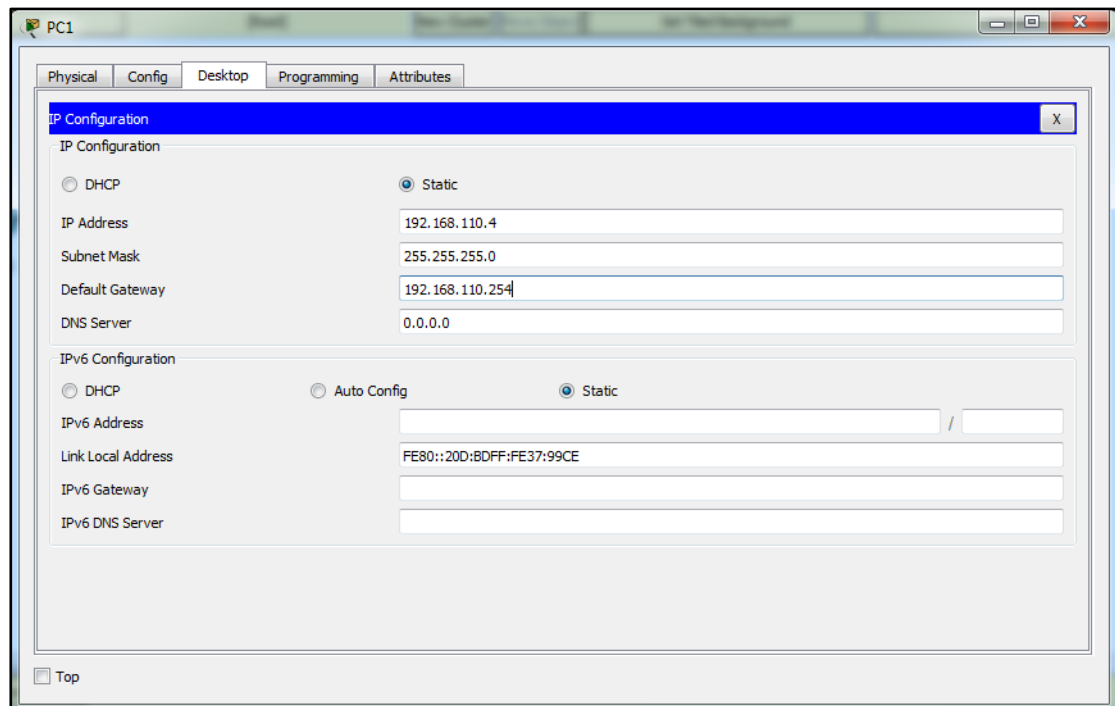
Switch(config-if)#exit
Switch(config)#
```

3. Memberikan alamat IP, subnet mask, dan default gateway pada pc 0

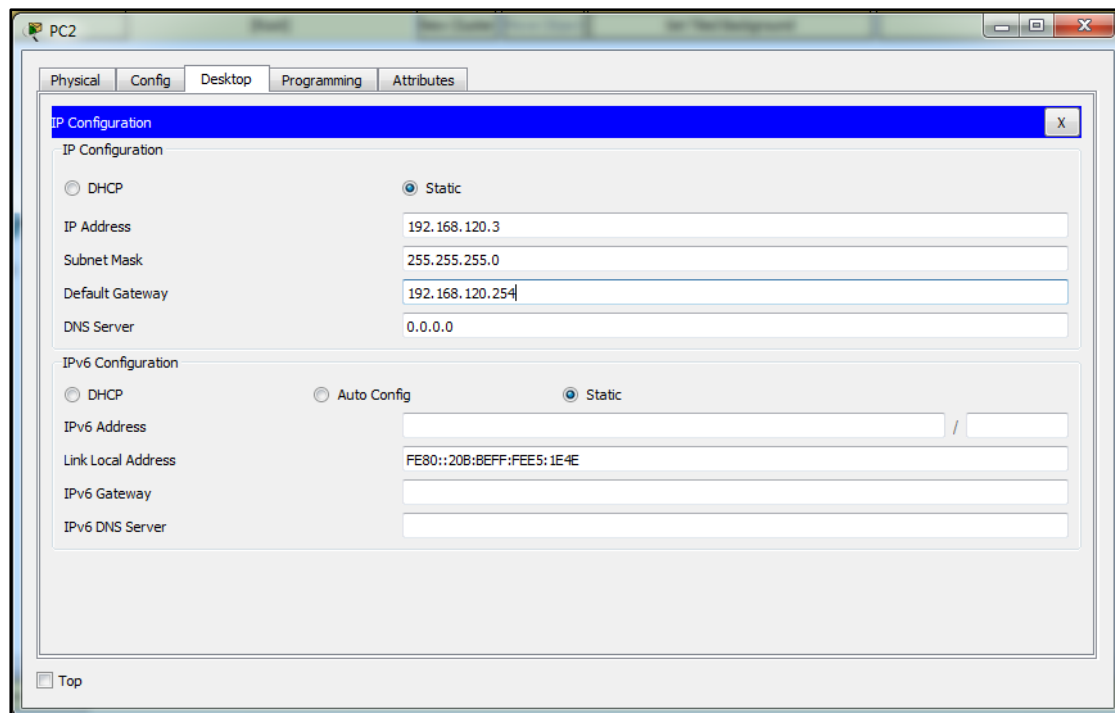


- Memberikan alamat ip, subnet mask, dan default gateway pada pc 1

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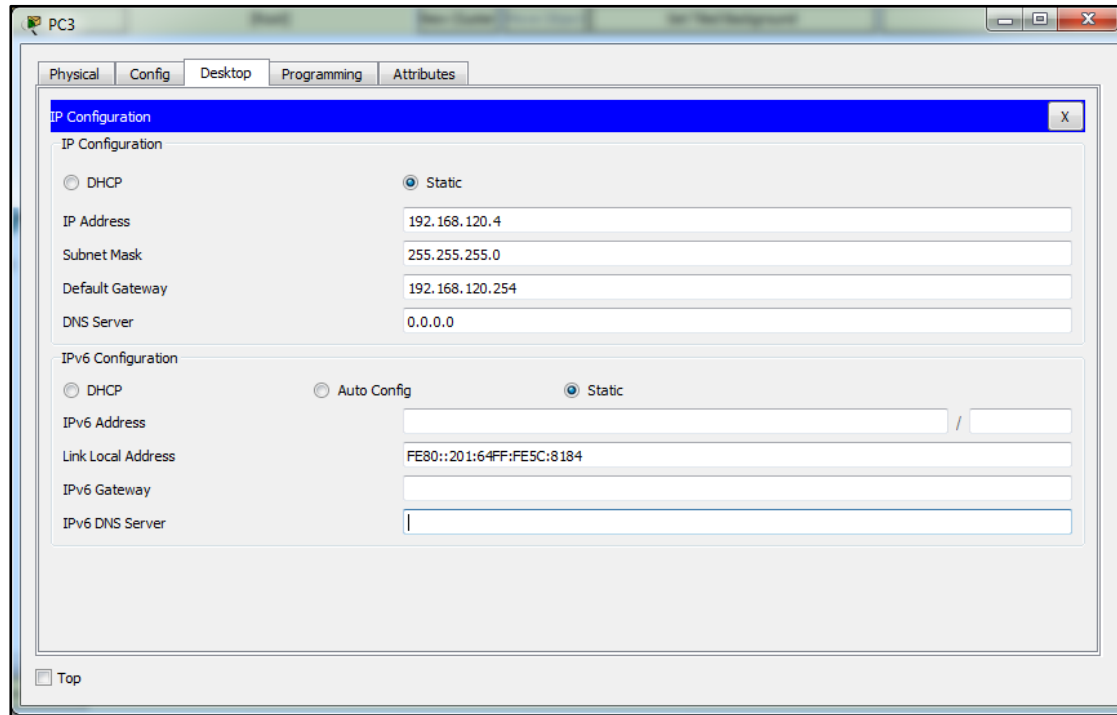


