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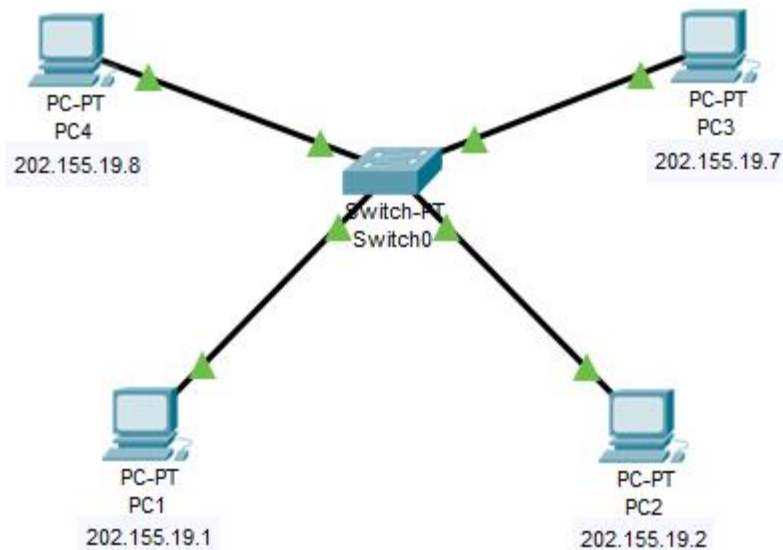
Kelas : C → D

### MODUL III

### SUBNETTING

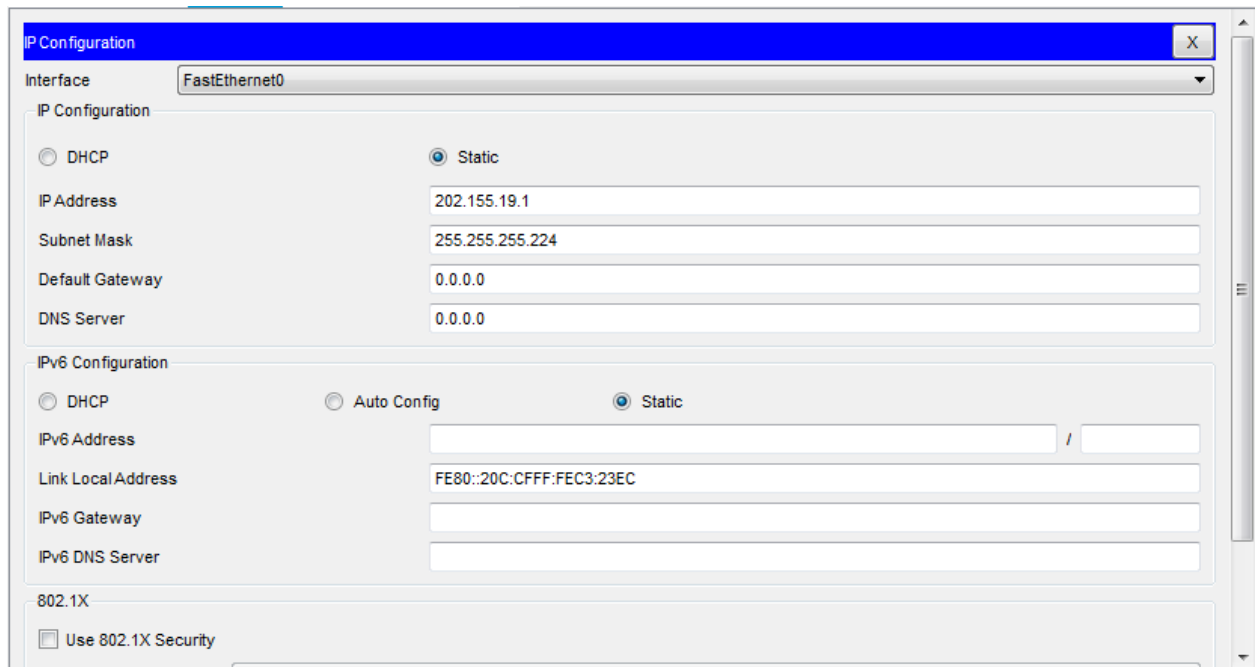
#### Tugas Modul.

