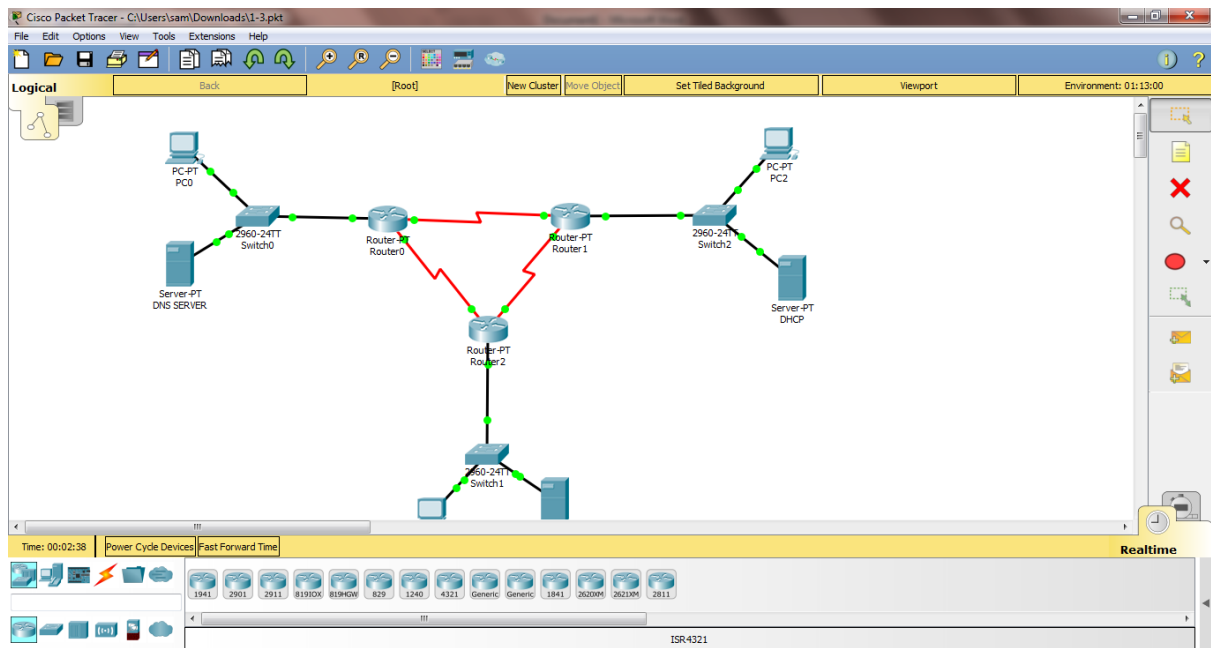


Nama : Tika Pratiwi
NIM : L200170046
Kelas : B

1. Buatlah topologi jaringan seperti pada Gambar 1, menggunakan router seri generic



2. Lakukan konfigurasi pengalamatan IP terhadap ROUTER 1,2,3, PC 1,2,3,!

>router 0

Router0

PhysicalConfigCLIAttributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

INTERFACE

FastEthernet0/0

FastEthernet1/0

Serial2/0

Serial3/0

FastEthernet4/0

FastEthernet5/0

FastEthernet0/0

Port Status

☒ On

Bandwidth

☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex

☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address

0030.F204.7606

IP Configuration

IP Address

192.168.10.1

Subnet Mask

255.255.255.0

Tx Ring Limit

10

Equivalent IOS Commands

Router(config-router)#

Router(config-router)#end

Router#configure terminal

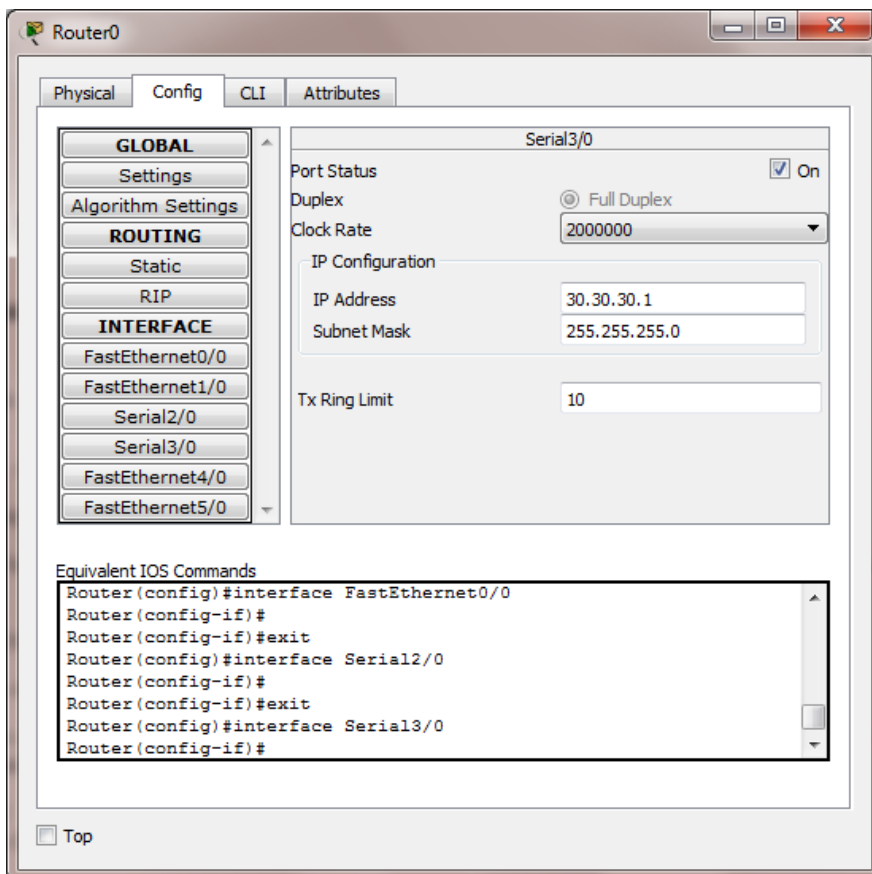
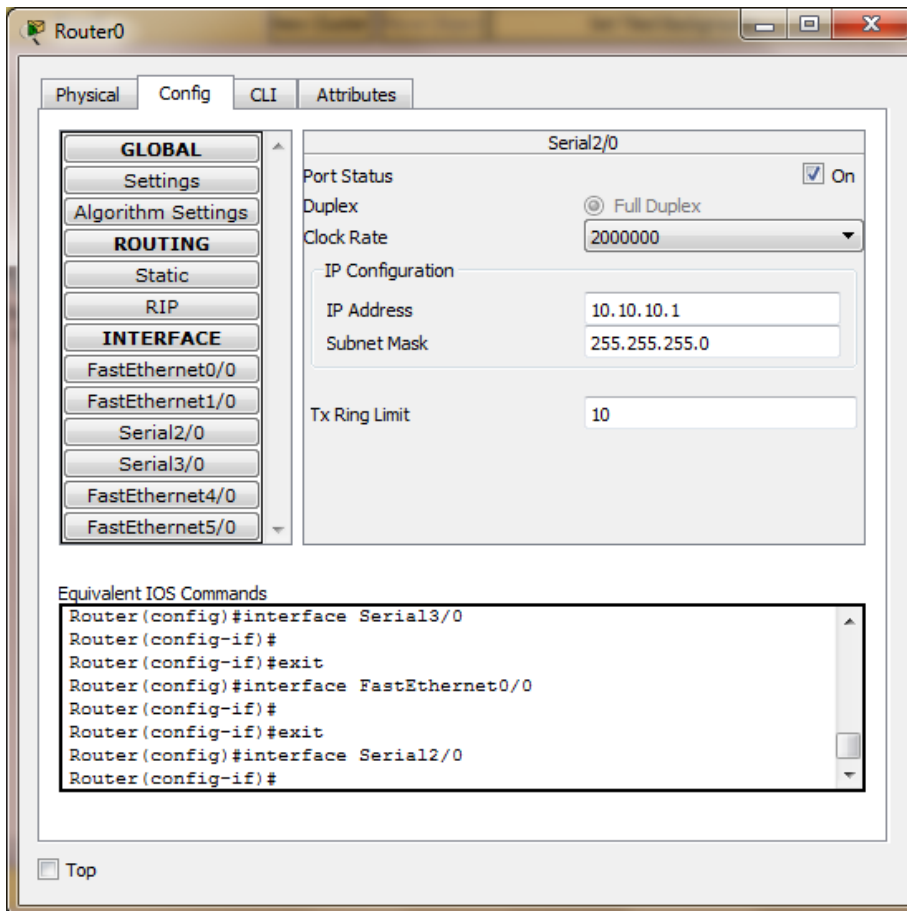
Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#interface FastEthernet0/0