- Memberikan alamat ip, subnet mask, dan default gateway pada pc 2



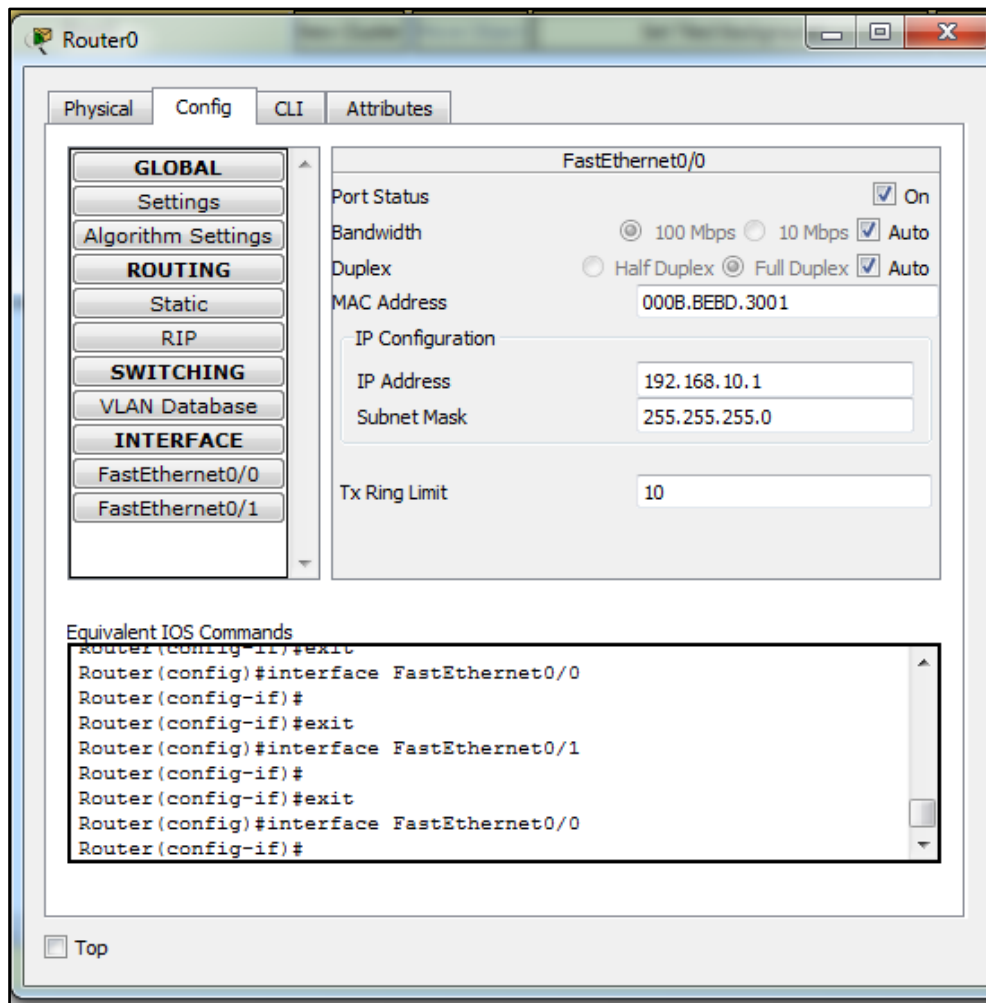
Muhibah Fata Tika
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- Memberikan alamat ip, subnet mask, dan default gateway pada pc 3



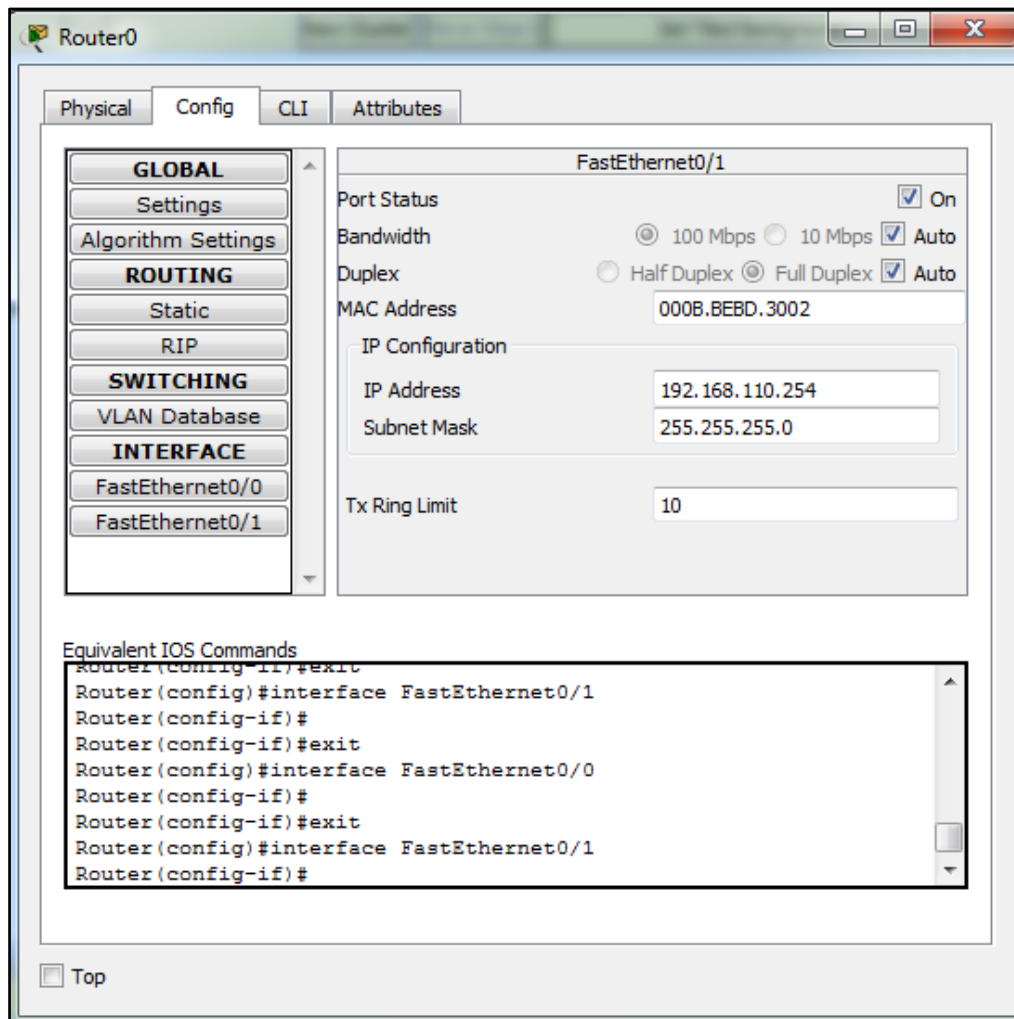