- Jumlah Subnet  
 $2^3 = 8$  subnet
- Jumlah Host  
 $2^5 - 2 = 30$  host
  - 1 untuk Network
  - 1 untuk Broadcast
- Block Subnet  
 $256 - 224 = 32$
- IP Address :
  - 202.155.19.0 / 27
  - IP Address Awal : 202.155.19.1
  - IP Address Akhir : 202.155.19.31
- Subnet mask
  - 255. 255. 255. 0
  - 11111111.11111111.11111111.00000000
  - 11111111.11111111.11111111.11100000
  - 255. 255. 255. 224
- Desain
  - Menggunakan 4 buah PC



g. Memberi IP Address dan Subnet Mask pada masing-masing PC

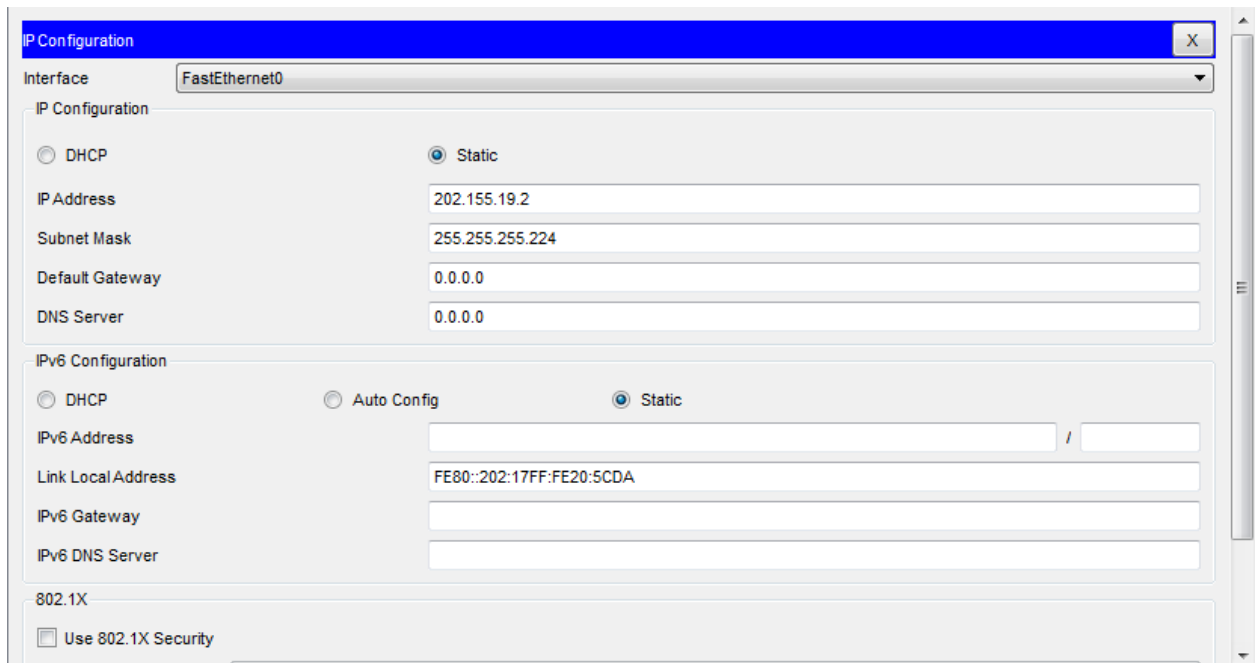
1. PC 1



The screenshot shows the 'IP Configuration' window for PC 1. The 'Interface' dropdown is set to 'FastEthernet0'. Under 'IP Configuration', the 'Static' radio button is selected. The fields are filled with: IP Address: 202.155.19.1, Subnet Mask: 255.255.255.224, Default Gateway: 0.0.0.0, and DNS Server: 0.0.0.0. Under 'IPv6 Configuration', the 'Static' radio button is also selected, with empty fields for IPv6 Address, Link Local Address, IPv6 Gateway, and IPv6 DNS Server. The '802.1X' section at the bottom has the 'Use 802.1X Security' checkbox unchecked.

