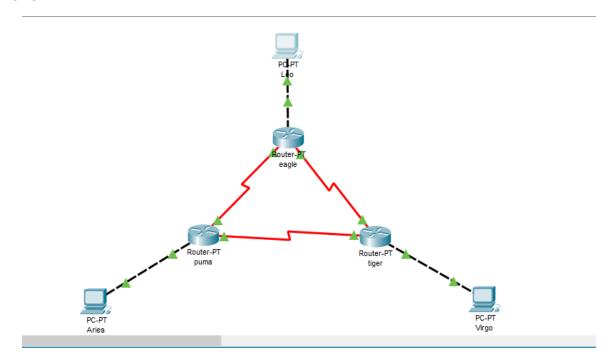
NAMA: DITA DENITA PRAMESTI

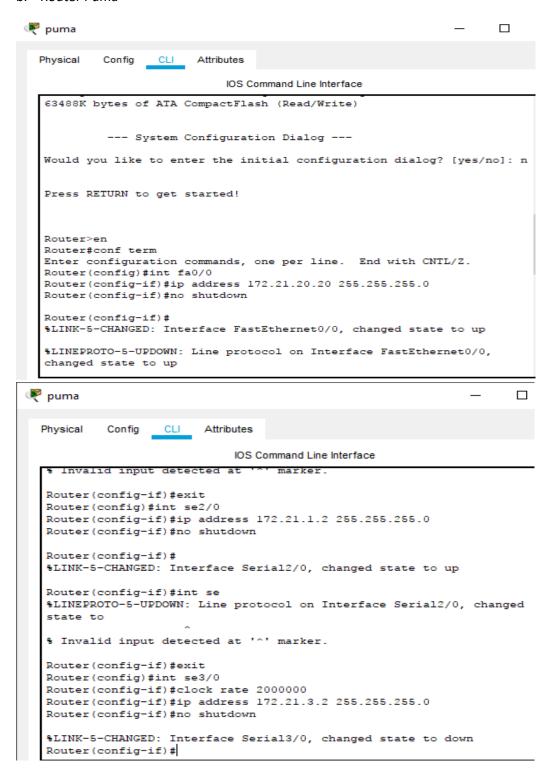
NIM : L200170139

KELAS : C MODUL: 7



- 1. Konfigurasi masing-masing Interface pada tiap Router dengan IP Address.
  - a. Router Eagle

#### b. Router Puma



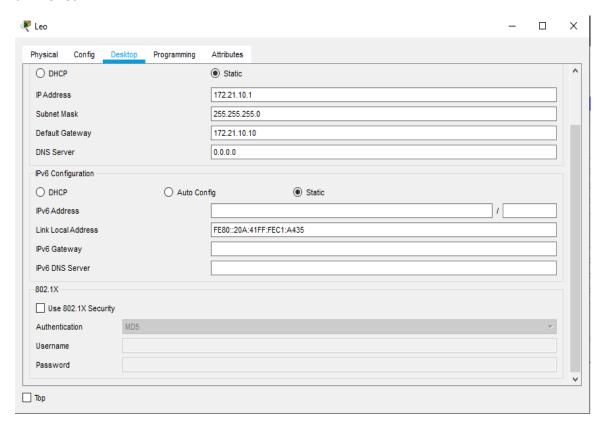
#### c. Router Tiger



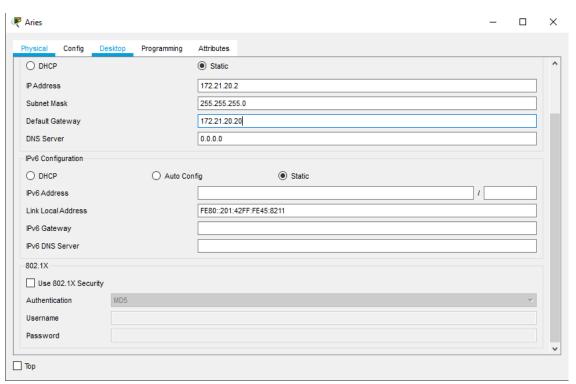
Physical Config CLI Attributes IOS Comma Press RETURN to get started! Router>en Router#conf term Enter configuration commands, one per line. End with CNTL/Z. Router(config) #int fa0/0 Router(config-if) #ip address 172.21.30.30 255.255.255.0 Router(config-if) #no shutdown Router(config-if)# %LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up %LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up Router(config-if)#exit Router(config) #int se2/0 Router(config-if)#ip address 172.21.2.3 255.255.255.0 Router(config-if) #no shutdown Router(config-if)# %LINK-5-CHANGED: Interface Serial2/0, changed state to up Router(config-if) #exit Router(config)# %LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up Router(config) #int se3/0 Router(config-if) #clock rate 2000000 This command applies only to DCE interfaces Router(config-if) #ip address 172.21.3.3 255.255.255.0 Router(config-if) #no shutdown Router(config-if)# %LINK-5-CHANGED: Interface Serial3/0, changed state to up

