

Nama : Tarisa Dwi Septia

NIM : 205410126

Praktikum Jaringan Komputer Pertemuan Ke-8

Praktik

1. Konfigurasi Router 2

```
Router>enable
Router#config terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface fa0/0
Router(config-if)#ip address 192.168.9.2 255.255.255.255
Bad mask /32 for address 192.168.9.2
Router(config-if)#ip address 192.168.9.2 255.255.255.252
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

Router(config-if)#interface fa1/0
Router(config-if)#ip address 192.168.5.1 255.255.255.0
Router(config-if)#no shutdown

Router(config-if)#interface fa4/0
Router(config-if)#ip address 192.168.3.1 255.255.255.128
Router(config-if)#no shutdown
```

```
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet4/0, changed state to up
```

2. Konfigurasi router 3

```
Router>enable
Router#config terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface fa1/0
Router(config-if)#ip address 192.168.9.1 255.255.255.252
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0,
changed state to up
Router(config-if)#interface fa0/0
Router(config-if)#192.168.6.1 255.255.255.252
^
% Invalid input detected at '^' marker.

Router(config-if)#ip address 192.168.6.1 255.255.255.252
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0,
changed state to up
|
Router(config-if)#interface fa6/0
Router(config-if)#
Router(config-if)#
Router(config-if)#ip address 192.168.8.1 255.255.255.224
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet6/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet6/0,
changed state to up

Router(config-if)#interface fa7/0
Router(config-if)#ip address 192.168.1.1 255.255.255.192
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet7/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet7/0,
changed state to up
```

3. Konfigurasi Server



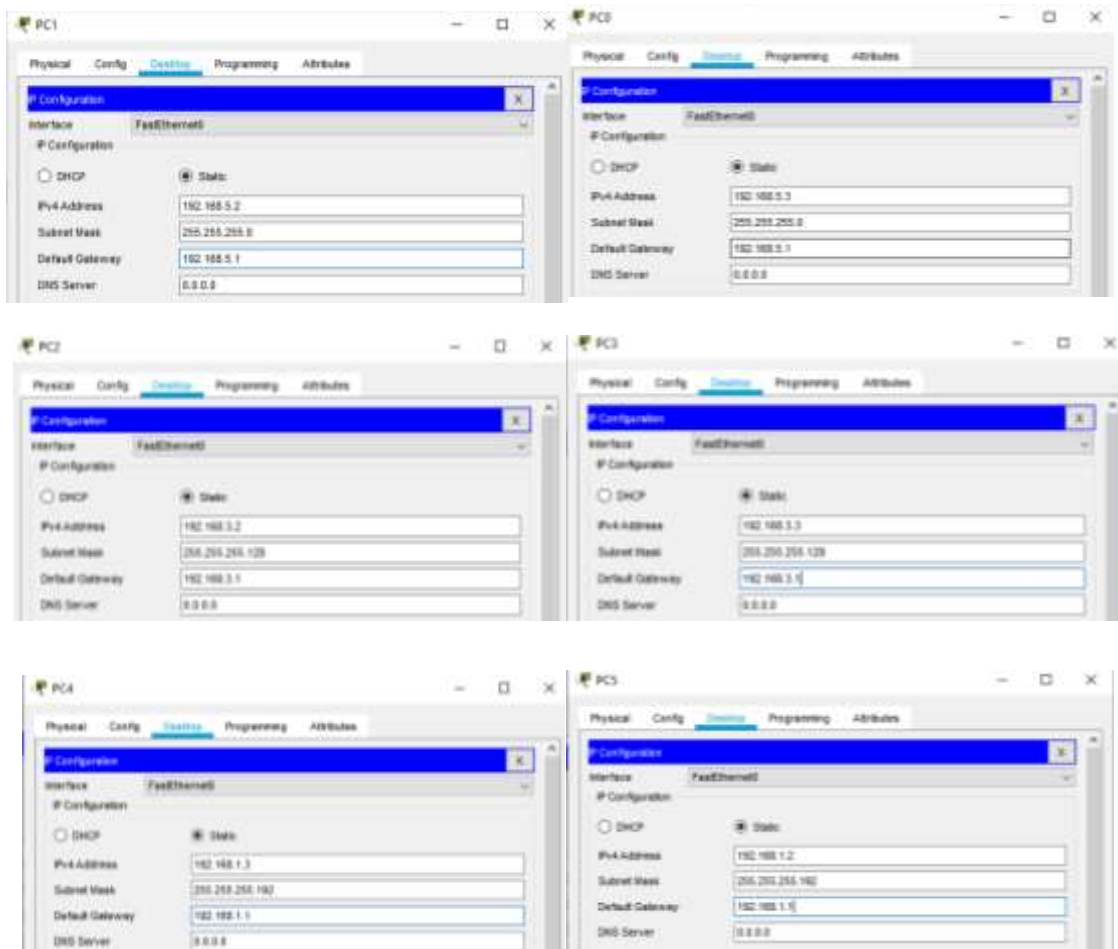
4. Konfigurasi router static pada Router 2