IP Configuration	
Interface	FastEthernet0
IP Configuration	
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static
IP Address	202.155.19.1
Subnet Mask	255.255.255.224
Default Gateway	0.0.0.0
DNS Server	0.0.0.0
IPv6 Configuration	
<input type="radio"/> DHCP	<input type="radio"/> Auto Config <input checked="" type="radio"/> Static
IPv6 Address	
Link Local Address	FE80::20C:CFFF:FEC3:23EC
IPv6 Gateway	
IPv6 DNS Server	
802.1X	
<input type="checkbox"/> Use 802.1X Security	

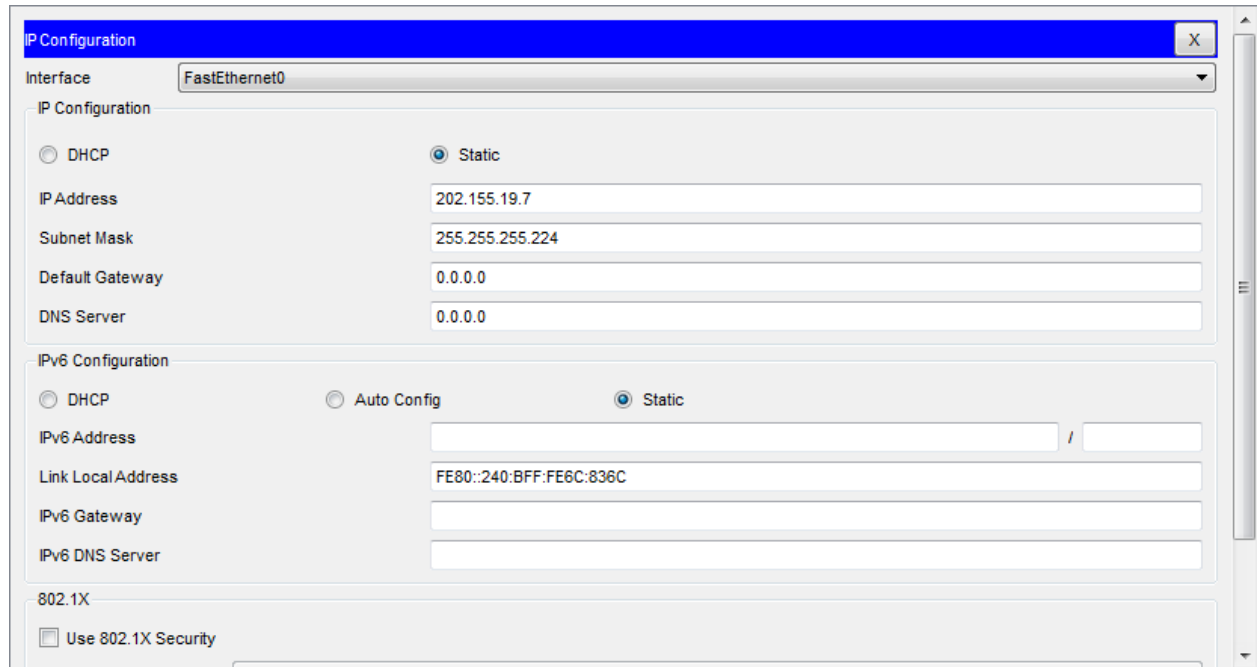
2. PC 2



The screenshot shows the 'IP Configuration' window for PC 2. The 'Interface' dropdown is set to 'FastEthernet0'. Under 'IP Configuration', the 'Static' radio button is selected. The fields are filled with: IP Address: 202.155.19.2, Subnet Mask: 255.255.255.224, Default Gateway: 0.0.0.0, and DNS Server: 0.0.0.0. Under 'IPv6 Configuration', the 'Static' radio button is also selected, with empty fields for IPv6 Address, Link Local Address, IPv6 Gateway, and IPv6 DNS Server. The '802.1X' section at the bottom has the 'Use 802.1X Security' checkbox unchecked.