## 2. Konfigurasi IP Address pada setiap PC.

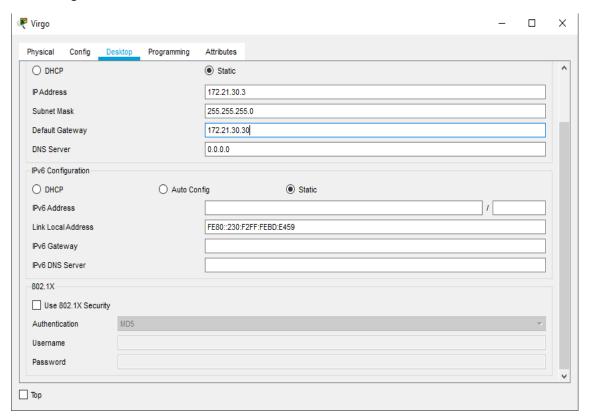
### a. PC Leo



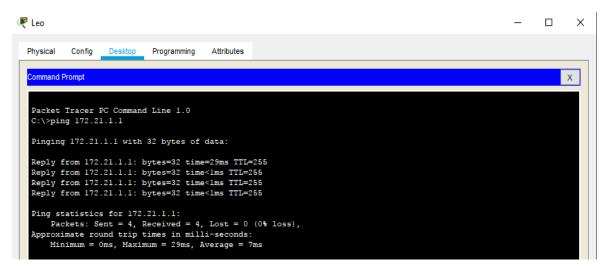
### b. PC Aries



### c. PC Virgo



- 3. Uji konfigurasi telah sesuai (proses ping)
  - a. PC Leo ke router eagle



b. PC Aries ke router puma

```
Physical Config Desktop Programming Attributes

Command Prompt

Packet Tracer PC Command Line 1.0
C:\>ping 172.21.1.2

Pinging 172.21.1.2 with 32 bytes of data:

Reply from 172.21.1.2: bytes=32 time=2ms TTL=255
Reply from 172.21.1.2: bytes=32 time<1ms TTL=255

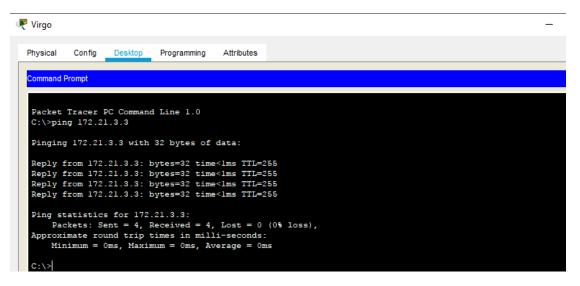
Ping statistics for 172.21.1.2:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:

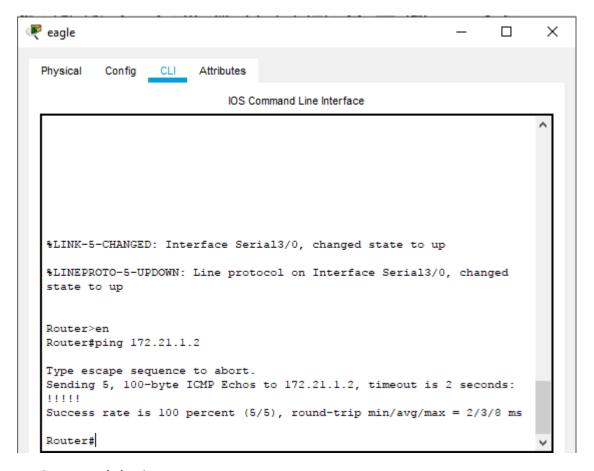
Minimum = Oms, Maximum = 2ms, Average = Oms

C:\>
```

c. PC Virgo ke router tiger



d. Router eagle ke puma



### e. Router eagle ke tiger

```
Router#ping 172.21.2.3

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.21.2.3, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/8 ms

Router#
```