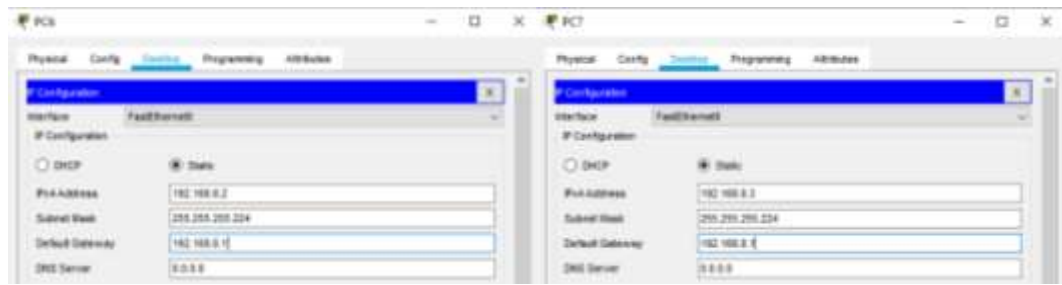
```
Router(config)#ip route 192.168.8.0 255.255.255.224 192.168.9.1
Router(config)#ip route 192.168.6.0 255.255.255.252 192.168.9.1
Router(config)#ip route 192.168.1.0 255.255.255.192 192.168.9.1
Router(config)#
```

5. Konfigurasi router static pada Router 3

```
Router#config terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 192.168.5.0 255.255.255.0 192.168.9.2
Router(config)#ip route 192.168.3.0 255.255.255.128 192.168.9.2
Router(config)#
```

6. Konfigurasi PC





7. Pengujian :

- Table routing

Routing Table for Router2

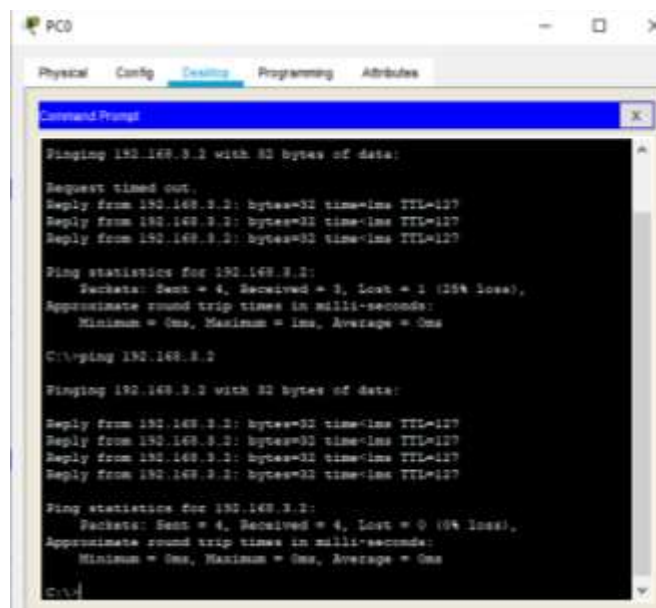
Type	Network	Port	Next Hop IP	Metric
S	192.168.1.0/26	---	192.168.9.1	1/0
S	192.168.1.0/27	---	192.168.9.1	1/0
C	192.168.3.0/25	FastEthernet4/0	---	0/0
C	192.168.5.0/24	FastEthernet1/0	---	0/0
S	192.168.6.0/27	---	192.168.9.1	1/0
S	192.168.6.0/30	---	192.168.9.1	1/0

