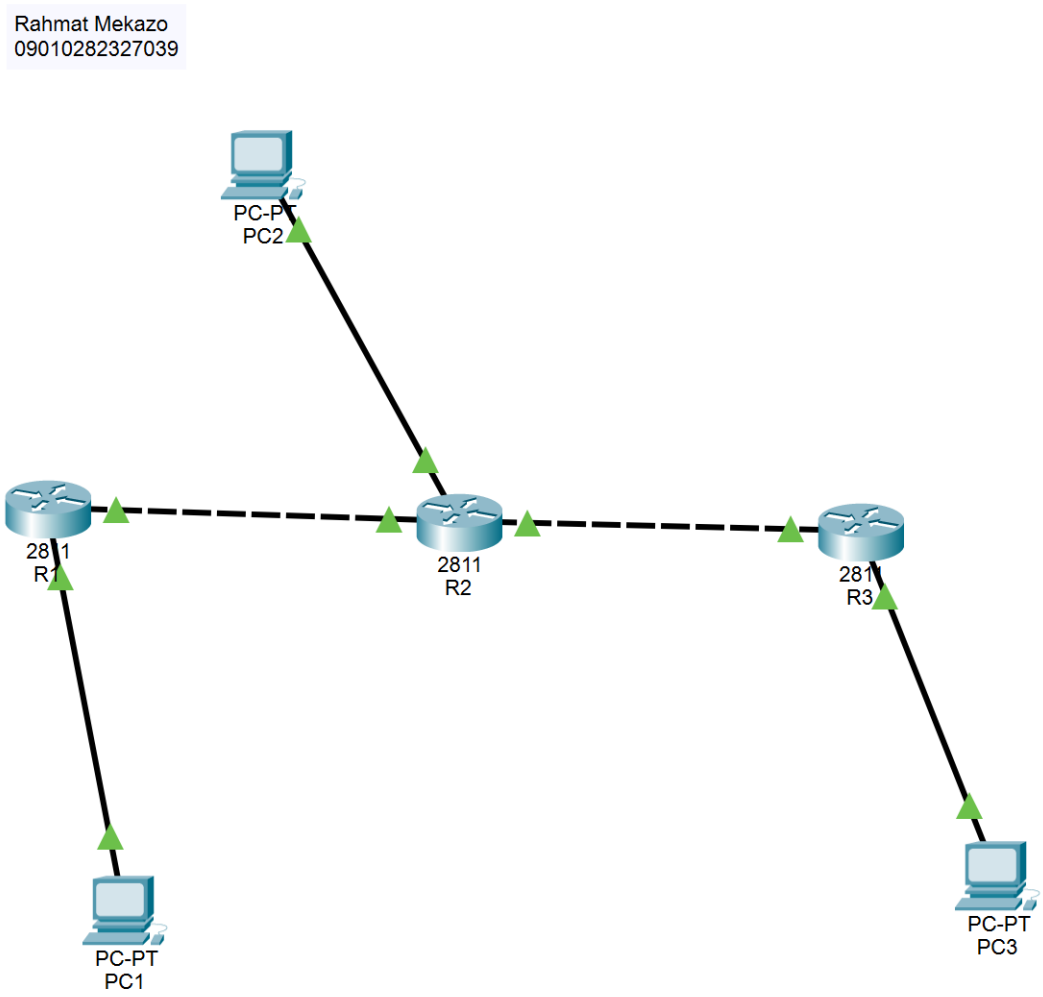
NAMA	**: RAHMAT MEKAZO**
NIM	**: 09010282327039**
KELAS	**: MI 3A**
MK	**: PRAKTIKUM JARKOM**

- **Routing RIP**



1. Buatlah IP Address di PC

No	Nama Device	Alamat	Netmask	Gateway
1	PC1	192.168.1.10	255.255.255.0	192.168.1.1
2	PC2	192.168.2.10	255.255.255.0	192.168.2.1
3	PC3	192.168.3.10	255.255.255.0	192.168.3.1

ROUTER R1

```
Router_09010282327039#show ip route rip
     192.168.1.0/24 is variably subnetted, 2 subnets, 2 masks
R    192.168.2.0/24 [120/1] via 192.168.100.2, 00:00:27, FastEthernet0/1
R    192.168.3.0/24 [120/2] via 192.168.100.2, 00:00:27, FastEthernet0/1
     192.168.200.0/30 is subnetted, 1 subnets
R       192.168.200.0 [120/1] via 192.168.100.2, 00:00:27, FastEthernet0/1

Router 09010282327039#
```

ROUTER R2

```
Router_09010282327039#show ip route rip
R    192.168.1.0/24 [120/1] via 192.168.100.1, 00:00:19, FastEthernet0/1
     192.168.2.0/24 is variably subnetted, 2 subnets, 2 masks
R    192.168.3.0/24 [120/1] via 192.168.200.2, 00:00:15, FastEthernet1/0

Router_09010282327039#
```

