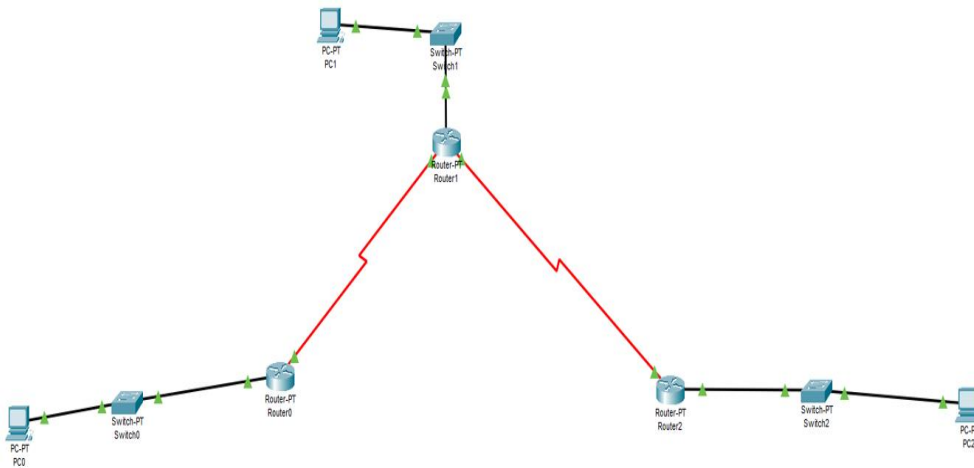




## Exercise:

### 1.3:

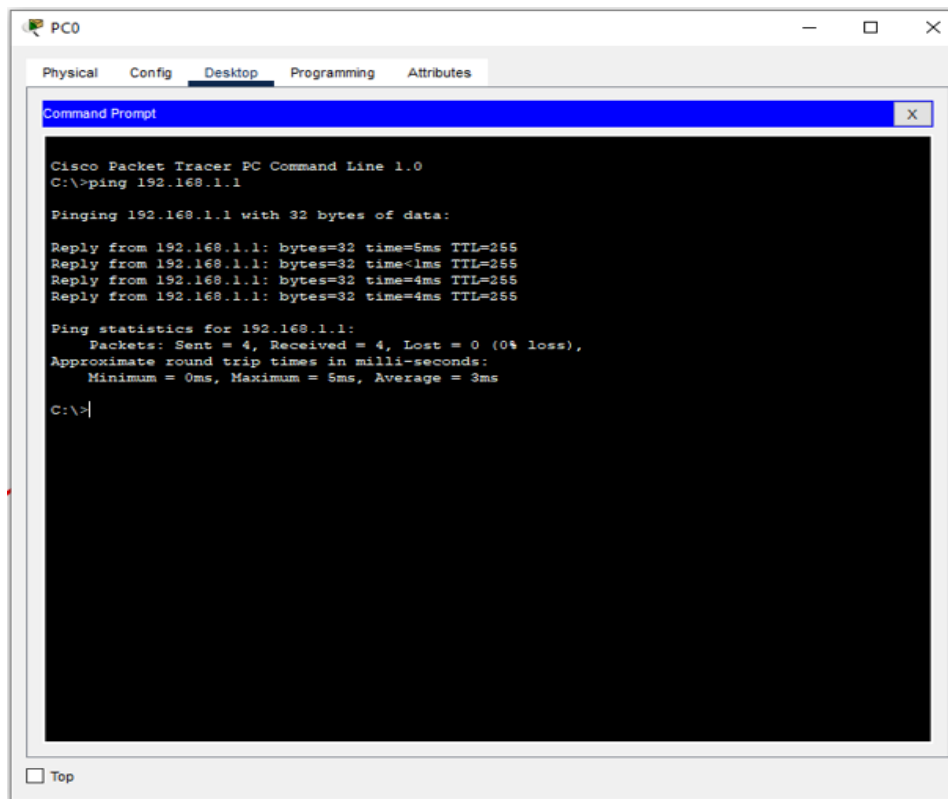


```
PC1
Physical Config Desktop Programming Attributes
Command Prompt
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.3.1

Pinging 192.168.3.1 with 32 bytes of data:

Reply from 192.168.3.1: bytes=32 time<1ms TTL=255
Reply from 192.168.3.1: bytes=32 time<1ms TTL=255
Reply from 192.168.3.1: bytes=32 time<1ms TTL=255
Reply from 192.168.3.1: bytes=32 time<1ms TTL=255

Ping statistics for 192.168.3.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>|
```