Routing Table for Router3

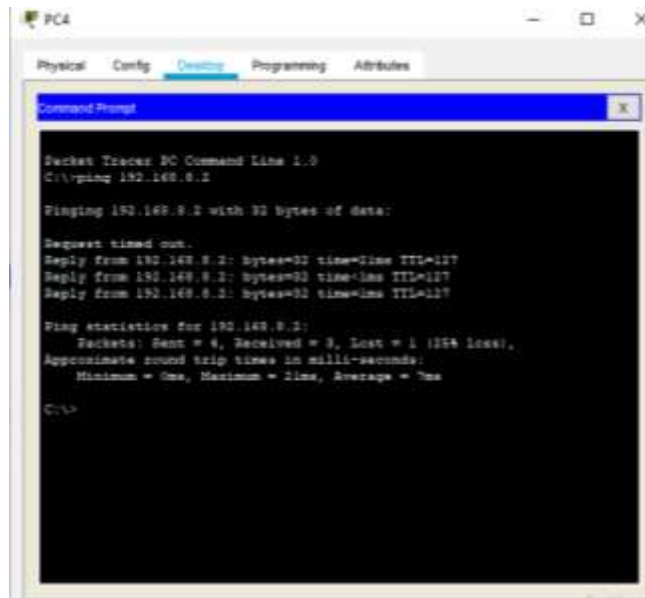
Type	Network	Port	Next Hop IP	Metric
C	192.168.1.0/26	FastEthernet7/0	---	0/0
S	192.168.3.0/25	---	192.168.9.2	1/0
S	192.168.5.0/24	---	192.168.9.2	1/0
C	192.168.8.0/30	FastEthernet0/0	---	0/0
C	192.168.8.0/27	FastEthernet5/0	---	0/0
C	192.168.9.0/30	FastEthernet1/0	---	0/0

- Tes Ping

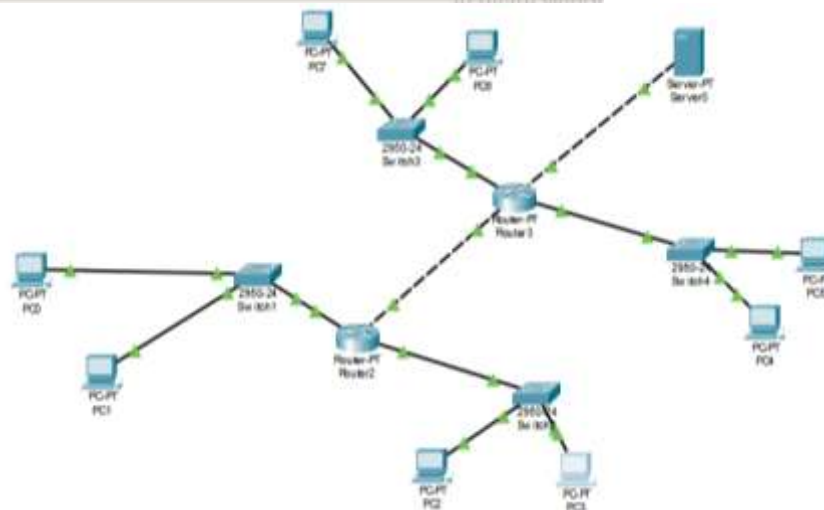
PC 0 -> PC 2



PC 4 -> PC 6



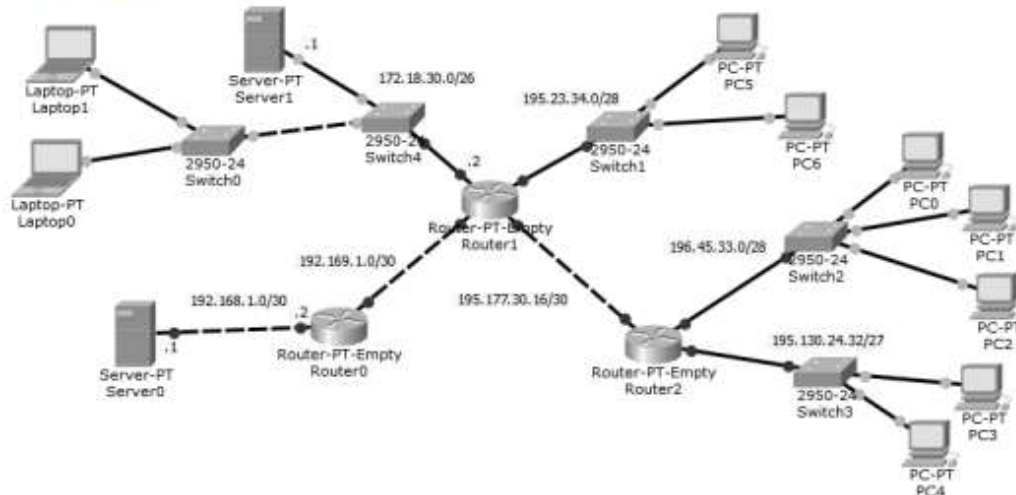
PC 3 -> Server



Tugas

1.