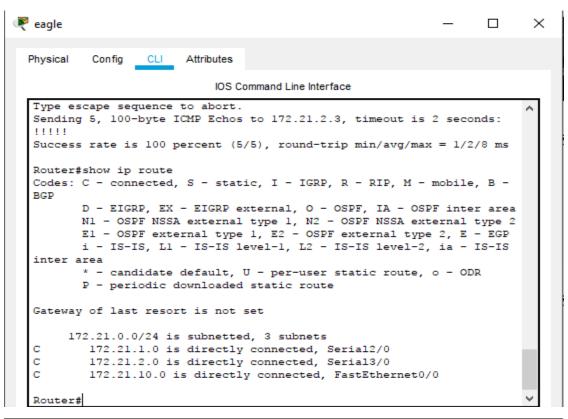
### f. Router puma ke tiger

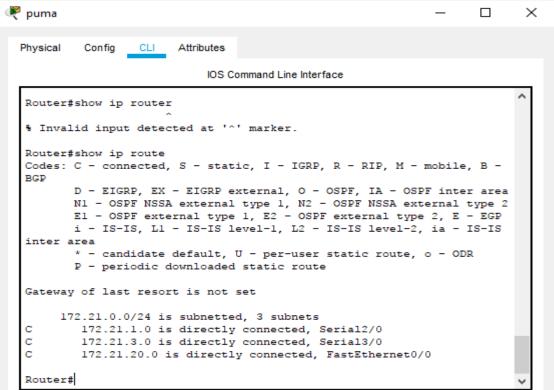
```
Router*en
Router*ping 172.21.3.3

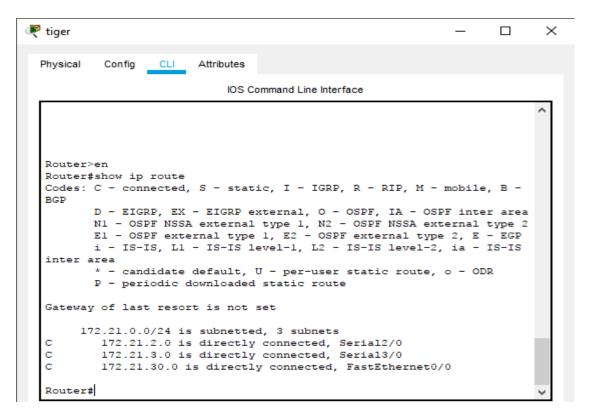
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.21.3.3, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/5 ms

Router#
```

#### 7. melihat router table pada masing router







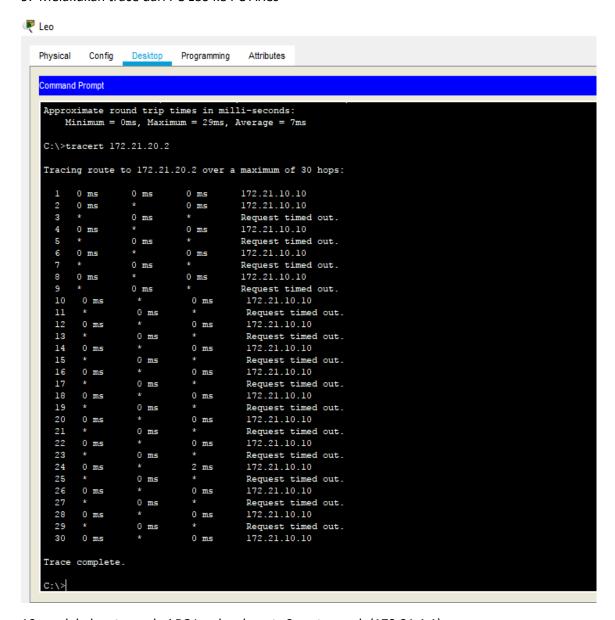
8. Melakukan ping dari router eagle ke alamat fa router puma (172.21.20.20)

```
Router#ping 172.21.20.20

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.21.20.20, timeout is 2 seconds:
.....
Success rate is 0 percent (0/5)
```

Tugas 8A: pada gambar di atas dijelaskan bahwa router eagle dengan alamat fa router puma saling terhubung.

9. Melakukan trace dari PC Leo ke PC Aries



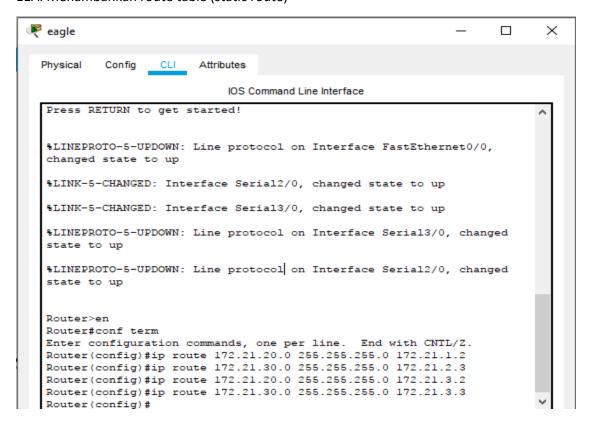
10. melakukan trace dari PC Leo ke alamat s0 router eagle(172.21.1.1)

