Nama: Amelia

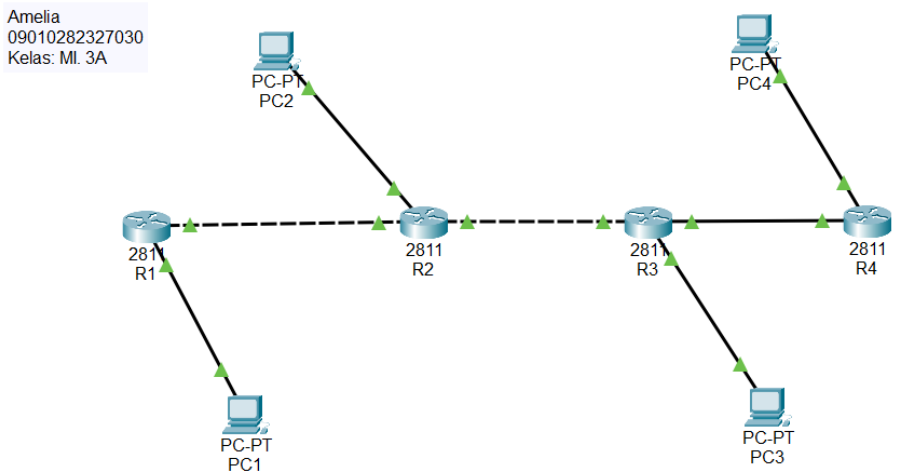
NIM: 09010282327030

Kelas: MI. 3A

Mata Kuliah: Praktikum Jaringan Komputer

RIP & EIGRP DYNAMIC ROUTING

1. RIP DYNAMIC ROUTING




```
R1_09010282327030#
R1_09010282327030#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, 00:00:11, FastEthernet0/1
     192.168.3.0/30 is subnetted, 1 subnets
R       192.168.3.0 [120/2] via 192.168.100.2, 00:00:11, FastEthernet0/1
     192.168.200.0/30 is subnetted, 1 subnets
R       192.168.200.0 [120/1] via 192.168.100.2, 00:00:11, FastEthernet0/1

R1_09010282327030#
```

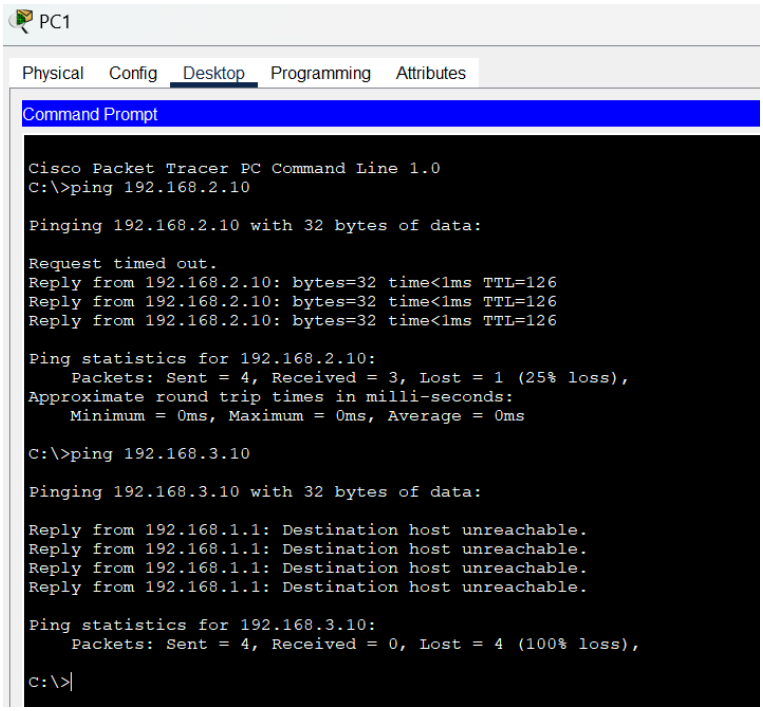
```
R2_09010282327030#show ip route rip
R    192.168.1.0/24 [120/1] via 192.168.100.1, 00:00:26, FastEthernet0/1
     192.168.3.0/30 is subnetted, 1 subnets
R       192.168.3.0 [120/1] via 192.168.200.2, 00:00:25, FastEthernet1/0

R2_09010282327030#
```

```
R3_09010282327030#show ip route rip
R    192.168.1.0/24 [120/2] via 192.168.200.1, 00:00:24, FastEthernet0/1
R    192.168.2.0/24 [120/1] via 192.168.200.1, 00:00:24, FastEthernet0/1
     192.168.100.0/30 is subnetted, 1 subnets
R       192.168.100.0 [120/1] via 192.168.200.1, 00:00:24, FastEthernet0/1

R3_09010282327030#
```