PC0

Physical Config Desktop Programming Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.1

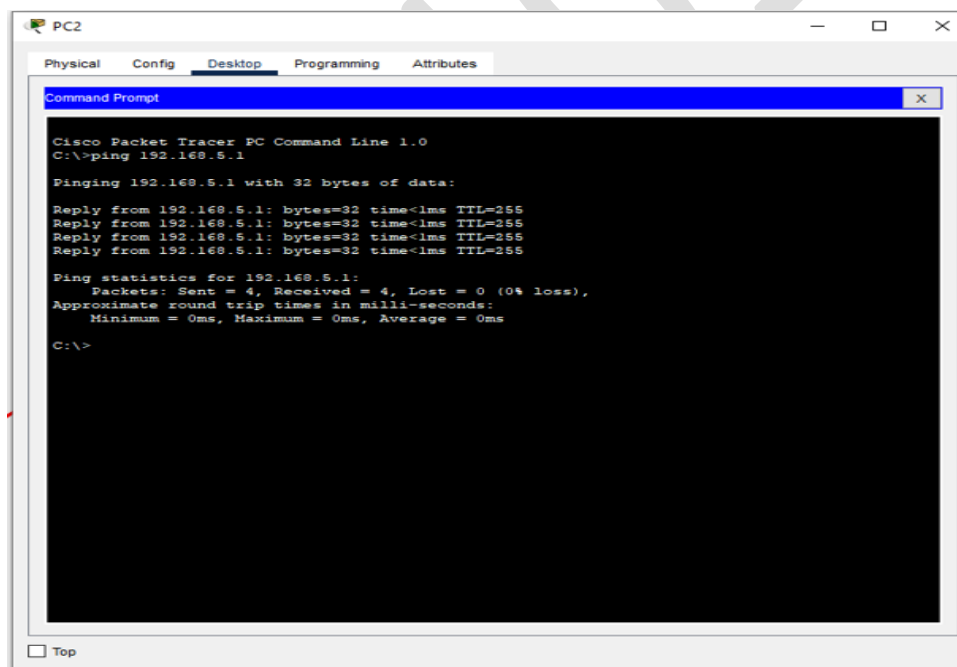
Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=5ms TTL=255
Reply from 192.168.1.1: bytes=32 time<1ms TTL=255
Reply from 192.168.1.1: bytes=32 time=4ms TTL=255
Reply from 192.168.1.1: bytes=32 time=4ms TTL=255

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 5ms, Average = 3ms

C:\>|
```

☐ Top



PC2

Physical Config Desktop Programming Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.5.1

Pinging 192.168.5.1 with 32 bytes of data:

Reply from 192.168.5.1: bytes=32 time<1ms TTL=255
Reply from 192.168.5.1: bytes=32 time<1ms TTL=255
Reply from 192.168.5.1: bytes=32 time<1ms TTL=255
Reply from 192.168.5.1: bytes=32 time<1ms TTL=255

Ping statistics for 192.168.5.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

☐ Top

1. Display the output generated at step 5 and what is the maximum number of hops seen in the output?

## Lab- Computer Network

```

Router0
Physical Config CLI Attributes
IOS Command Line Interface

Routing For Networks:
  192.168.1.0
  192.168.2.0
Passive Interface(s):
Routing Information Sources:
  Gateway Distance Last Update
  192.168.2.2 120 00:00:12
Distance: (default is 120)
Router#debug ip rip
RIP protocol debugging is on
Router#RIP: sending v1 update to 255.255.255.255 via FastEthernet0/0 (192.168.1.1)
RIP: build update entries
  network 192.168.2.0 metric 1
  network 192.168.3.0 metric 2
  network 192.168.4.0 metric 2
  network 192.168.5.0 metric 3
RIP: sending v1 update to 255.255.255.255 via Serial2/0 (192.168.2.1)
RIP: build update entries
  network 192.168.1.0 metric 1
RIP: received v1 update from 192.168.2.2 on Serial2/0
  192.168.3.0 in 1 hops
  192.168.4.0 in 1 hops
  192.168.5.0 in 2 hops
RIP: received v1 update from 192.168.2.2 on Serial2/0
  192.168.3.0 in 1 hops
  192.168.4.0 in 1 hops
  192.168.5.0 in 2 hops
RIP: sending v1 update to 255.255.255.255 via FastEthernet0/0 (192.168.1.1)
RIP: build update entries
  network 192.168.2.0 metric 1
  network 192.168.3.0 metric 2
  network 192.168.4.0 metric 2
  network 192.168.5.0 metric 3
RIP: sending v1 update to 255.255.255.255 via Serial2/0 (192.168.2.1)
RIP: build update entries
  network 192.168.1.0 metric 1
RIP: received v1 update from 192.168.2.2 on Serial2/0
  192.168.3.0 in 1 hops
  192.168.4.0 in 1 hops
  192.168.5.0 in 2 hops
Ctrl+F6 to exit CLI focus
Copy Paste

```

Maximum number of hops in output = 2 hops.

2. What is the administrative distance of RIP in Step 7?