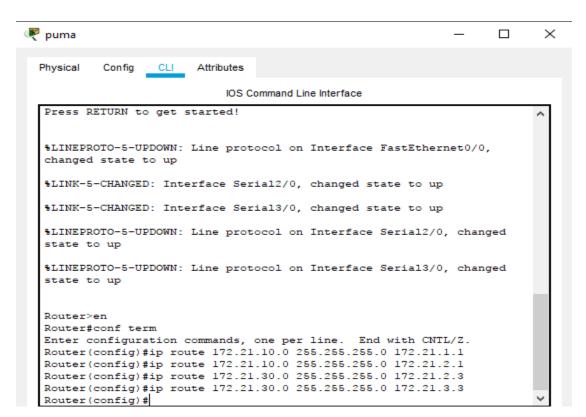
```
C:\>tracert 172.21.1.1

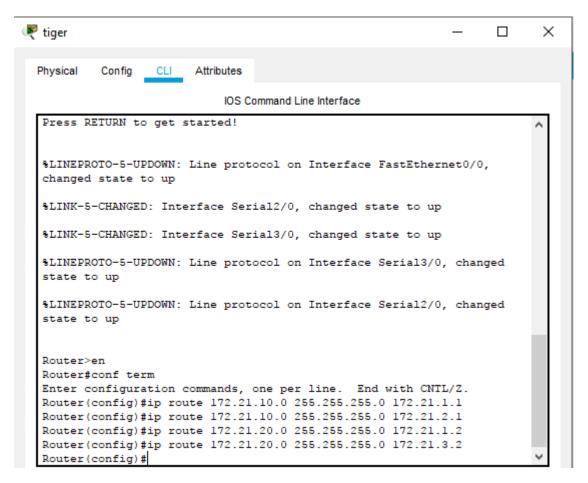
Tracing route to 172.21.1.1 over a maximum of 30 hops:
    1    0 ms    0 ms    1 ms    172.21.1.1

Trace complete.
C:\>
```

### 11A. Menambahkan route table (static route)





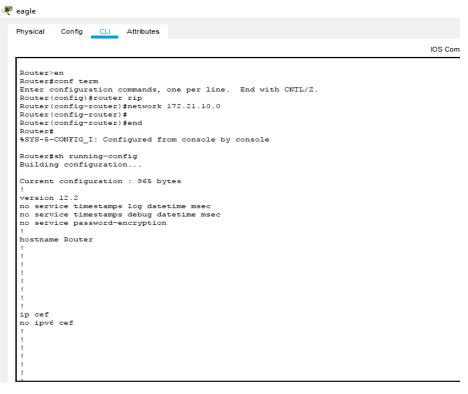


#### 12A. Melakukan ping dan trace dari PC Leo ke PC Aries

```
₹ Leo
                                                                                                                                          ×
 Physical Config Desktop Programming Attributes
   Command Prompt
                                                                                                                                       Х
  C:\>ping 172.21.20.2
  Pinging 172.21.20.2 with 32 bytes of data:
  Reply from 172.21.20.2: bytes=32 time=1ms TTL=126
  Reply from 172.21.20.2: bytes=32 time=1ms TTL=126
Reply from 172.21.20.2: bytes=32 time=3ms TTL=126
Reply from 172.21.20.2: bytes=32 time=1ms TTL=126
   Ping statistics for 172.21.20.2:
      Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
   Approximate round trip times in milli-seconds:
       Minimum = 1ms, Maximum = 3ms, Average = 1ms
   C:\>tracert 172.21.20.2
   Tracing route to 172.21.20.2 over a maximum of 30 hops:
                                              172.21.10.10
         1 ms
                      0 ms
                                  0 ms
                                              172.21.1.2
172.21.20.2
          4 ms
                      1 ms
         0 ms
                      1 ms
   Trace complete.
```