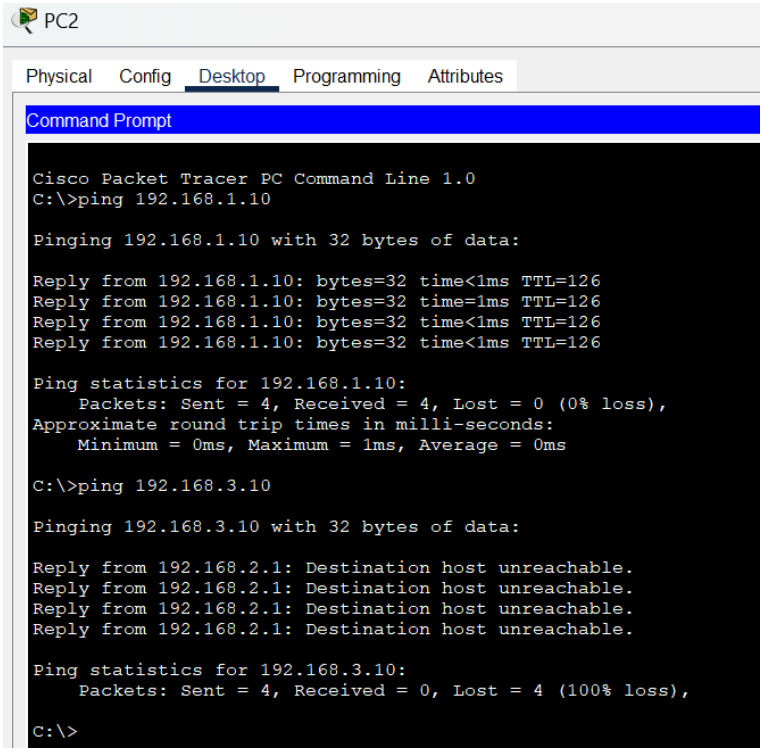
```
R4_09010282327030#show ip route rip

R4_09010282327030#
```