- Memberikan ip pada router 0, Fa 0/0

Muhibah Fata Tika
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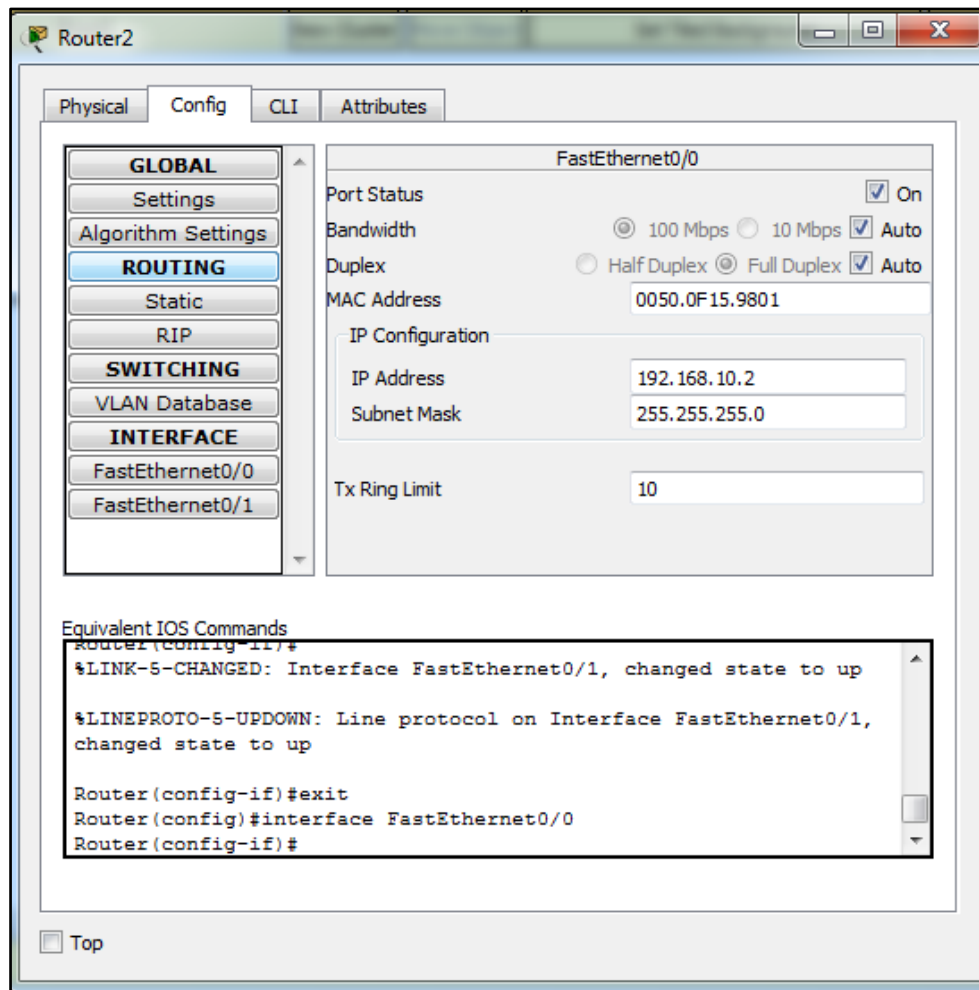
- Memberikan ip pada router 0 , Fa 0/1

Muhibah Fata Tika
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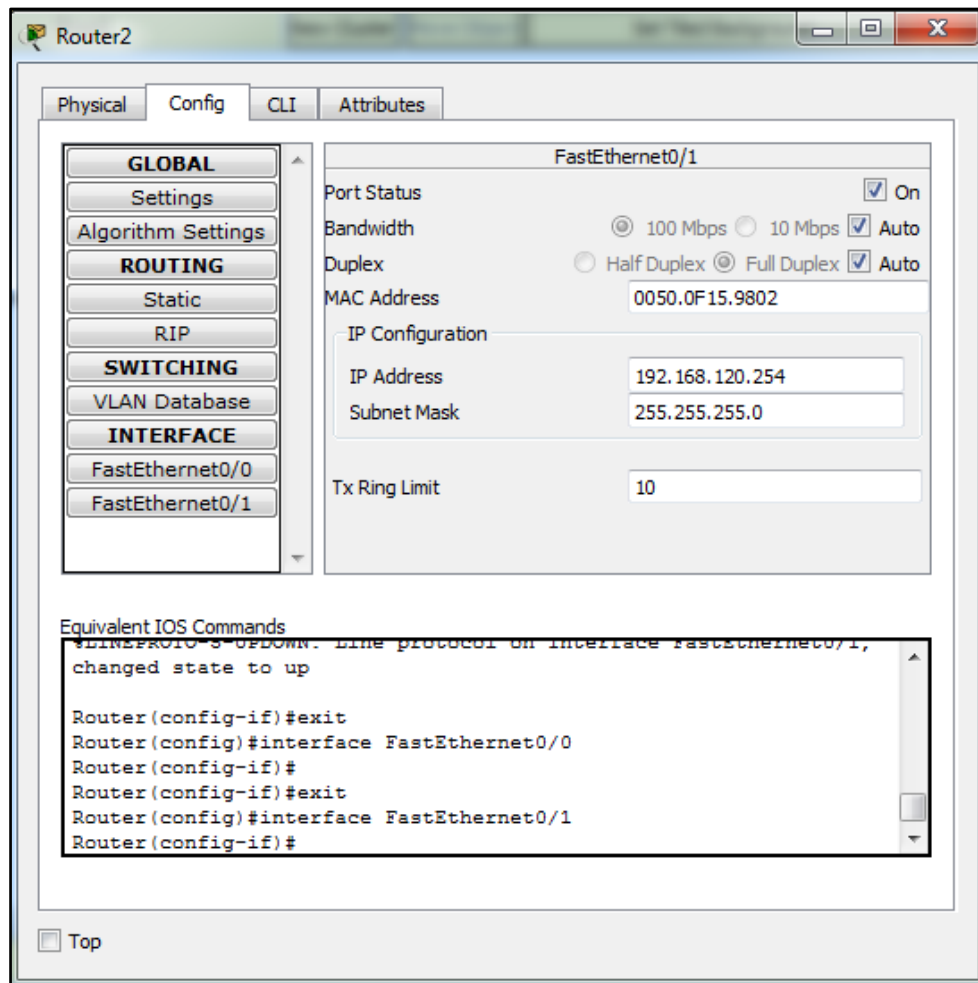
- Memberikan ip pada router 1, Fa 0/0