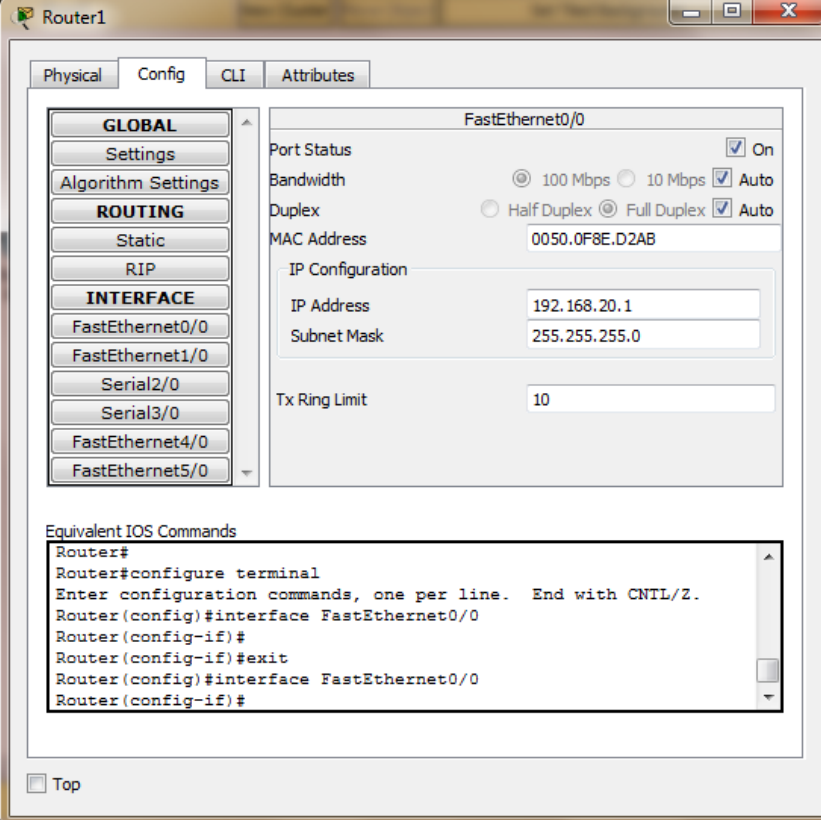
Router(config-if)#

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

☐ Top



>router 1



Router1

Physical Config CLI Attributes

GLOBAL

- Settings
- Algorithm Settings

ROUTING

- Static
- RIP

INTERFACE

- FastEthernet0/0
- FastEthernet1/0
- Serial2/0
- Serial3/0
- FastEthernet4/0
- FastEthernet5/0

FastEthernet0/0

Port Status ☒ On

Bandwidth ☒ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0050.0F8E.D2AB

IP Configuration

IP Address 192.168.20.1

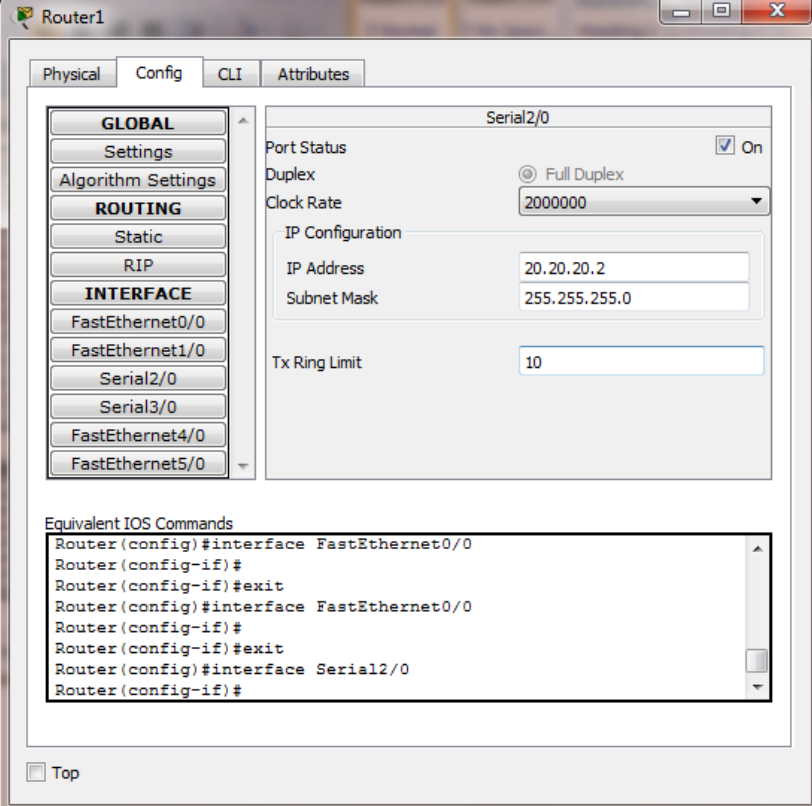
Subnet Mask 255.255.255.0

Tx Ring Limit 10

Equivalent IOS Commands

```
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 FastEthernet0/0
Router(config-if)#
```