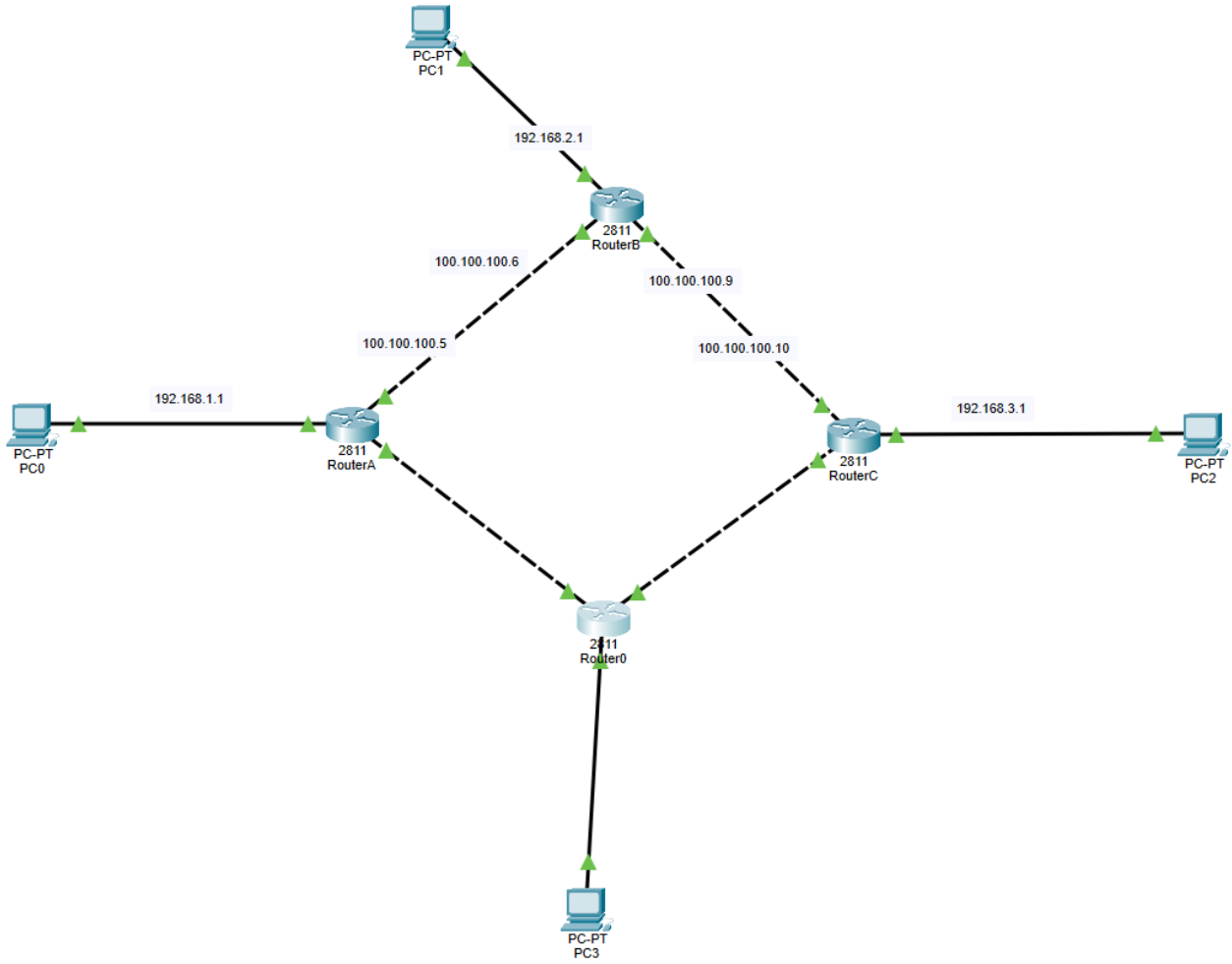
ROUTER R3

```
Router_09010282327039#show ip route rip
R    192.168.1.0/24 [120/2] via 192.168.200.1, 00:00:21, FastEthernet0/1
R    192.168.2.0/24 [120/1] via 192.168.200.1, 00:00:21, FastEthernet0/1
     192.168.100.0/30 is subnetted, 1 subnets
R       192.168.100.0 [120/1] via 192.168.200.1, 00:00:21, FastEthernet0/1

Router_09010282327039#
```

2. Lakukan PING dan Traceroute dari PC1 ke PC2 dan PC3, PC2 ke PC1 dan PC3, serta PC3 ke PC1 dan PC2.

No	Sumber	Tujuan	Hasil	
			Ya	Tidak
1	PC1	PC2	Ya	
		PC3	Ya	
2	PC2	PC1	Ya	
		PC3	Ya	
3	PC3	PC1	Ya	
		PC2	Ya	