```

Router0
Physical Config CLI Attributes
IOS Command Line Interface

RIP: sending v1 update to 255.255.255.255 via FastEthernet0/0 (192.168.1.1)
RIP: build update entries
  network 192.168.2.0 metric 1
  network 192.168.3.0 metric 2
  network 192.168.4.0 metric 2
  network 192.168.5.0 metric 3
RIP: sending v1 update to 255.255.255.255 via Serial2/0 (192.168.2.1)
RIP: build update entries
  network 192.168.1.0 metric 1
RIP: received v1 update from 192.168.2.2 on Serial2/0
  192.168.3.0 in 1 hops
  192.168.4.0 in 1 hops
  192.168.5.0 in 2 hops
RIP: sending v1 update to 255.255.255.255 via FastEthernet0/0 (192.168.1.1)
RIP: build update entries
  network 192.168.2.0 metric 1
  network 192.168.3.0 metric 2
  network 192.168.4.0 metric 2
  network 192.168.5.0 metric 3
RIP: sending v1 update to 255.255.255.255 via Serial2/0 (192.168.2.1)
RIP: build update entries
  network 192.168.1.0 metric 1
RIP: received v1 update from 192.168.2.2 on Serial2/0
  192.168.3.0 in 1 hops
  192.168.4.0 in 1 hops
  192.168.5.0 in 2 hops

Router#undebug all
All possible debugging has been turned off
Router#show ip route rip
R 192.168.3.0/24 [120/1] via 192.168.2.2, 00:00:26, Serial2/0
R 192.168.4.0/24 [120/1] via 192.168.2.2, 00:00:26, Serial2/0
R 192.168.5.0/24 [120/2] via 192.168.2.2, 00:00:26, Serial2/0
Router#
Ctrl+F6 to exit CLI focus
Copy Paste

```

Administrative distance RIP = 120.

3. When was the last update you saw in Step 8?

```
Router0
Physical Config CLI Attributes
IOS Command Line Interface

Router#undebug all
All possible debugging has been turned off
Router#show ip route rip
R 192.168.3.0/24 [120/1] via 192.168.2.2, 00:00:26, Serial2/0
R 192.168.4.0/24 [120/1] via 192.168.2.2, 00:00:26, Serial2/0
R 192.168.5.0/24 [120/2] via 192.168.2.2, 00:00:26, Serial2/0

Router#show ip route 192.168.1.0
Routing entry for 192.168.1.0/24
Known via "connected", distance 0, metric 0 (connected, via interface)
Redistributing via rip
Advertised by rip
Routing Descriptor Blocks:
* directly connected, via FastEthernet0/0
Route metric is 0, traffic share count is 1

Router#show ip route 192.168.2.0
Routing entry for 192.168.2.0/24
Known via "connected", distance 0, metric 0 (connected, via interface)
Redistributing via rip
Advertised by rip
Routing Descriptor Blocks:
* directly connected, via Serial2/0
Route metric is 0, traffic share count is 1

Router#show ip route 192.168.5.0
Routing entry for 192.168.5.0/24
Known via "rip", distance 120, metric 2
Redistributing via rip
Last update from 192.168.2.2 on Serial2/0, 00:00:22 ago
Routing Descriptor Blocks:
* 192.168.2.2, from 192.168.2.2, 00:00:22 ago, via Serial2/0
Route metric is 2, traffic share count is 1

Router#
```

Ctrl+F6 to exit CLI focus

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Last update = 22 seconds ago.

4. What is the default update time for RIP in Step 8?

Default update time RIP = 30 seconds.