Muhibah Fata Tika
L200170156
D
JARKOM

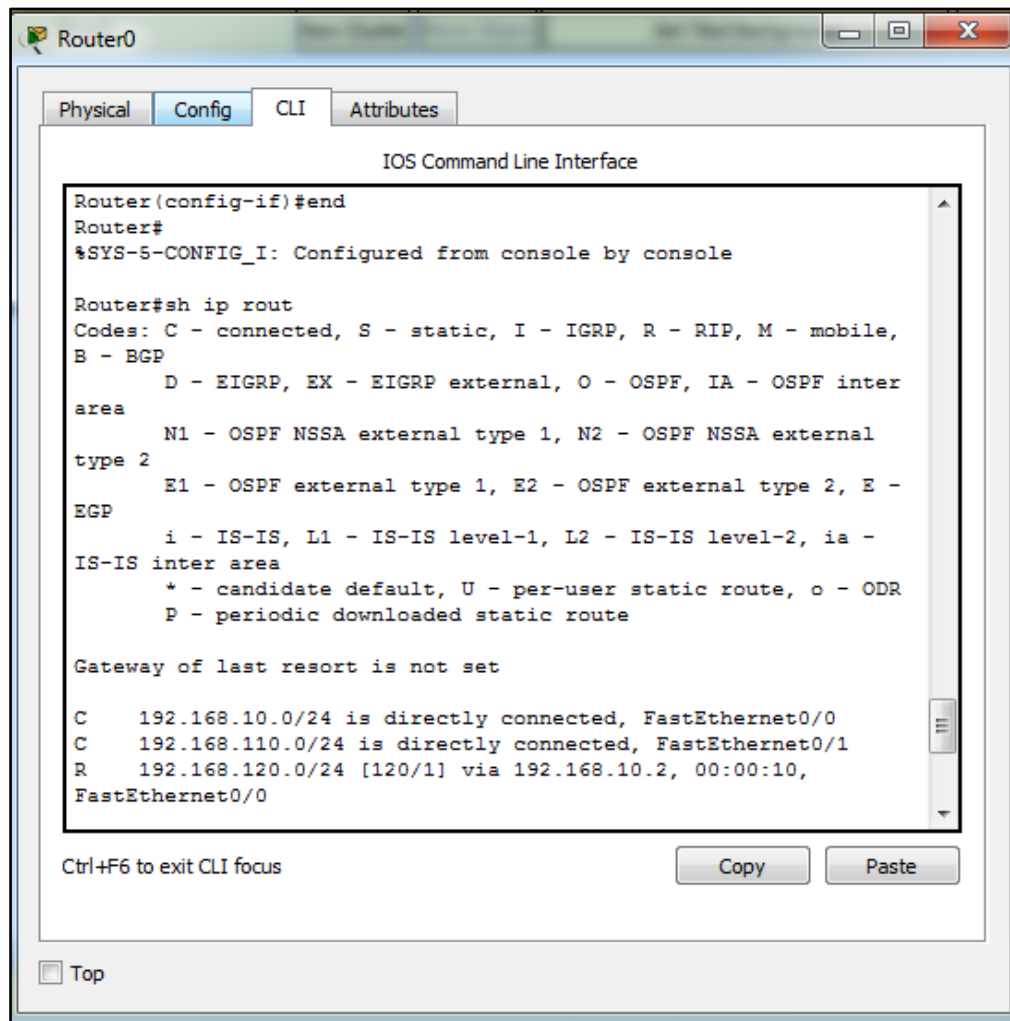


- Memberikan ip pada router 1, Fa 0/1

Muhibah Fata Tika
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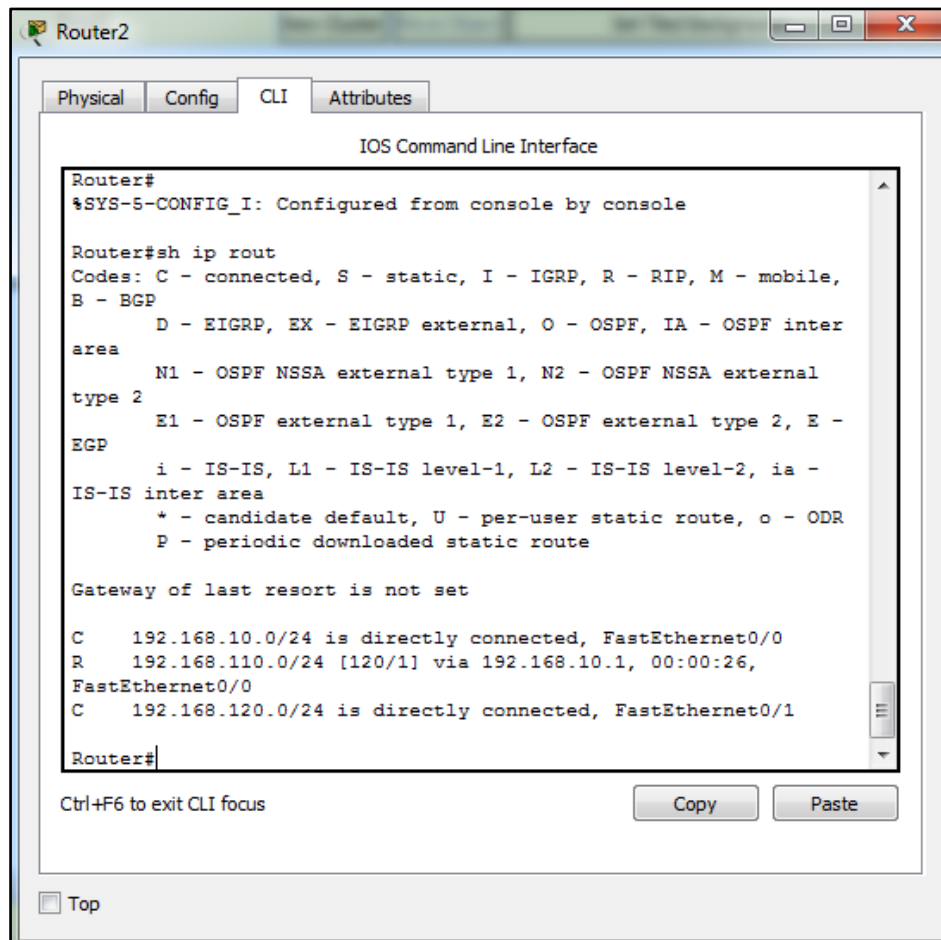


4. Konfigurasi protokol RIP pada router 0



- Konfigurasi protokol RIP pada router 1

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The screenshot shows a window titled "Router2" with tabs for "Physical", "Config", "CLI", and "Attributes". The "CLI" tab is active, displaying the "IOS Command Line Interface". The command prompt is "Router#". The output of the command "sh ip route" is shown, including a legend for route codes (C, S, I, R, M, B, D, N1, N2, E1, E2, i, IS-IS, *, U, o, P) and the current routing table entries. The routing table shows three entries: a connected route for 192.168.10.0/24, a static route for 192.168.110.0/24 via 192.168.10.1, and a connected route for 192.168.120.0/24. The prompt "Router#" is visible at the bottom of the CLI window.