- **Routing EIGRP**



1. Buat Pengalamat di PC

No	Nama Device	Alamat	Netmask	Gateway
1	PCA	192.168.1.10	255.255.255.0	192.168.1.1
2	PCB	192.168.2.10	255.255.255.0	192.168.2.1
3	PCC	192.168.3.10	255.255.255.0	192.168.3.1

ROUTER A

```
RouterA_09010282327039#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
RouterA_09010282327039#show ip route eigrp
     100.0.0.0/8 is variably subnetted, 6 subnets, 2 masks
D       100.100.100.8/30 [90/30720] via 100.100.100.6, 00:11:32, FastEthernet0/1
D       100.100.100.12/30 [90/30720] via 100.100.100.2, 00:11:32, FastEthernet1/0
     192.168.1.0/24 is variably subnetted, 2 subnets, 2 masks
D    192.168.2.0/24 [90/30720] via 100.100.100.6, 00:11:32, FastEthernet0/1
D    192.168.3.0/24 [90/33280] via 100.100.100.2, 00:11:32, FastEthernet1/0
                    [90/33280] via 100.100.100.6, 00:11:32, FastEthernet0/1
D    192.168.4.0/24 [90/30720] via 100.100.100.2, 00:11:32, FastEthernet1/0

RouterA_09010282327039#
```

ROUTER B

```
RouterB_09010282327039>ENABLE
RouterB_09010282327039#show ip route eigrp
     100.0.0.0/8 is variably subnetted, 6 subnets, 2 masks
D       100.100.100.0/30 [90/30720] via 100.100.100.5, 00:13:31, FastEthernet1/0
D       100.100.100.12/30 [90/30720] via 100.100.100.10, 00:13:31, FastEthernet0/1
D    192.168.1.0/24 [90/30720] via 100.100.100.5, 00:13:31, FastEthernet1/0
     192.168.2.0/24 is variably subnetted, 2 subnets, 2 masks
D    192.168.3.0/24 [90/30720] via 100.100.100.10, 00:13:31, FastEthernet0/1
D    192.168.4.0/24 [90/33280] via 100.100.100.5, 00:13:31, FastEthernet1/0
                    [90/33280] via 100.100.100.10, 00:13:31, FastEthernet0/1

RouterB 09010282327039#
```