☐ Top



Router1

Physical Config CLI Attributes

GLOBAL

- Settings
- Algorithm Settings

ROUTING

- Static
- RIP

INTERFACE

- FastEthernet0/0
- FastEthernet1/0
- Serial2/0
- Serial3/0
- FastEthernet4/0
- FastEthernet5/0

Serial2/0

Port Status ☒ On

Duplex ☒ Full Duplex

Clock Rate 2000000

IP Configuration

IP Address 20.20.20.2

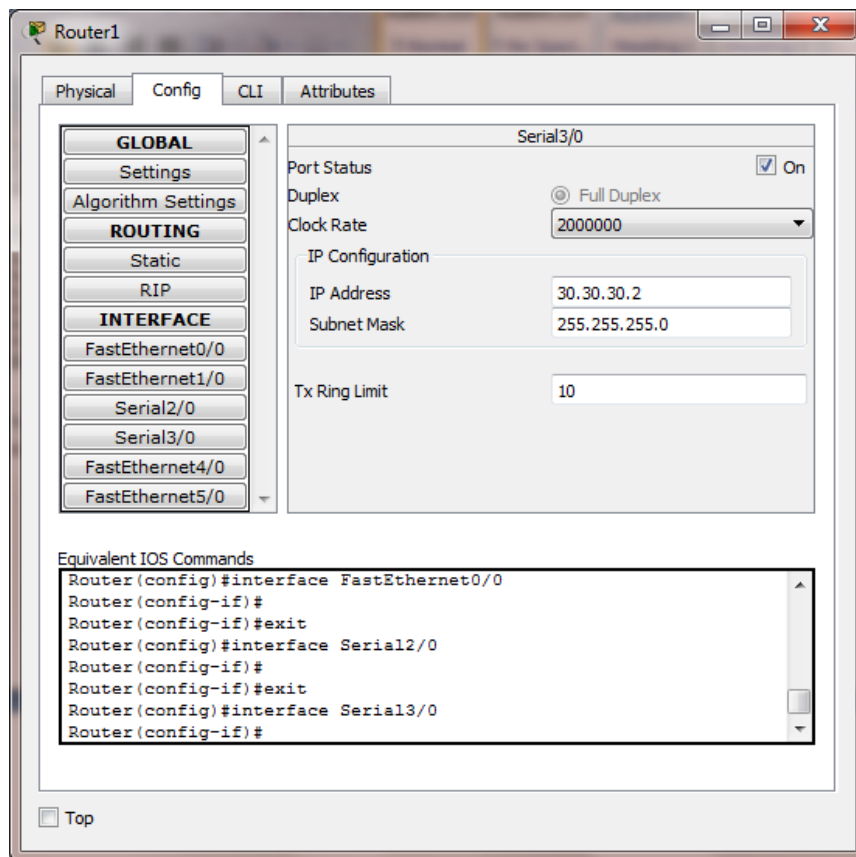
Subnet Mask 255.255.255.0

Tx Ring Limit 10

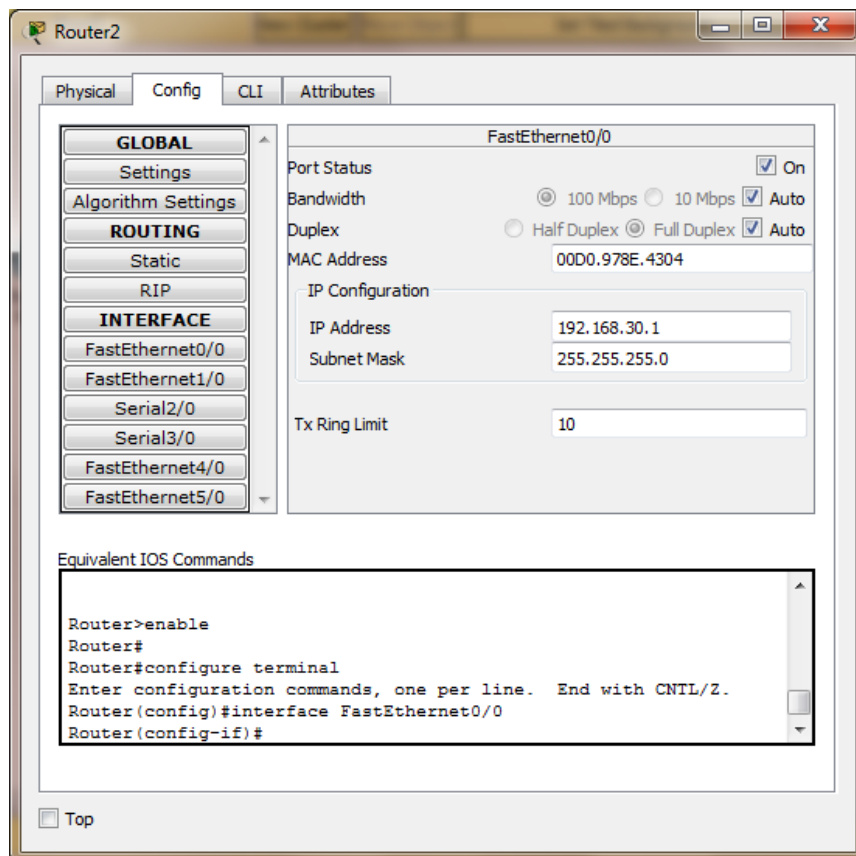
Equivalent IOS Commands

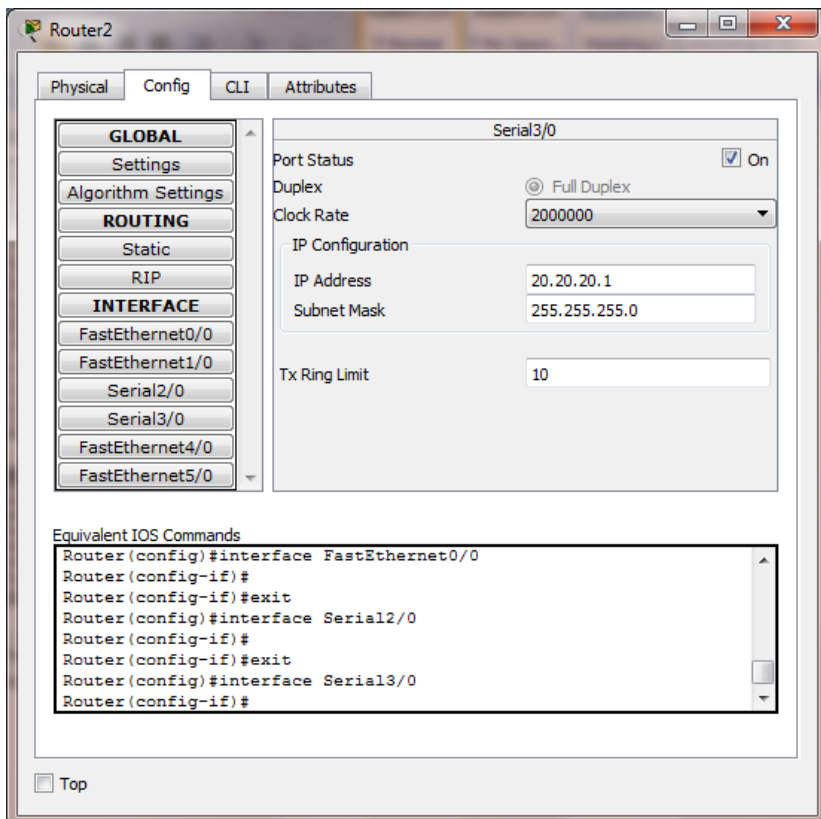
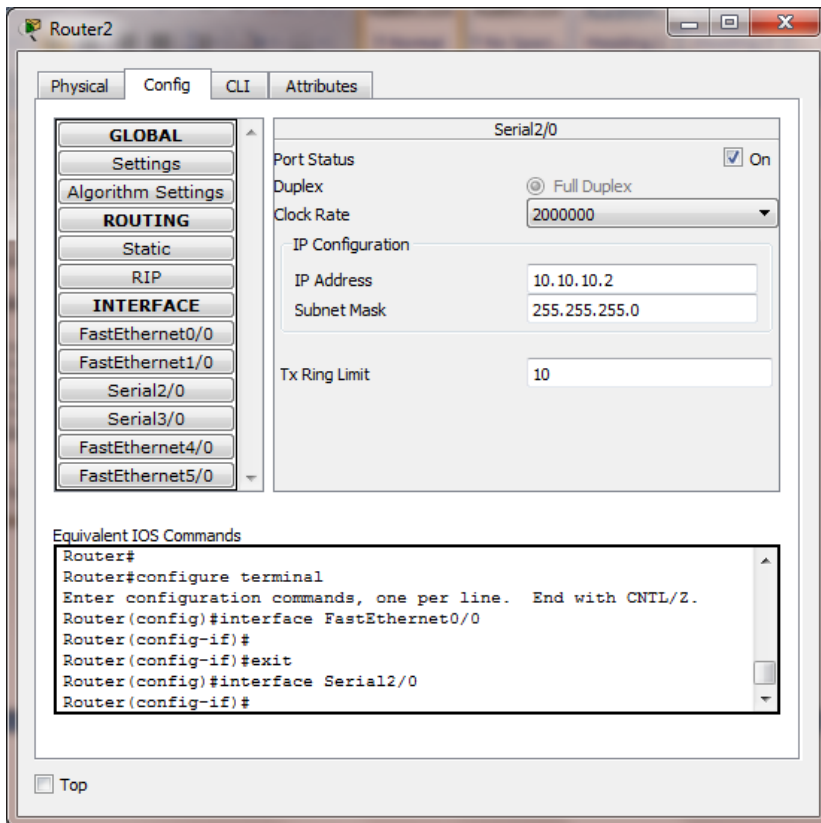
```
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface Serial2/0
Router(config-if)#
```

☐ Top



>router 2





>pc 0

The screenshot shows the configuration window for PC0. The 'Config' tab is selected. The 'IP Configuration' section has 'DHCP' selected. The 'IPv6 Configuration' section has 'Static' selected. The fields are filled with the following values:

Field	Value
IP Address	192.168.10.3
Subnet Mask	255.255.255.0
Default Gateway	192.168.10.1
DNS Server	192.168.10.2
IPv6 Address	
Link Local Address	FE80::201:43FF:FEC1:221E
IPv6 Gateway	
IPv6 DNS Server	