```
Router#
%SYS-5-CONFIG_I: Configured from console by console

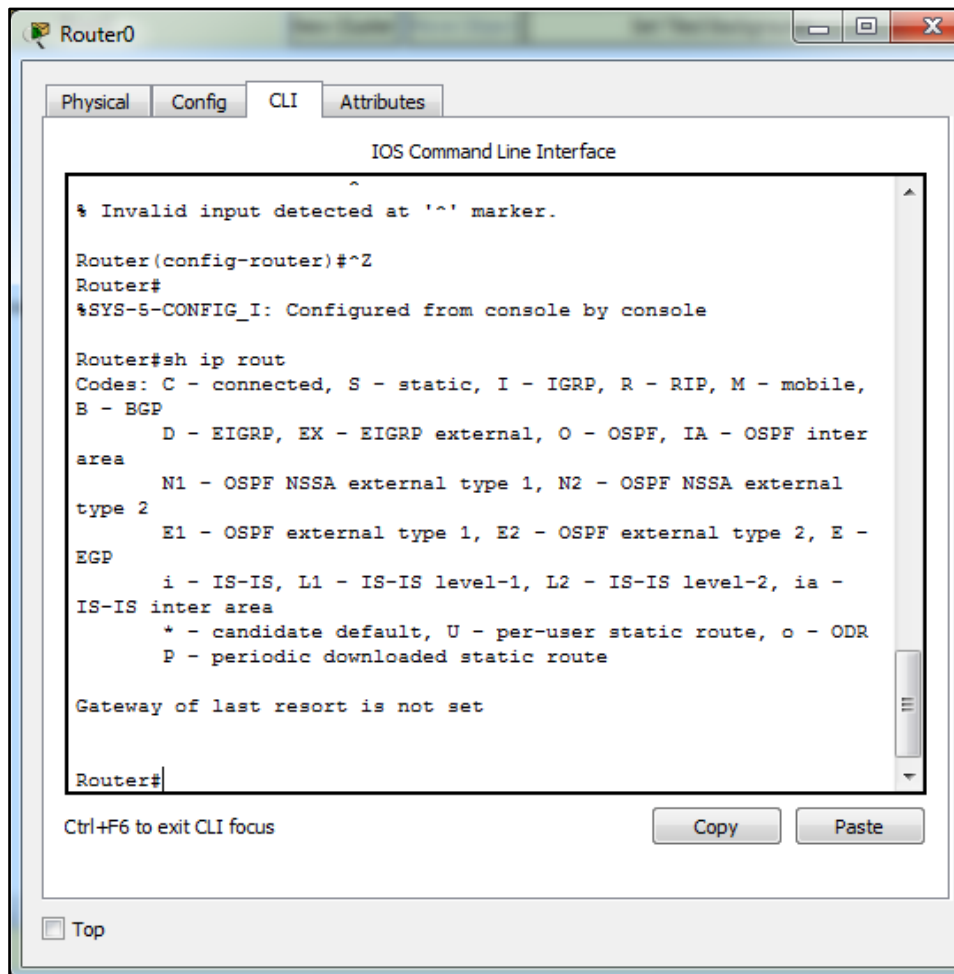
Router#sh ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile,
B - BGP
      D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter
area
      N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external
type 2
      E1 - OSPF external type 1, E2 - OSPF external type 2, E -
EGP
      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, FastEthernet0/0
R    192.168.110.0/24 [120/1] via 192.168.10.1, 00:00:26,
FastEthernet0/0
C    192.168.120.0/24 is directly connected, FastEthernet0/1

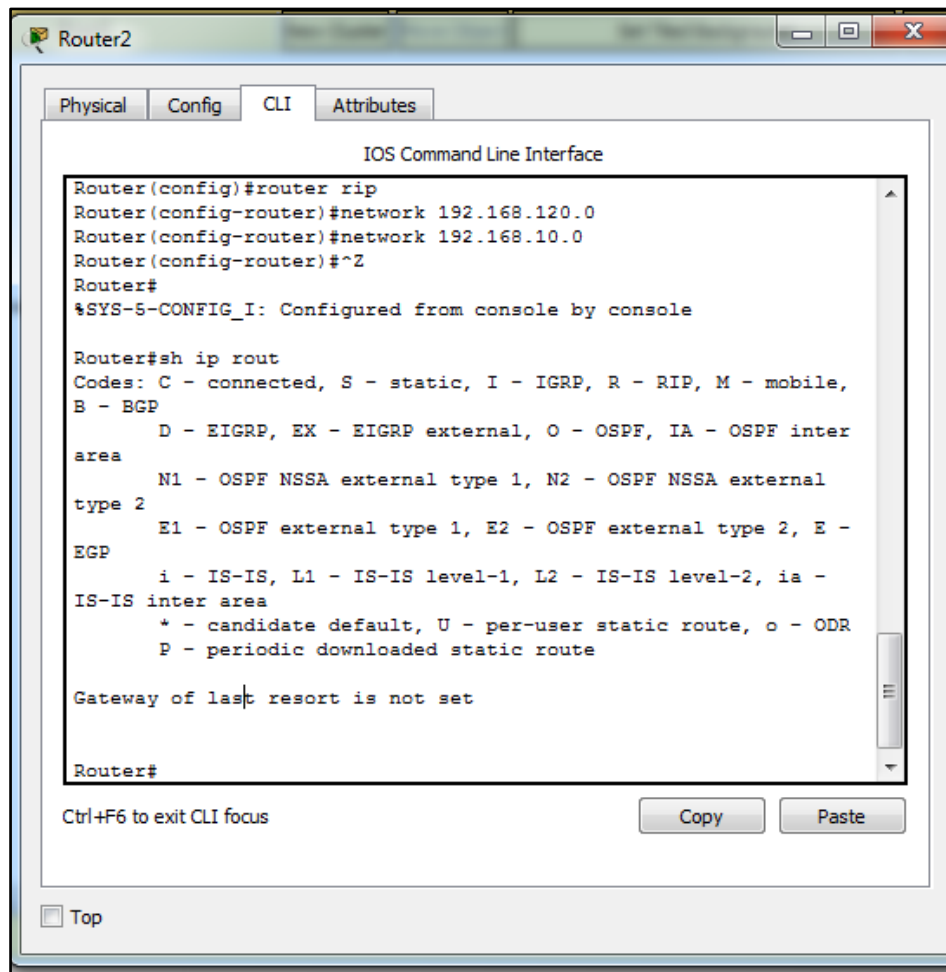
Router#
```

5. Melakukan pengecekan tabel routing pada router 0



- Melakukan pengecekan tabel routing pada router 1

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6. Tes koneksi dari pc 1 ke pc 4