IP Configuration	
Interface	FastEthernet0
IP Configuration	
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static
IP Address	202.155.19.2
Subnet Mask	255.255.255.224
Default Gateway	0.0.0.0
DNS Server	0.0.0.0
IPv6 Configuration	
<input type="radio"/> DHCP	<input type="radio"/> Auto Config <input checked="" type="radio"/> Static
IPv6 Address	
Link Local Address	FE80::202:17FF:FE20:5CDA
IPv6 Gateway	
IPv6 DNS Server	
802.1X	
<input type="checkbox"/> Use 802.1X Security	

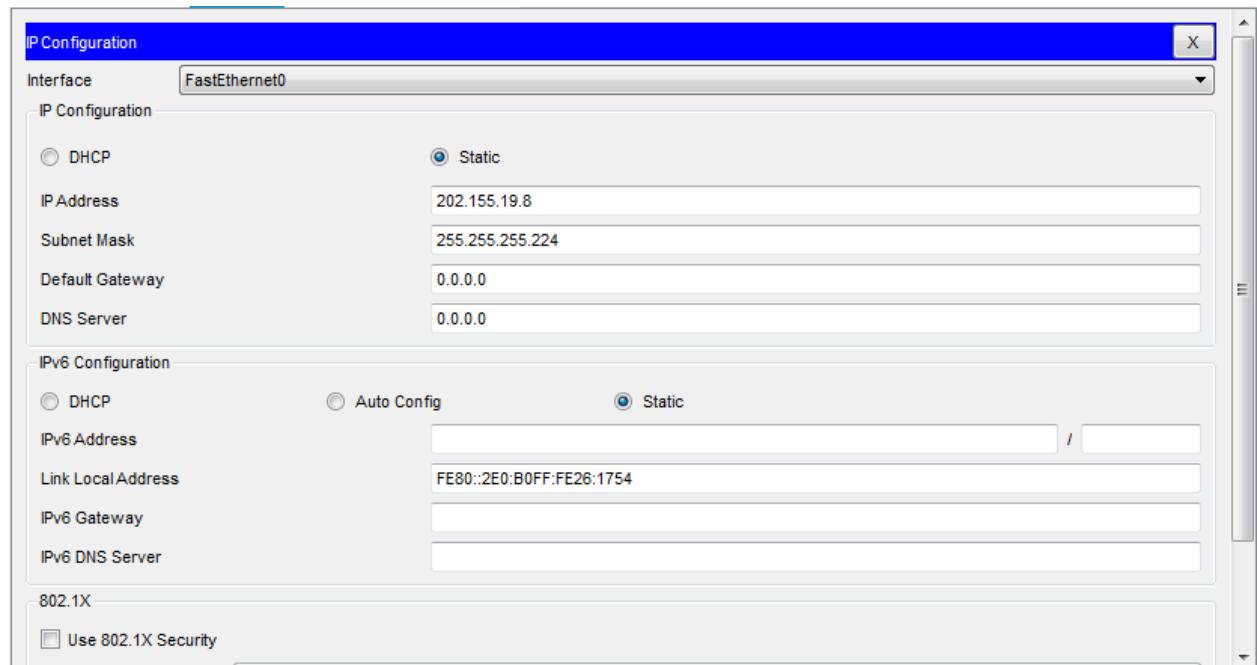
### 3. PC 3



The image shows the 'IP Configuration' window for PC 3. The 'Interface' dropdown is set to 'FastEthernet0'. Under 'IP Configuration', the 'Static' radio button is selected. The IP Address is 202.155.19.7, Subnet Mask is 255.255.255.224, Default Gateway is 0.0.0.0, and DNS Server is 0.0.0.0. Under 'IPv6 Configuration', the 'Static' radio button is selected. The IPv6 Address field is empty, the Link Local Address is FE80::240:BFF:FE6C:836C, and the IPv6 Gateway and DNS Server fields are empty. The '802.1X' section has the 'Use 802.1X Security' checkbox unchecked.