Top

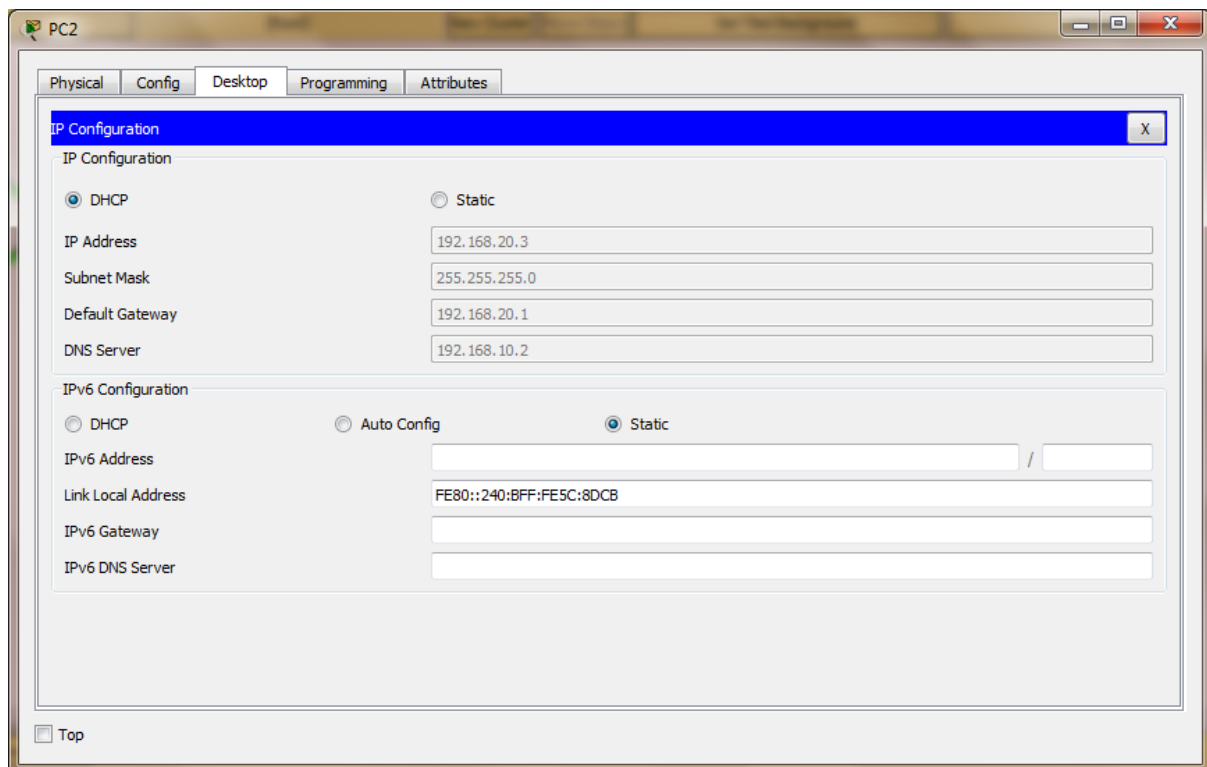
>pc 1

The screenshot shows the configuration window for PC1. The 'Config' tab is selected. The 'IP Configuration' section has 'DHCP' selected. The 'IPv6 Configuration' section has 'Static' selected. The fields are filled with the following values:

Field	Value
IP Address	192.168.30.3
Subnet Mask	255.255.255.0
Default Gateway	192.168.30.1
DNS Server	192.168.10.2
IPv6 Address	
Link Local Address	FE80::2D0:58FF:FE01:DC02
IPv6 Gateway	
IPv6 DNS Server	