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

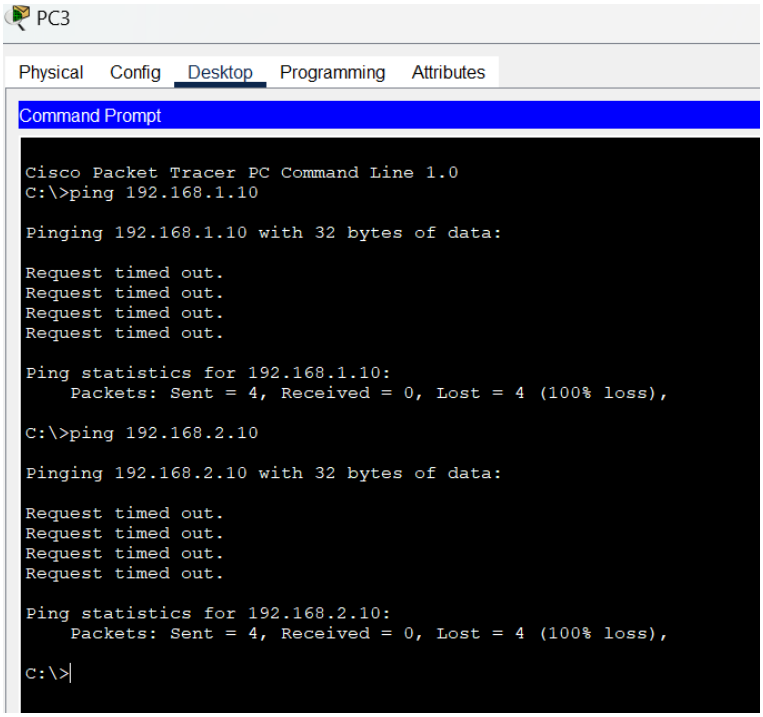
PC1



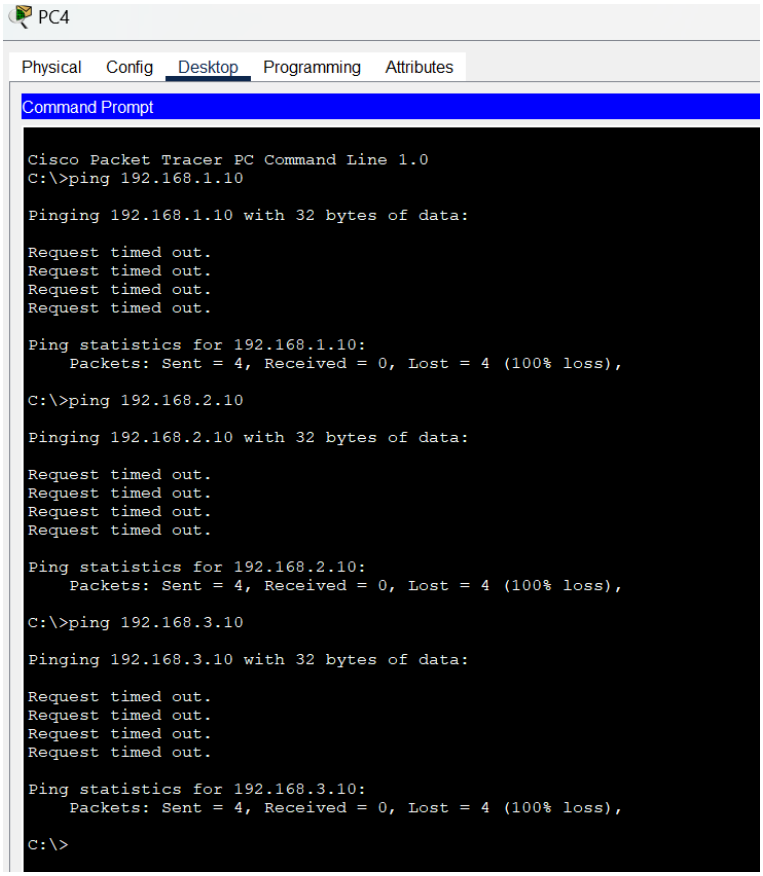
PC2


PC2
Physical
Config
Desktop
Programming
Attributes
Command Prompt
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<1ms TTL=126
Reply from 192.168.1.10: bytes=32 time=1ms TTL=126
Reply from 192.168.1.10: bytes=32 time<1ms TTL=126
Reply from 192.168.1.10: bytes=32 time<1ms TTL=126
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 = 1ms, Average = 0ms
C:\>ping 192.168.3.10
Pinging 192.168.3.10 with 32 bytes of data:
Reply from 192.168.2.1: Destination host unreachable.
Reply from 192.168.2.1: Destination host unreachable.
Reply from 192.168.2.1: Destination host unreachable.
Reply from 192.168.2.1: Destination host unreachable.
Ping statistics for 192.168.3.10:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>

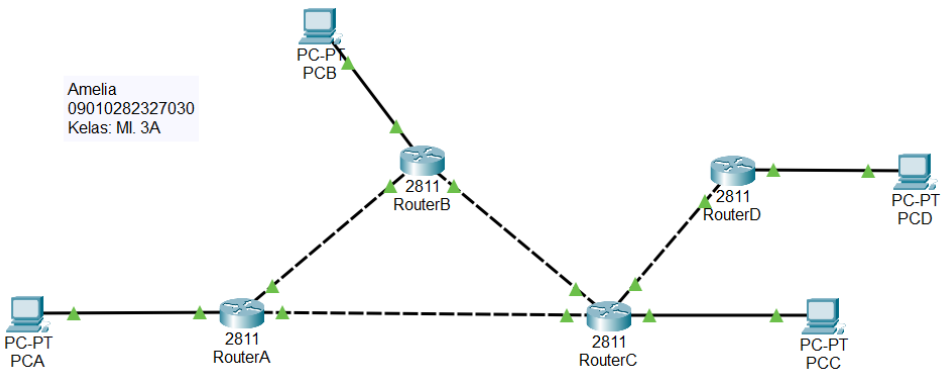
PC3


PC3
Physical
Config
Desktop
Programming
Attributes
Command Prompt
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.10
Pinging 192.168.1.10 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 192.168.1.10:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>ping 192.168.2.10
Pinging 192.168.2.10 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 192.168.2.10:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>