Buatlah sebuah topologi seperti yang ada di bawah ini dengan menggunakan Router-PT-Empty, tambahkan module PT-ROUTER-NM-1CFE sebanyak yang dibutuhkan pada masing-masing router tersebut.



Berdasarkan topologi tersebut, tentukan sendiri alamat IP dari masing-masing PC, interface router, gateway, dsb.

Buatlah tabel routing masing-masing Router, capture, dan lakukan ping dari dan ke semua jaringan yang ada.

- Konfigurasi Router 0

```
Router(config)#interface fa0/0
Router(config-if)#ip add
% Incomplete command.
Router(config-if)#ip add 192.168.1.2 255.255.255.252
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

Router(config-if)#interface fal/0
Router(config-if)#ip address 192.169.1.1 255.255.255.252
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up
```

- Konfigurasi Router 1

```
Router(config)#interface fa0/0
Router(config-if)#ip address 192.169.1.2 255.255.255.252
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

Router(config-if)#interface fal/0
Router(config-if)#ip address 195.177.30.16 255.255.255.252
Bad mask /30 for address 195.177.30.16
Router(config-if)#ip address 195.177.30.17 255.255.255.252
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up
```

```

Router(config-if)#interface fa2/0
Router(config-if)#ip address 195.23.34.1 255.255.255.240
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet2/0, changed state to up

Router(config-if)#interface fa3/0
Router(config-if)#ip address 172.18.30.2 255.255.255.192
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet3/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet3/0,

```

- Konfigurasi Router 2

```

Router(config)#interface fa0/0
Router(config-if)#195.177.30.18 255.255.255.252
^
% Invalid input detected at '^' marker.

Router(config-if)#ip add 195.177.30.18 255.255.255.252
Router(config-if)#no shut

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

Router(config-if)#interface fa1/0
Router(config-if)#ip add
% Incomplete command.
Router(config-if)#ip add 195.130.24.33 255.255.255.224
Router(config-if)#no shut

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up

Router(config-if)#interface fa2/0
Router(config-if)#ip add 196.45.33.1 255.255.255.240
Router(config-if)#no shut

Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet2/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet2/0,

```

- Konfigurasi router static Router 0

```

Router(config)#ip route 192.169.1.0 255.255.255.252 192.169.1.2
Router(config)#ip route 172.18.30.0 255.255.255.192 172.18.30.2
Router(config)#ip route 195.23.34.0 255.255.255.240 195.23.34.1
Router(config)#ip route 195.177.30.16 255.255.255.252 195.177.30.17
Router(config)#ip route 195.177.30.16 255.255.255.252 195.177.30.18
Router(config)#ip route 195.130.24.32 255.255.255.224 195.130.24.33
Router(config)#ip route 195.45.33.0 255.255.255.240 195.45.33.1
Router(config)#

```

- Konfigurasi router static Router 1

```

Router(config)#ip route 192.169.1.0 255.255.255.252 192.169.1.1
Router(config)#ip route 192.168.1.0 255.255.255.252 192.168.1.1
Router(config)#ip route 196.45.33.0 255.255.255.240 196.45.33.1
Router(config)#ip route 195.130.24.32 255.255.255.224 195.130.24.33
Router(config)#