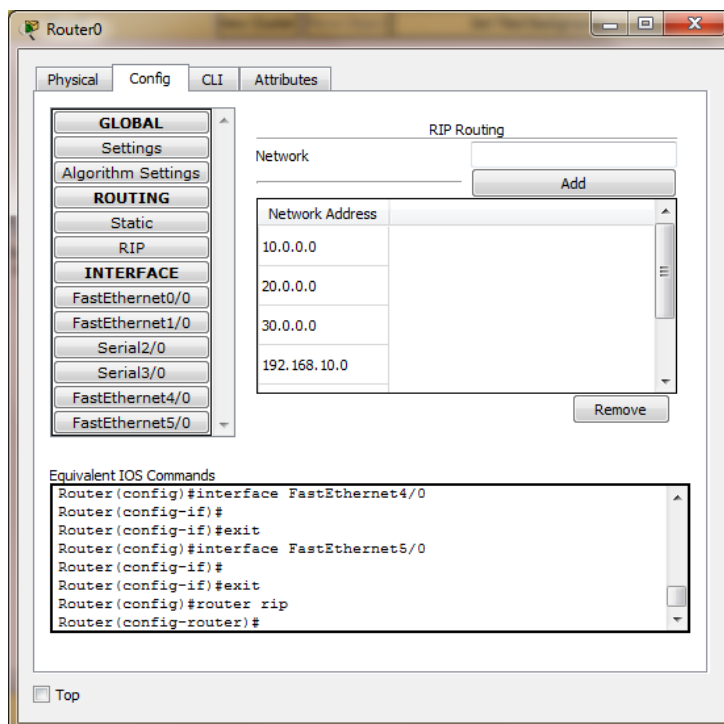
Top

>pc 2

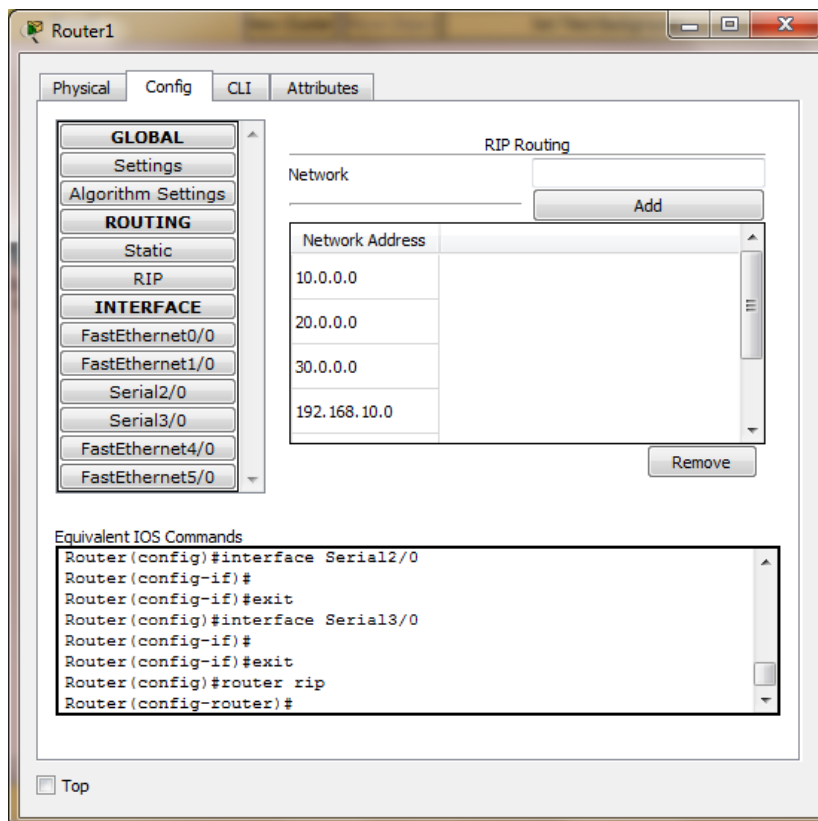


3. Lakukan konfigurasi untuk routing dinamis menggunakan protokol routing RIP pada 3 router tersebut!

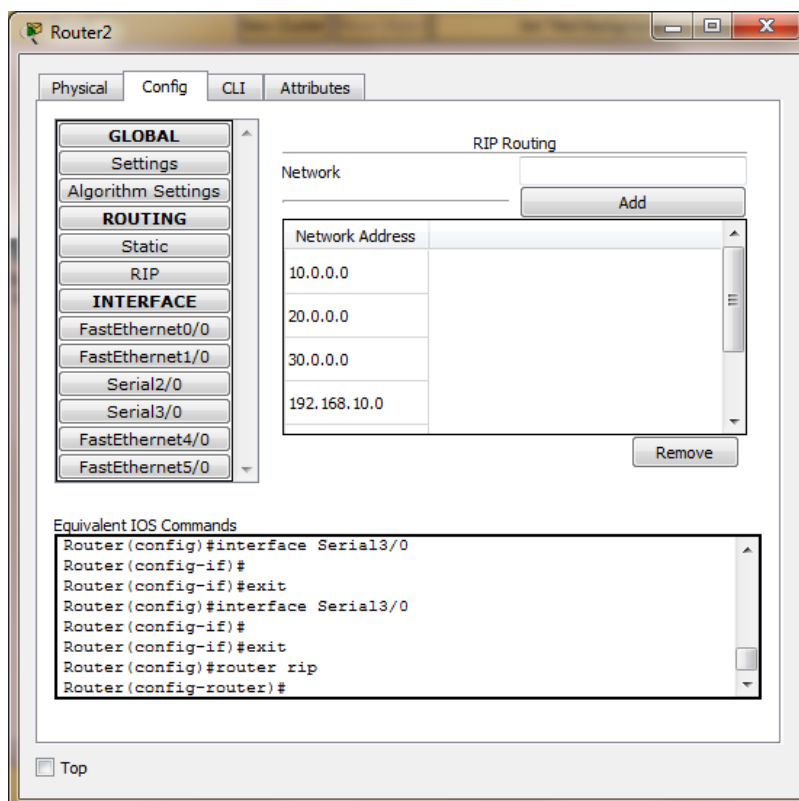
>router0



>router1

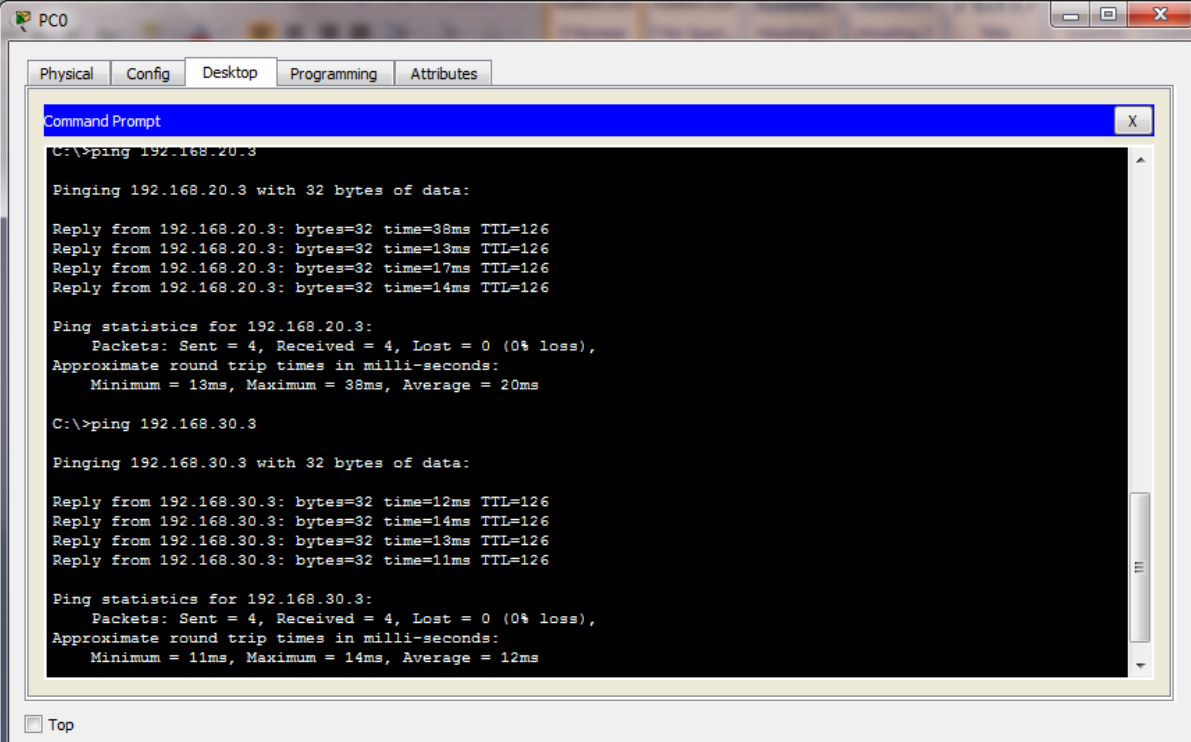


>router2



4. Lakukan uji koneksi untuk melihat konektivitas antar PC dan lakukan konfigurasi routing statis pada 3 router tersebut

>pc0



The screenshot shows the PC0 configuration window with the 'Desktop' tab selected. A Command Prompt window is open, displaying the results of two ping commands. The first command is 'C:\>ping 192.168.20.3', which shows four successful replies with varying round-trip times (38ms, 13ms, 17ms, 14ms) and a statistics summary: 'Packets: Sent = 4, Received = 4, Lost = 0 (0% loss), Approximate round trip times in milli-seconds: Minimum = 13ms, Maximum = 38ms, Average = 20ms'. The second command is 'C:\>ping 192.168.30.3', showing four successful replies with round-trip times (12ms, 14ms, 