PC4



2. EIGRP DYNAMIC ROUTING



```
RouterA_09010282327030>enable
RouterA_09010282327030#show ip route eigrp
     100.0.0.0/8 is variably subnetted, 5 subnets, 2 masks
D       100.100.100.8/30 [90/30720] via 100.100.100.6, 00:18:42, FastEthernet0/1
     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, 00:18:42, FastEthernet0/1

RouterA_09010282327030#
```

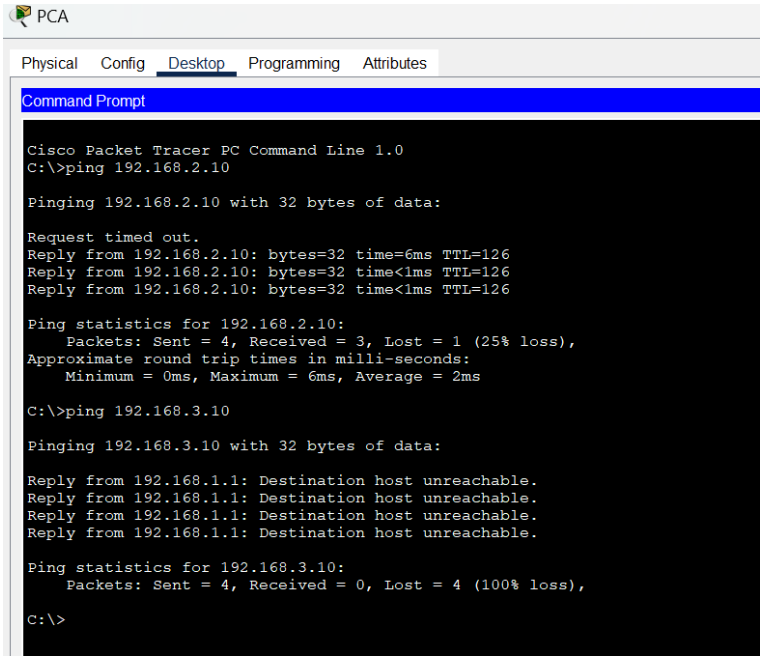
```
RouterB_09010282327030>enable
RouterB_09010282327030#show ip route eigrp
     100.0.0.0/8 is variably subnetted, 5 subnets, 2 masks
D       100.100.100.0/30 [90/30720] via 100.100.100.5, 00:19:06, FastEthernet1/0
D    192.168.1.0/24 [90/30720] via 100.100.100.5, 00:19:06, FastEthernet1/0

RouterB_09010282327030#
```

```
RouterC_09010282327030>enable
RouterC_09010282327030#show ip route eigrp

RouterC_09010282327030#
```

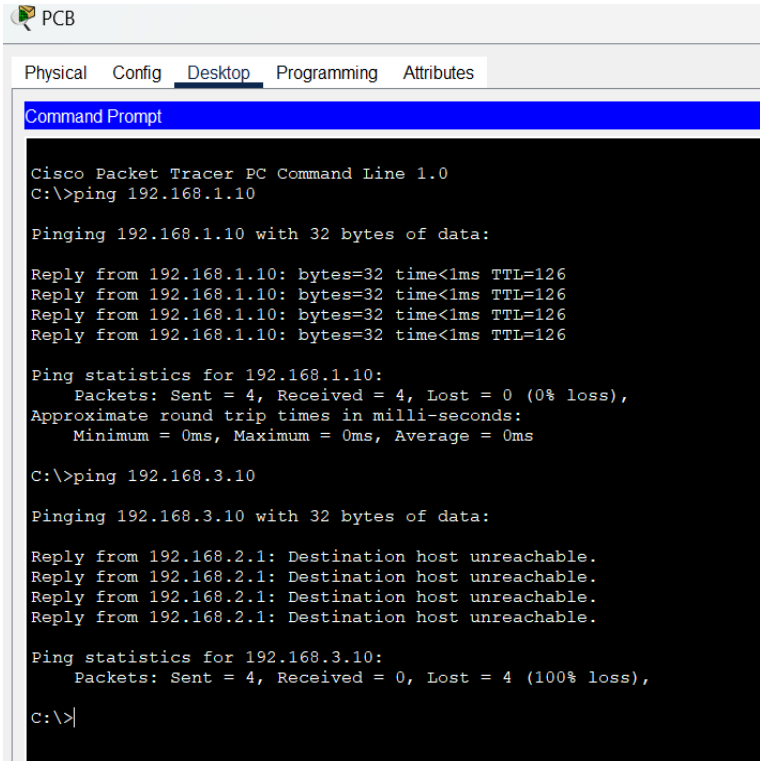
```
RouterD_09010282327030#show ip route eigrp


RouterD_09010282327030#
```