```
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

C:\>
```

7. Berikutnya menentukan access list yang akan diterapkan pada router 1

```
Router(config-if)#access-list 10 permit 192.168.120.0 0.0.255.255
Router(config)#conf t
%Invalid hex value
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
Router#
```

8. menerapkan accesss list ke interface router 1 yang mengarah ke dalam jaringan 192.168.110.0

```
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa 0/1
Router(config-if)#ip access-group 10 out
Router(config-if)#^Z
Router#
%SYS-5-CONFIG_I: Configured from console by console
Router#
```

9. Melihat konfigurasi access list pada router 1

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

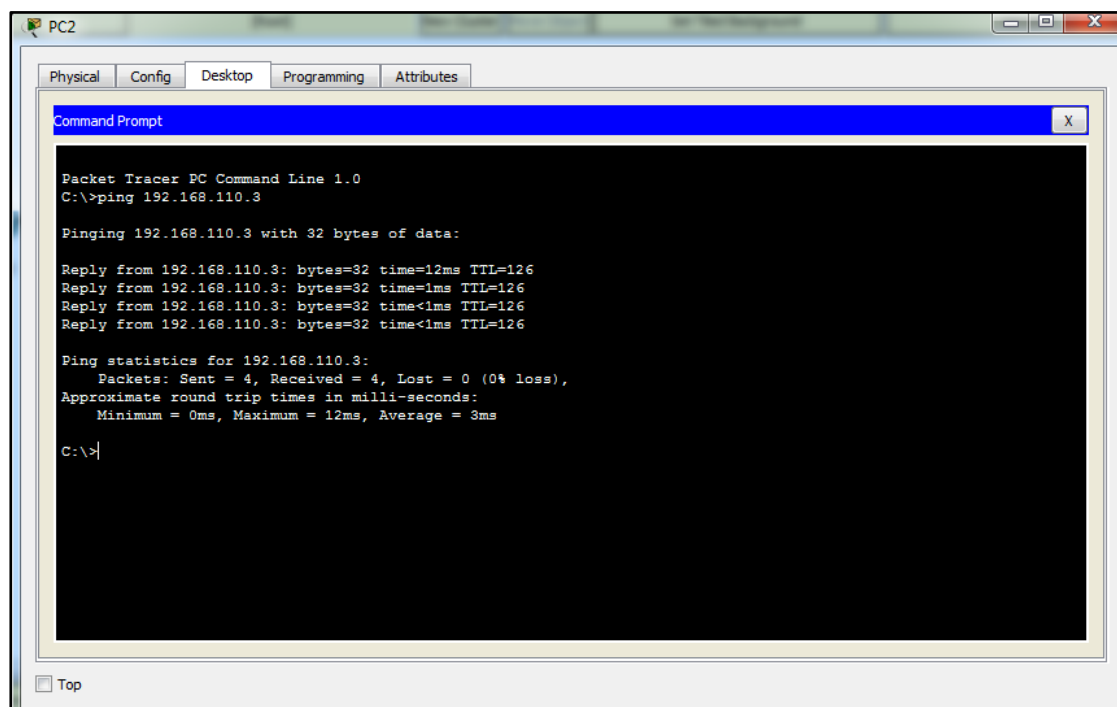
10. Melihat konfigurasi access list pada ethernet 1

Muhibah Fata Tika
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```
Router#show running-config
Building configuration...

Current configuration : 734 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
!
!
!
--More--
```

11. Tes koneksi antara pc 3 ke pc 1



12. Memberikan hak akses pada satu host pc 4 dengan alamat ip 192.168.120.4 agar dapat mengakses ke jaringan 192.168.110.0

```
Router#  
Router#  
Router#  
Router#conf t  
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#
```

13. Menerapkan access list 20 tersebut ke interface ethernet 1 pada router 1

```
Router#conf t  
Enter configuration commands, one per line. End with CNTL/Z.  
Router(config)#int fa 0/1  
Router(config-if)#ip access-group 20 out  
Router(config-if)#^Z  
Router#  
%SYS-5-CONFIG_I: Configured from console by console  
Router#
```

14. Tes koneksi dari pc 3 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),
```

- Tes koneksi dari pc 3 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),
```

15. Tes koneksi dari pc 4 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

C:\>
```

- Tes koneksi dari pc 4 ke pc 2

```
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<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 = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>|
```

Kegiatan 2. Konfigurasi Extended Access List

Untuk konfigurasi extended access list dengan perintah sebagai berikut :

```
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa0/0
Router(config-if)#ip access-group 100 in
Router(config-if)#^Z
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#|
```

Cara menerapkan access list ke interface router dengan perintah dibawah ini :

```
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa0/0
Router(config-if)#ip access-group 100 in
Router(config-if)#^Z
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#|
```