13ms, 11ms) and a statistics summary: 'Packets: Sent = 4, Received = 4, Lost = 0 (0% loss), Approximate round trip times in milli-seconds: Minimum = 11ms, Maximum = 14ms, Average = 12ms'.

```
C:\>ping 192.168.20.3

Pinging 192.168.20.3 with 32 bytes of data:

Reply from 192.168.20.3: bytes=32 time=38ms TTL=126
Reply from 192.168.20.3: bytes=32 time=13ms TTL=126
Reply from 192.168.20.3: bytes=32 time=17ms TTL=126
Reply from 192.168.20.3: bytes=32 time=14ms TTL=126

Ping statistics for 192.168.20.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 13ms, Maximum = 38ms, Average = 20ms

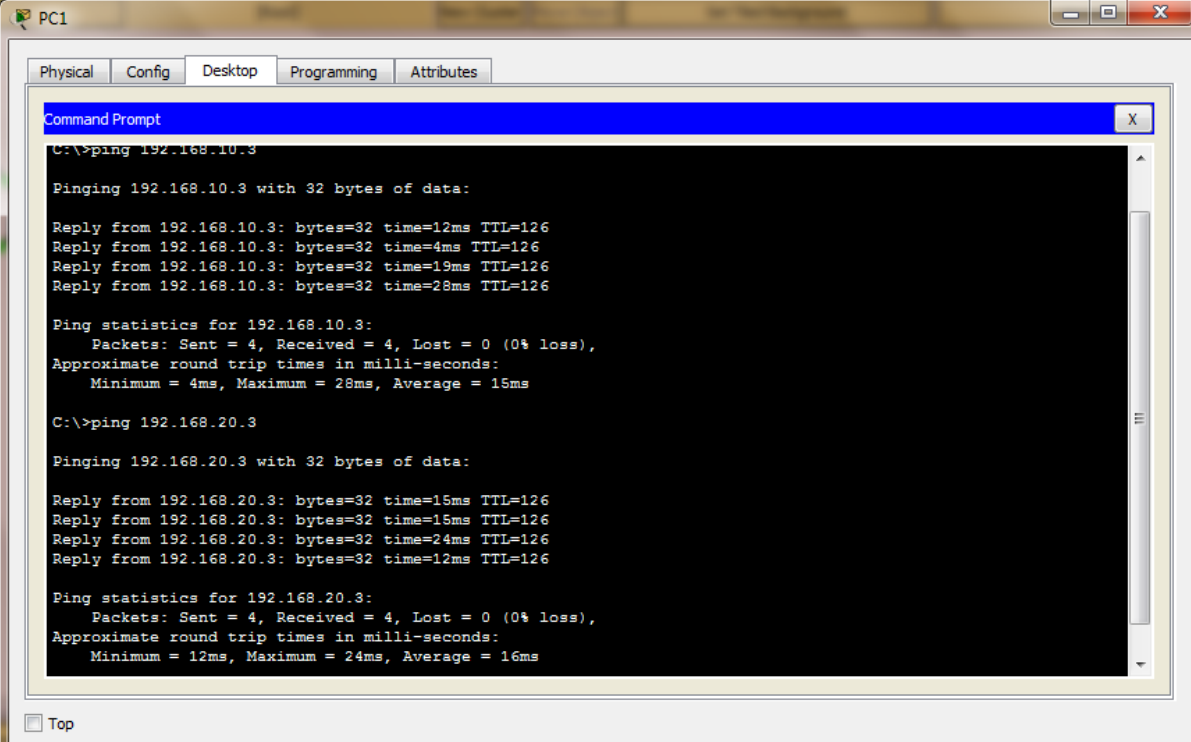
C:\>ping 192.168.30.3

Pinging 192.168.30.3 with 32 bytes of data:

Reply from 192.168.30.3: bytes=32 time=12ms TTL=126
Reply from 192.168.30.3: bytes=32 time=14ms TTL=126
Reply from 192.168.30.3: bytes=32 time=13ms TTL=126
Reply from 192.168.30.3: bytes=32 time=11ms TTL=126

Ping statistics for 192.168.30.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 11ms, Maximum = 14ms, Average = 12ms
```