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

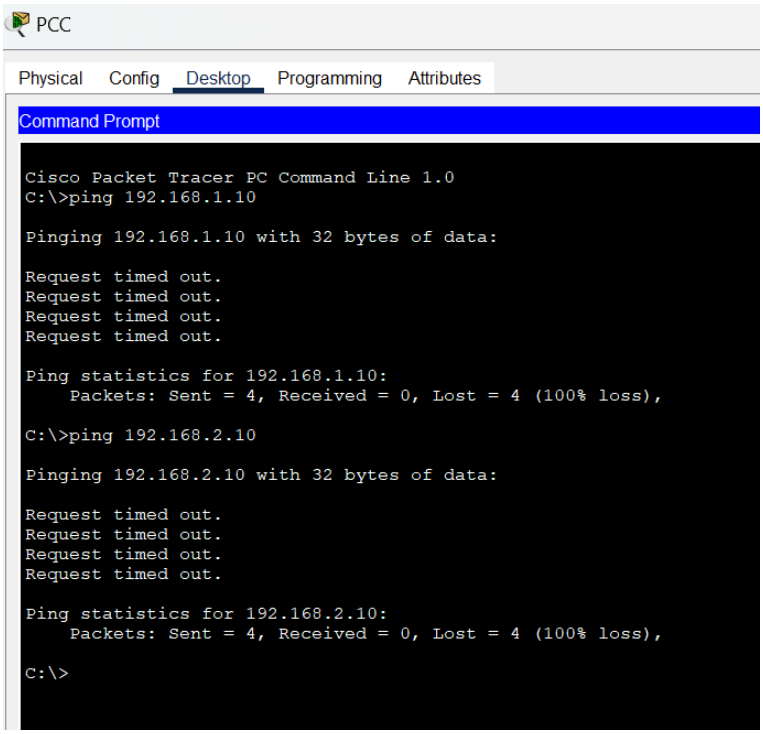
PCA


PCA
Physical
Config
Desktop
Programming
Attributes
Command Prompt
Cisco Packet Tracer PC Command Line 1.0
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=6ms TTL=126
Reply from 192.168.2.10: bytes=32 time<1ms 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 = 6ms, Average = 2ms
C:\>ping 192.168.3.10
Pinging 192.168.3.10 with 32 bytes of data:
Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.
Reply from 192.168.1.1: Destination host unreachable.
Ping statistics for 192.168.3.10:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>