```

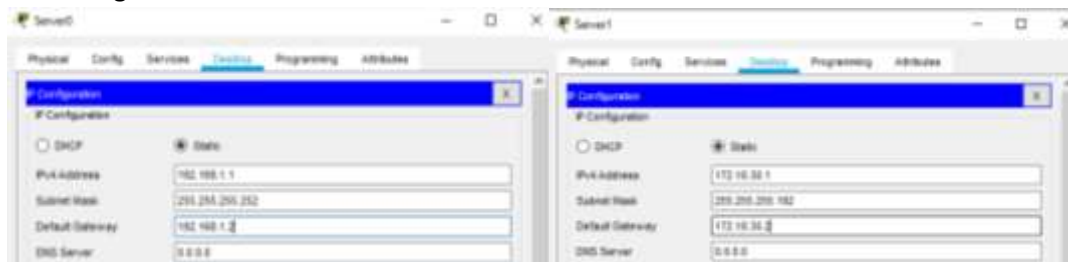
- Konfigurasi router static Router 2

```

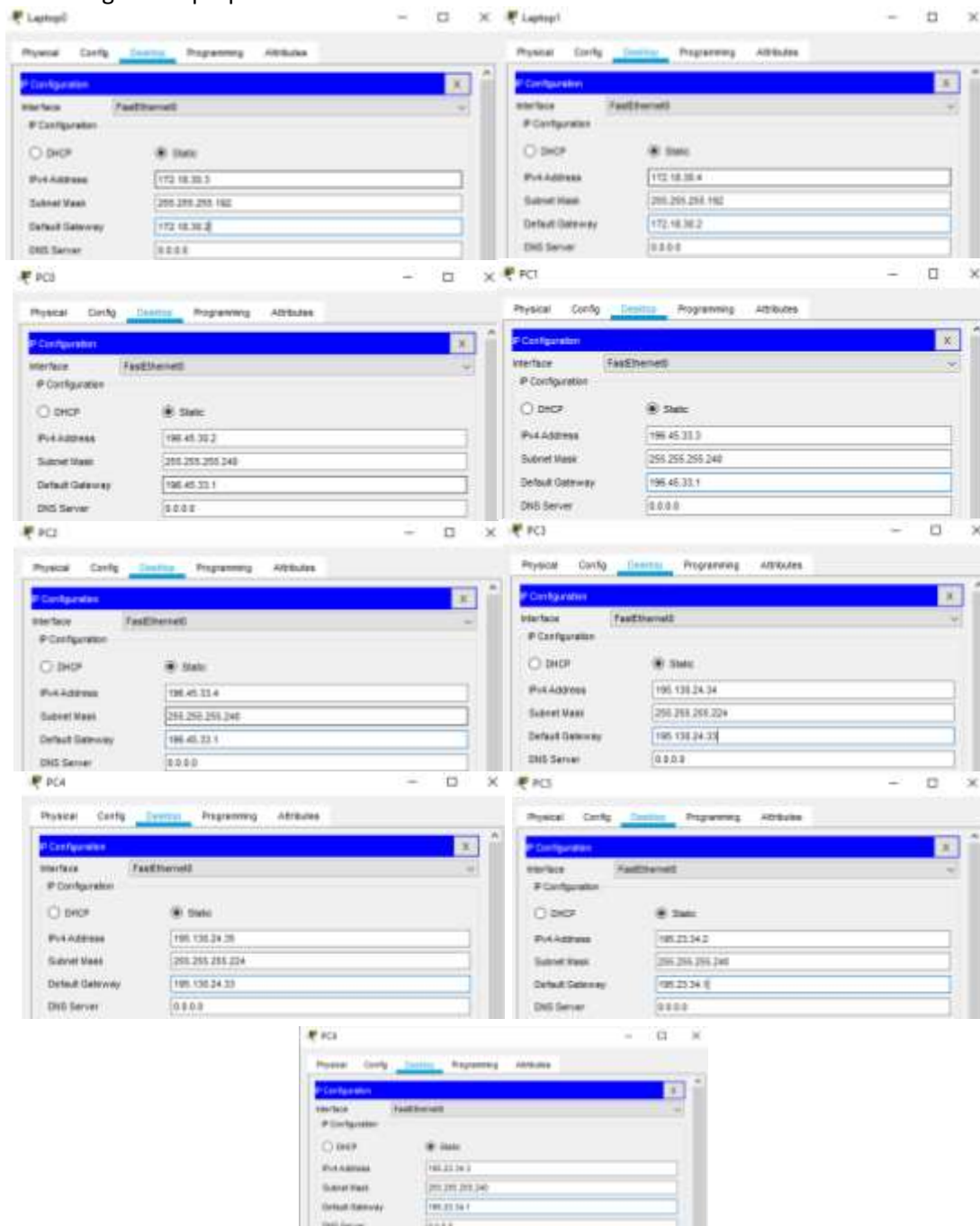
Router(config)#ip route 192.168.1.0 255.255.255.252 192.168.1.1
Router(config)#ip route 192.169.1.0 255.255.255.252 192.169.1.1
Router(config)#ip route 172.18.30.0 255.255.255.240 172.18.30.2
Router(config)#ip route 195.23.34.0 255.255.255.240 195.23.34.1
Router(config)#ip route 172.18.30.0 255.255.255.192 172.18.30.2
Router(config)#