>pc1



The screenshot shows the PC1 configuration window with the 'Desktop' tab selected. A Command Prompt window is open, displaying the results of two ping commands. The first command is 'C:\>ping 192.168.10.3', which shows four successful replies with round-trip times (12ms, 4ms, 19ms, 28ms) and a statistics summary: 'Packets: Sent = 4, Received = 4, Lost = 0 (0% loss), Approximate round trip times in milli-seconds: Minimum = 4ms, Maximum = 28ms, Average = 15ms'. The second command is 'C:\>ping 192.168.20.3', showing four successful replies with round-trip times (15ms, 15ms, 24ms, 12ms) and a statistics summary: 'Packets: Sent = 4, Received = 4, Lost = 0 (0% loss), Approximate round trip times in milli-seconds: Minimum = 12ms, Maximum = 24ms, Average = 16ms'.

```
C:\>ping 192.168.10.3

Pinging 192.168.10.3 with 32 bytes of data:

Reply from 192.168.10.3: bytes=32 time=12ms TTL=126
Reply from 192.168.10.3: bytes=32 time=4ms TTL=126
Reply from 192.168.10.3: bytes=32 time=19ms TTL=126
Reply from 192.168.10.3: bytes=32 time=28ms TTL=126

Ping statistics for 192.168.10.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 4ms, Maximum = 28ms, Average = 15ms

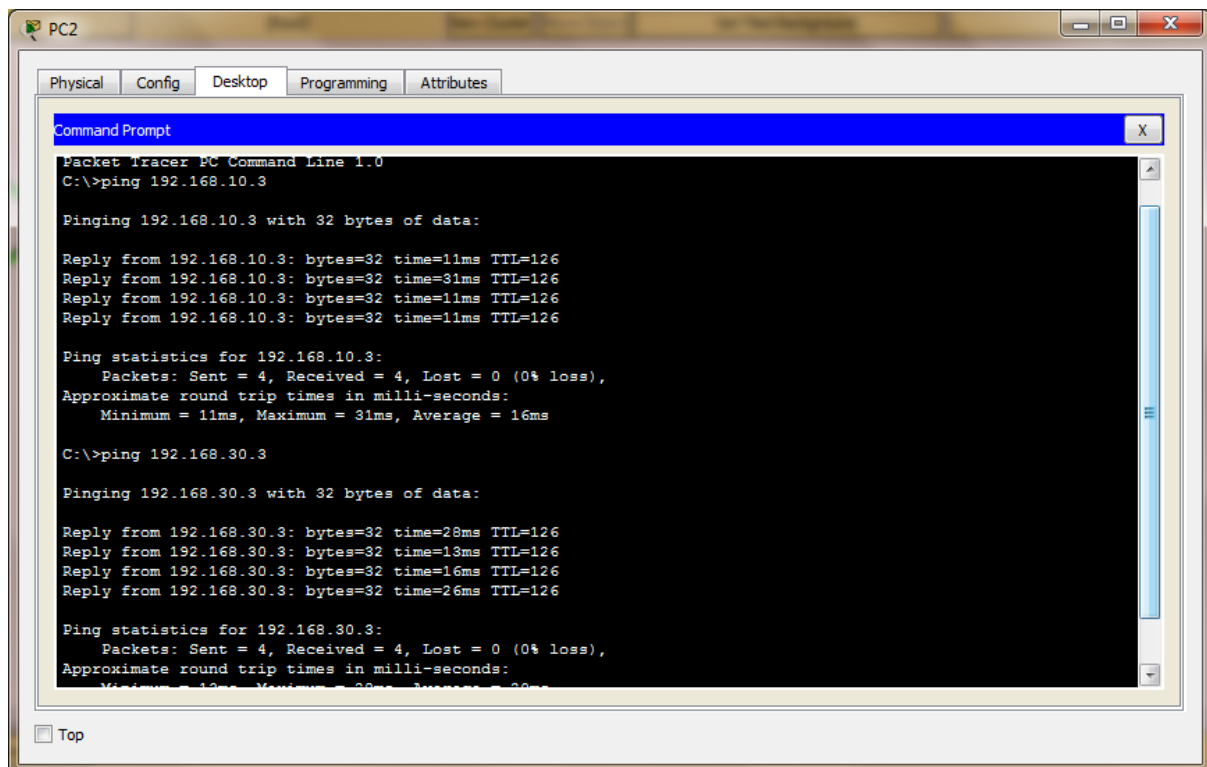
C:\>ping 192.168.20.3

Pinging 192.168.20.3 with 32 bytes of data:

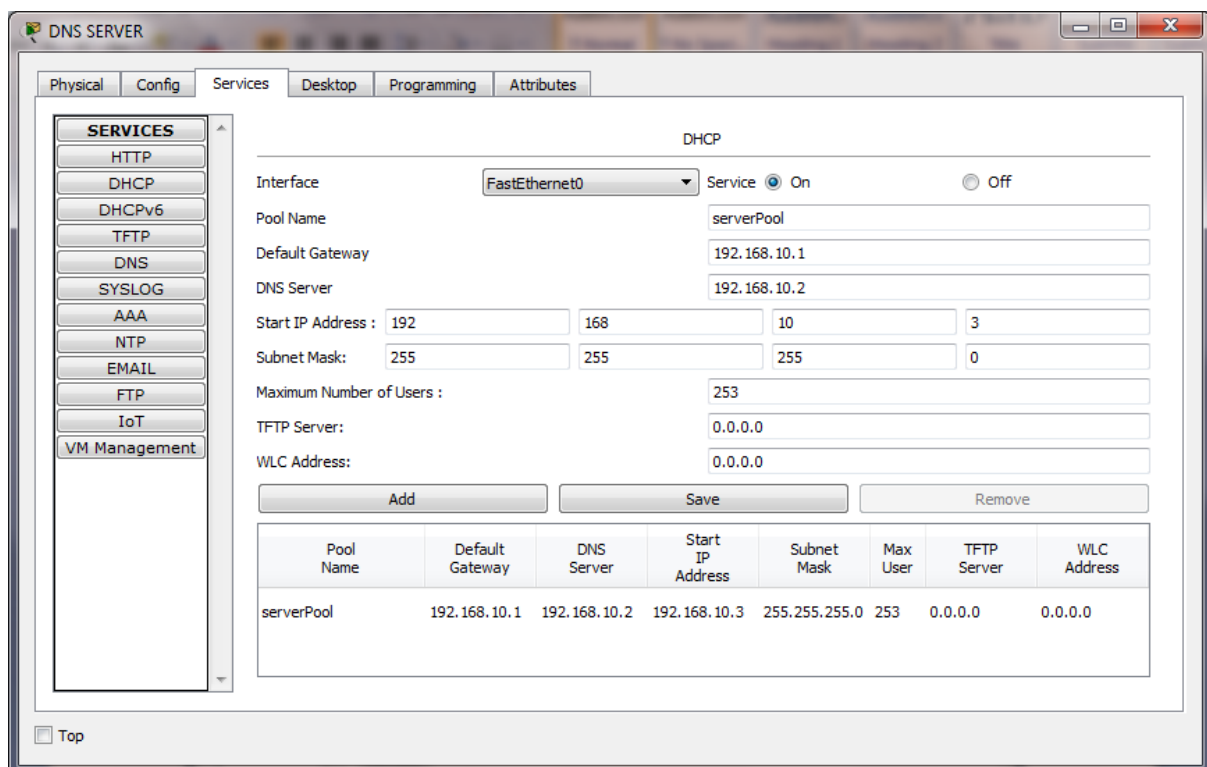
Reply from 192.168.20.3: bytes=32 time=15ms TTL=126
Reply from 192.168.20.3: bytes=32 time=15ms TTL=126
Reply from 192.168.20.3: bytes=32 time=24ms TTL=126
Reply from 192.168.20.3: bytes=32 time=12ms TTL=126

Ping statistics for 192.168.20.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 12ms, Maximum = 24ms, Average = 16ms
```

>pc2



5. Menggunakan acces list, batasi hanya pc 2 yang bisa mengakses server dhcp!



bagong.com

Physical

Config

Services

Desktop

Programming

Attributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

DHCP

Interface

FastEthernet0

Service

On

Off

Pool Name

serverPool

Default Gateway

192.168.30.1

DNS Server

192.168.10.2

Start IP Address :

192

168

30

3

Subnet Mask:

255

255

255

0

Maximum Number of Users :

253

TFTP Server:

0.0.0.0

WLC Address:

0.0.0.0

Add

Save

Remove

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
serverPool	192.168.30.1	192.168.10.2	192.168.30.3	255.255.255.0	253	0.0.0.0	0.0.0.0

Top

DHCP

Physical

Config

Services

Desktop

Programming

Attributes

SERVICES

HTTP

DHCP

DHCPv6

TFTP

DNS

SYSLOG

AAA

NTP

EMAIL

FTP

IoT

VM Management

DHCP

Interface

FastEthernet0

Service

On

Off

Pool Name

serverPool

Default Gateway

192.168.20.1

DNS Server

192.168.10.2

Start IP Address :

192

168

20

3

Subnet Mask:

255

255

255

0

Maximum Number of Users :

253

TFTP Server:

0.0.0.0

WLC Address:

0.0.0.0

Add

Save

Remove

Pool Name	Default Gateway	DNS Server	Start IP Address	Subnet Mask	Max User	TFTP Server	WLC Address
serverPool	192.168.20.1	192.168.10.2	192.168.20.3	255.255.255.0	253	0.0.0.0	0.0.0.0

Top