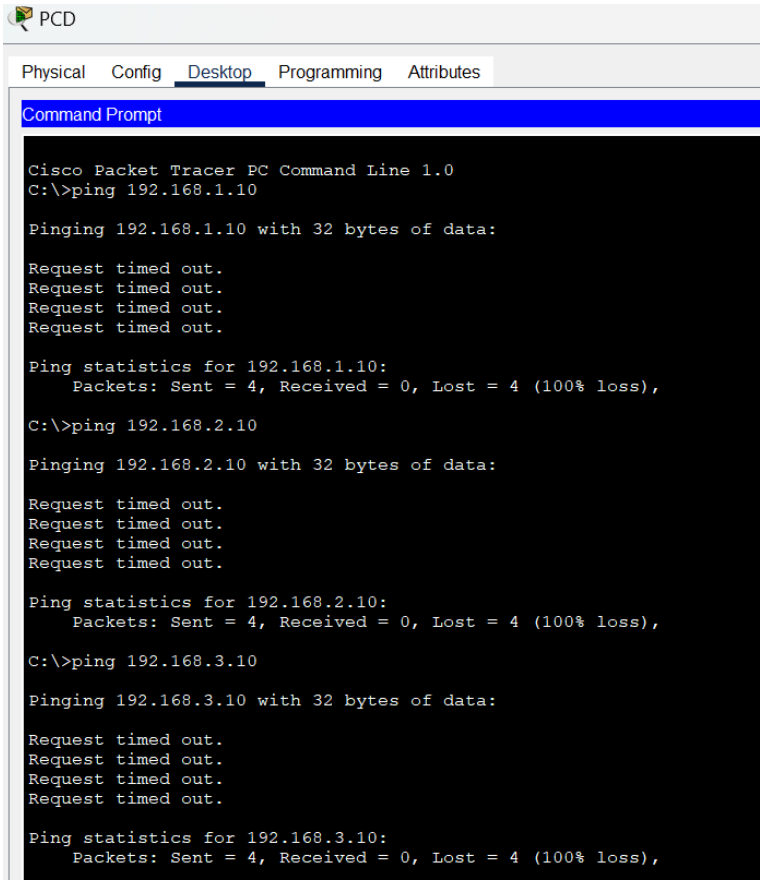
PCB


PCB
Physical
Config
Desktop
Programming
Attributes
Command Prompt
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<1ms TTL=126
Reply from 192.168.1.10: bytes=32 time<1ms TTL=126
Reply from 192.168.1.10: bytes=32 time<1ms TTL=126
Reply from 192.168.1.10: bytes=32 time<1ms TTL=126
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 = 0ms, Average = 0ms
C:\>ping 192.168.3.10
Pinging 192.168.3.10 with 32 bytes of data:
Reply from 192.168.2.1: Destination host unreachable.
Reply from 192.168.2.1: Destination host unreachable.
Reply from 192.168.2.1: Destination host unreachable.
Reply from 192.168.2.1: Destination host unreachable.
Ping statistics for 192.168.3.10:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>

PCC


PCC
Physical
Config
Desktop
Programming
Attributes
Command Prompt
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.10
Pinging 192.168.1.10 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 192.168.1.10:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>ping 192.168.2.10
Pinging 192.168.2.10 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 192.168.2.10:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>

PCD


PCD
Physical
Config
Desktop
Programming
Attributes
Command Prompt
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.10
Pinging 192.168.1.10 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 192.168.1.10:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>ping 192.168.2.10
Pinging 192.168.2.10 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 192.168.2.10:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>ping 192.168.3.10
Pinging 192.168.3.10 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 192.168.3.10:
Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

Hasil Praktikum:

- Tiga router dikonfigurasi untuk menggunakan RIP dan EIGRP DYNAMIC ROUTING.
- Jaringan yang digunakan: 192.168.1.0/24, 192.168.2.0/24, dan 192.168.3.0/24.

Melakukan pengujian konektivitas dengan ping dari PC1 ke (PC2 & PC3), PC2 ke (PC1 & PC3), dan PC3 (ke PC1 & PC2). Serta menggunakan perintah show ip route untuk memverifikasi tabel routing pada masing-masing router.

Analisa Praktikum:

Berdasarkan praktikum yang saya buat, bahwa:

RIP

- PC1 dapat berkomunikasi dengan PC2.
- PC2 dapat berkomunikasi dengan PC1.
- PC3 tidak dapat berkomunikasi dengan PC1 dan PC2.

EIGRP

- PCA dapat berkomunikasi dengan PCB.
- PCB dapat berkomunikasi dengan PCA.
- PCC tidak dapat berkomunikasi dengan PCA dan PCB.

Bisa dilihat bahwa praktikum yang saya lakukan ada yang gagal, dikarenakan ada yang bermasalah di PC3 dan PCC nya.

Kesimpulan:

Dari praktikum ini, dapat disimpulkan bahwa pemilihan protokol routing harus disesuaikan dengan kebutuhan dan skala jaringan yang akan dibangun. EIGRP lebih cocok untuk jaringan besar dan kompleks, sementara RIP cocok untuk jaringan kecil dengan sedikit router.