```

- Konfigurasi server 0 dan server 1



- Konfigurasi laptop dan PC



- Table Routing

Routing Table for Router0

Type	Network	Port	Next Hop IP	Metric
C	192.168.1.0/30	FastEthernet0/0	---	0/0
C	192.169.1.0/30	FastEthernet1/0	---	0/0

Routing Table for Router1

Type	Network	Port	Next Hop IP	Metric
C	172.16.30.0/26	FastEthernet0/0	---	0/0
C	192.169.1.0/30	FastEthernet0/0	---	0/0
C	195.23.34.0/28	FastEthernet2/0	---	0/0
C	195.177.30.16/30	FastEthernet1/0	---	0/0

Routing Table for Router2

Type	Network	Port	Next Hop IP	Metric
C	195.130.24.32/27	FastEthernet1/0	---	0/0
C	195.177.30.16/30	FastEthernet0/0	---	0/0
C	196.45.33.0/28	FastEthernet2/0	---	0/0

- Test Ping

- o Server 0 -> PC 5

```

Server0
Physical Config Services Desktop Programming Attributes

Command Prompt

Packet Tracer SERVER Command Line 1.0
C:\>ping 195.23.34.2

Pinging 195.23.34.2 with 32 bytes of data:

Reply from 192.168.1.2: Destination host unreachable.
Request timed out.
Reply from 192.168.1.2: Destination host unreachable.
Reply from 192.168.1.2: Destination host unreachable.

Ping statistics for 195.23.34.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ping 195.23.34.2

Pinging 195.23.34.2 with 32 bytes of data:

Reply from 192.168.1.2: Destination host unreachable.
Reply from 192.168.1.2: Destination host unreachable.
Reply from 192.168.1.2: Destination host unreachable.
Reply from 192.168.1.2: Destination host unreachable.

Ping statistics for 195.23.34.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ping 195.23.34.2
  
```

- o PC 4 -> Laptop 1

```

PC4
Physical Config Desktop Programming Attributes

Command Prompt

Packet Tracer PC Command Line 1.0
C:\>ping 172.16.90.4

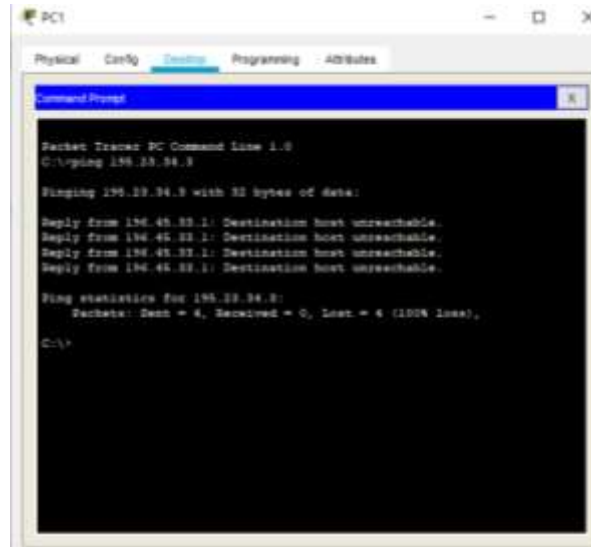
Pinging 172.16.90.4 with 32 bytes of data:

Reply from 195.190.24.88: Destination host unreachable.
Reply from 195.190.24.88: Destination host unreachable.
Reply from 195.190.24.88: Destination host unreachable.
Reply from 195.190.24.88: Destination host unreachable.

Ping statistics for 172.16.90.4:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
  
```


- PC 1 -> PC 6



The screenshot shows a Packet Tracer PC Command Line window for PC1. The window has tabs for Physical, Config, Command, Programming, and Attributes, with the Command tab selected. The Command Prompt area shows the following text:

```
Packet Tracer PC Command Line 1.0
C:\>ping 196.29.34.9

Pinging 196.29.34.9 with 32 bytes of data:

Reply from 196.45.89.1: Destination host unreachable.
Reply from 196.45.89.1: Destination host unreachable.
Reply from 196.45.89.1: Destination host unreachable.
Reply from 196.45.89.1: Destination host unreachable.

Ping statistics for 196.29.34.9:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>
```