ROUTER C

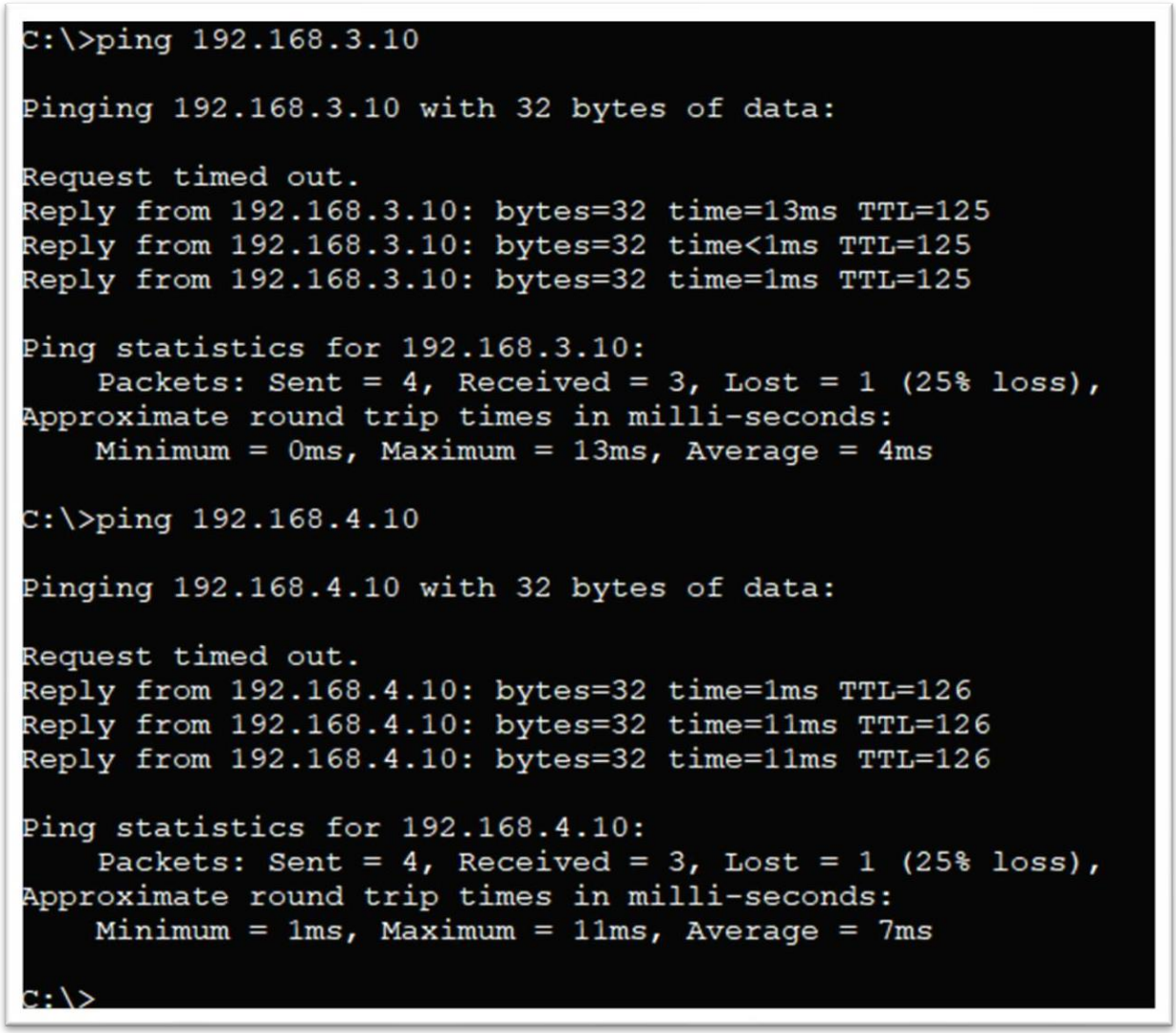
```
RouterC_09010282327039#show ip route eigrp
     100.0.0.0/8 is variably subnetted, 6 subnets, 2 masks
D       100.100.100.0/30 [90/30720] via 100.100.100.14, 00:15:29, FastEthernet0/1
D       100.100.100.4/30 [90/30720] via 100.100.100.9, 00:15:29, FastEthernet1/0
D    192.168.1.0/24 [90/33280] via 100.100.100.14, 00:15:29, FastEthernet0/1
                    [90/33280] via 100.100.100.9, 00:15:29, FastEthernet1/0
D    192.168.2.0/24 [90/30720] via 100.100.100.9, 00:15:29, FastEthernet1/0
     192.168.3.0/24 is variably subnetted, 2 subnets, 2 masks
D    192.168.4.0/24 [90/30720] via 100.100.100.14, 00:15:29, FastEthernet0/1

RouterC 09010282327039#
```

2. Lakukan PING dan Traceroute dari PCA ke PCB dan PCC, PCB ke PCA dan PCC, serta PCC ke PCA dan PCB.

No	Sumber	Tujuan	Hasil	
			Ya	Tidak
1	PCA	PCB	Ya	
		PCC	Ya	
	PCB	PCA	Ya	
		PCC	Ya	
3	PCC	PCA	Ya	
		PCB	Ya	

- Tabel hasil Ping.

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.10

Pinging 192.168.1.10 with 32 bytes of data:

Reply from 192.168.1.10: bytes=32 time=23ms TTL=128
Reply from 192.168.1.10: bytes=32 time=36ms TTL=128
Reply from 192.168.1.10: bytes=32 time=19ms TTL=128
Reply from 192.168.1.10: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.10:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 36ms, Average = 19ms

C:\>ping 192.168.2.10

Pinging 192.168.2.10 with 32 bytes of data:

Request timed out.
Reply from 192.168.2.10: bytes=32 time=2ms TTL=126
Reply from 192.168.2.10: bytes=32 time=11ms TTL=126
Reply from 192.168.2.10: bytes=32 time<1ms TTL=126

Ping statistics for 192.168.2.10:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 11ms, Average = 4ms
```



- **Menurut penjelasan saya:** Laporan ini secara keseluruhan menampilkan hasil konfigurasi dan pengujian konektivitas jaringan menggunakan protokol RIP dan EIGRP, serta verifikasi koneksi antar perangkat dalam jaringan tersebut.
- **Analisa yang saya dapatkan dari Laporan tersebut:**
  Keberhasilan Routing: Kedua protokol routing (RIP dan EIGRP) berhasil membentuk tabel routing yang memungkinkan konektivitas antar perangkat dalam jaringan.
  Keunggulan EIGRP dibanding RIP: Walaupun RIP berhasil dalam jaringan ini, EIGRP memiliki keunggulan dalam hal efisiensi dan skalabilitas untuk jaringan yang lebih besar.
  Penggunaan di Masa Depan: Untuk jaringan yang dinamis dan kompleks, EIGRP atau protokol routing yang lebih canggih akan lebih efisien daripada RIP.
- **Kesimpulannya,** laporan ini menunjukkan bahwa EIGRP menawarkan performa yang lebih baik dalam skenario jaringan yang memerlukan efisiensi dan keandalan yang lebih tingg