IP Configuration		
Interface	FastEthernet0	
IP Configuration		
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static	
IP Address	202.155.19.7	
Subnet Mask	255.255.255.224	
Default Gateway	0.0.0.0	
DNS Server	0.0.0.0	
IPv6 Configuration		
<input type="radio"/> DHCP	<input type="radio"/> Auto Config	<input checked="" type="radio"/> Static
IPv6 Address		
Link Local Address	FE80::240:BFF:FE6C:836C	
IPv6 Gateway		
IPv6 DNS Server		
802.1X		
<input type="checkbox"/> Use 802.1X Security		

### 4. PC 4



The image shows the 'IP Configuration' window for PC 4. The 'Interface' dropdown is set to 'FastEthernet0'. Under 'IP Configuration', the 'Static' radio button is selected. The IP Address is 202.155.19.8, Subnet Mask is 255.255.255.224, Default Gateway is 0.0.0.0, and DNS Server is 0.0.0.0. Under 'IPv6 Configuration', the 'Static' radio button is selected. The IPv6 Address field is empty, the Link Local Address is FE80::2E0:B0FF:FE26:1754, and the IPv6 Gateway and DNS Server fields are empty. The '802.1X' section has the 'Use 802.1X Security' checkbox unchecked.

IP Configuration		
Interface	FastEthernet0	
IP Configuration		
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static	
IP Address	202.155.19.8	
Subnet Mask	255.255.255.224	
Default Gateway	0.0.0.0	
DNS Server	0.0.0.0	
IPv6 Configuration		
<input type="radio"/> DHCP	<input type="radio"/> Auto Config	<input checked="" type="radio"/> Static
IPv6 Address		
Link Local Address	FE80::2E0:B0FF:FE26:1754	
IPv6 Gateway		
IPv6 DNS Server		
802.1X		
<input type="checkbox"/> Use 802.1X Security		

- h. Uji Koneksi Jaringan
1. PC1 dengan PC2

```
C:\>ping 202.155.19.2

Pinging 202.155.19.2 with 32 bytes of data:

Reply from 202.155.19.2: bytes=32 time=25ms TTL=128
Reply from 202.155.19.2: bytes=32 time<1ms TTL=128
Reply from 202.155.19.2: bytes=32 time<1ms TTL=128
Reply from 202.155.19.2: bytes=32 time<1ms TTL=128

Ping statistics for 202.155.19.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 25ms, Average = 6ms
```

Berhasil dipanggil karena dalam satu alamat.

2. PC1 dengan PC3

```
C:\>ping 202.155.19.7

Pinging 202.155.19.7 with 32 bytes of data:

Reply from 202.155.19.7: bytes=32 time=1ms TTL=128
Reply from 202.155.19.7: bytes=32 time<1ms TTL=128
Reply from 202.155.19.7: bytes=32 time<1ms TTL=128
Reply from 202.155.19.7: bytes=32 time<1ms TTL=128

Ping statistics for 202.155.19.7:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

Berhasil dipanggil karena dalam satu alamat.

3. PC1 dengan PC4

```
C:\>ping 202.155.19.8

Pinging 202.155.19.8 with 32 bytes of data:

Reply from 202.155.19.8: bytes=32 time=1ms TTL=128
Reply from 202.155.19.8: bytes=32 time<1ms TTL=128
Reply from 202.155.19.8: bytes=32 time<1ms TTL=128
Reply from 202.155.19.8: bytes=32 time<1ms TTL=128

Ping statistics for 202.155.19.8:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

Berhasil dipanggil karena dalam satu alamat.

4. PC2 dengan PC1

```
C:\>ping 202.155.19.1

Pinging 202.155.19.1 with 32 bytes of data:

Reply from 202.155.19.1: bytes=32 time=1ms TTL=128
Reply from 202.155.19.1: bytes=32 time<1ms TTL=128
Reply from 202.155.19.1: bytes=32 time<1ms TTL=128
Reply from 202.155.19.1: bytes=32 time<1ms TTL=128

Ping statistics for 202.155.19.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

Berhasil dipanggil karena dalam satu alamat.

5. PC2 dengan PC3

```
C:\>ping 202.155.19.7

Pinging 202.155.19.7 with 32 bytes of data:

Reply from 202.155.19.7: bytes=32 time=1ms TTL=128
Reply from 202.155.19.7: bytes=32 time=1ms TTL=128
Reply from 202.155.19.7: bytes=32 time<1ms TTL=128
Reply from 202.155.19.7: bytes=32 time<1ms TTL=128

Ping statistics for 202.155.19.7:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

Berhasil dipanggil karena dalam satu alamat.

6. PC2 dengan PC4

```
C:\>ping 202.155.19.8

Pinging 202.155.19.8 with 32 bytes of data:

Reply from 202.155.19.8: bytes=32 time=2ms TTL=128
Reply from 202.155.19.8: bytes=32 time<1ms TTL=128
Reply from 202.155.19.8: bytes=32 time<1ms TTL=128
Reply from 202.155.19.8: bytes=32 time<1ms TTL=128

Ping statistics for 202.155.19.8:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 2ms, Average = 0ms
```

Berhasil dipanggil karena dalam satu alamat.

7. PC3 dengan PC1

```
C:\>ping 202.155.19.1

Pinging 202.155.19.1 with 32 bytes of data:

Reply from 202.155.19.1: bytes=32 time<1ms TTL=128
Reply from 202.155.19.1: bytes=32 time<1ms TTL=128
Reply from 202.155.19.1: bytes=32 time=1ms TTL=128
Reply from 202.155.19.1: bytes=32 time<1ms TTL=128

Ping statistics for 202.155.19.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

Berhasil dipanggil karena dalam satu alamat.

8. PC3 dengan PC2

```
C:\>ping 202.155.19.7

Pinging 202.155.19.7 with 32 bytes of data:

Reply from 202.155.19.7: bytes=32 time=21ms TTL=128
Reply from 202.155.19.7: bytes=32 time<1ms TTL=128
Reply from 202.155.19.7: bytes=32 time<1ms TTL=128
Reply from 202.155.19.7: bytes=32 time=2ms TTL=128

Ping statistics for 202.155.19.7:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 21ms, Average = 5ms
```

Berhasil dipanggil karena dalam satu alamat.

9. PC3 dengan PC4

```
C:\>ping 202.155.19.8

Pinging 202.155.19.8 with 32 bytes of data:

Reply from 202.155.19.8: bytes=32 time=1ms TTL=128
Reply from 202.155.19.8: bytes=32 time<1ms TTL=128
Reply from 202.155.19.8: bytes=32 time<1ms TTL=128
Reply from 202.155.19.8: bytes=32 time<1ms TTL=128

Ping statistics for 202.155.19.8:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

Berhasil dipanggil karena dalam satu alamat.

10. PC4 dengan PC1

```
C:\>ping 202.155.19.1

Pinging 202.155.19.1 with 32 bytes of data:

Reply from 202.155.19.1: bytes=32 time=1ms TTL=128
Reply from 202.155.19.1: bytes=32 time<1ms TTL=128
Reply from 202.155.19.1: bytes=32 time=1ms TTL=128
Reply from 202.155.19.1: bytes=32 time<1ms TTL=128

Ping statistics for 202.155.19.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

Berhasil dipanggil karena dalam satu alamat.

11. PC4 dengan PC2

```
C:\>ping 202.155.19.2

Pinging 202.155.19.2 with 32 bytes of data:

Reply from 202.155.19.2: bytes=32 time<1ms TTL=128
Reply from 202.155.19.2: bytes=32 time<1ms TTL=128
Reply from 202.155.19.2: bytes=32 time<1ms TTL=128
Reply from 202.155.19.2: bytes=32 time<1ms TTL=128

Ping statistics for 202.155.19.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

Berhasil dipanggil karena dalam satu alamat.

12. PC4 dengan PC3

```
C:\>ping 202.155.19.7

Pinging 202.155.19.7 with 32 bytes of data:

Reply from 202.155.19.7: bytes=32 time<1ms TTL=128
Reply from 202.155.19.7: bytes=32 time<1ms TTL=128
Reply from 202.155.19.7: bytes=32 time<1ms TTL=128
Reply from 202.155.19.7: bytes=32 time<1ms TTL=128

Ping statistics for 202.155.19.7:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

Berhasil dipanggil karena dalam satu alamat.