# **Kegiatan 2**

3.konfigurasi routing rip, show running conf dan debug ip rip



```
Mouters
Routers
Router
```



```
Config CLI Attributes
Physical
                                                                                       IOS C
Router>en
Router#conf term
Enter configuration commands, one per line. End with {\tt CNTL/Z}.
Router(config) #router rip
Router(config-router) #network 172.21.0.0
Router (config-router) #end
Router#
%SYS-5-CONFIG_I: Configured from console by console
Router#sh running-config
Building configuration.
Current configuration : 985 bytes
version 12.2
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
hostname Router
ip cef
no ipv6 cef
```

```
P puma
```

```
Config CLI Attributes
    Physical
                                                                                                                                    IOS Command Line
     RIP: received vl update from 172.21.1.1 on Serial2/0
              172.21.2.0 in 1 hops
              172.21.10.0 in 1 hops
     RIP: sending v1 update to 255.255.255.255 via FastEthernet0/0 (172.21.20.20)
     RIP: build update entries
              network 172.21.1.0 metric 1
              network 172.21.2.0 metric 2
              network 172.21.3.0 metric 1
              network 172.21.10.0 metric 2
     RIP: sending vl update to 255.255.255.255 via Serial2/0 (172.21.1.2)
     RIP: build update entries
              network 172.21.3.0 metric 1
              network 172.21.20.0 metric 1
     RIP: sending v1 update to 255.255.255.255 via Serial3/0 (172.21.3.2)
     RIP: build update entries
              network 172.21.1.0 metric 1
              network 172.21.2.0 metric 2
              network 172.21.10.0 metric 2
              network 172.21.20.0 metric 1
     RIP: received v1 update from 172.21.1.1 on Serial2/0
              172.21.2.0 in 1 hops
              172.21.10.0 in 1 hops
     RIP: sending v1 update to 255.255.255.255 via FastEthernet0/0 (172.21.20.20)
     RIP: build update entries
              network 172.21.1.0 metric 1
              network 172.21.2.0 metric 2
              network 172.21.3.0 metric 1
              network 172.21.10.0 metric 2
     RIP: sending v1 update to 255.255.255.255 via Serial2/0 (172.21.1.2)
     RIP: build update entries
              network 172.21.3.0 metric 1
              network 172.21.20.0 metric 1
     RIP: sending v1 update to 255.255.255.255 via Serial3/0 (172.21.3.2)
     RIP: build update entries
              network 172.21.1.0 metric 1
              network 172.21.2.0 metric 2
              network 172.21.10.0 metric 2
              network 172.21.20.0 metric 1
🏴 puma
  Physical Config CLI Attributes
                                                                                                   IOS Command Line Interface
   Router#debug ip rip
RIP protocol debugging is on
Router#RIP: sending v1 update to 255.255.255.255 via FastEthernet0/0 (172.21.20.20)
RIP: build update entries
network 172.21.1.0 metric 1
network 172.21.3.0 metric 2
network 172.21.3.0 metric 2
network 172.21.3.0 metric 2
PID: sending v1 update to 252.25.255.255 via Serial2/0 (172.21.1.2)
   RIP: sending v1 update to 255.255.255.255 via Serial2/0 (172.21.1.2)
   RIP: build update entries
network 172.21.3.0 metric 1
network 172.21.20.0 metric 1
   RIP: sending v1 update to 255.255.255.255 via Serial3/0 (172.21.3.2)
   RIP: build update entries
network 172.21.1.0 metric 1
network 172.21.2.0 metric 2
          network 172.21.10.0 metric 2
   network 172.21.20.0 metric 1

RIP: received v1 update from 172.21.1.1 on Serial2/0

172.21.2.0 in 1 hops
   172.21.20 in 1 hops
172.21.10.0 in 1 hops
172.21.10.0 in 1 hops
RIP: sending v1 update to 255.255.255.255 via FastEthernet0/0 (172.21.20.20)
RIP: build update entries
network 172.21.1.0 metric 1
network 172.21.2.0 metric 2
network 172.21.3.0 metric 1
network 172.21.10.0 metric 2
   RIP: sending vl update to 255.255.255.255 via Serial2/0 (172.21.1.2)
RIP: build update entries
network 172.21.3.0 metric 1
network 172.21.20.00 metric 1
   RIP: sending v1 update to 255.255.255.255 via Serial3/0 (172.21.3.2)
RIP: build update entries
network 172.21.1.0 metric 1
network 172.21.2.0 metric 2
          network 172.21.10.0 metric 2
network 172.21.20.0 metric 1
   RIP: received v1 update from 172.21.1.1 on Serial2/0
```

### Ping leo ke aries

```
Physical Config Desktop Programming Attributes

Command Prompt

Packet Tracer PC Command Line 1.0
C:\>tracert 172.21.20.0 over a maximum of 30 hops:

1 1 ms 0 ms 0 ms 172.21.10.10
2 0 ms 1 ms 0 ms 172.21.1.2

Trace complete.
C:\>
```

### Melakukan shut down

```
Router(config) #int se2/0
Router(config-if) #shutdown

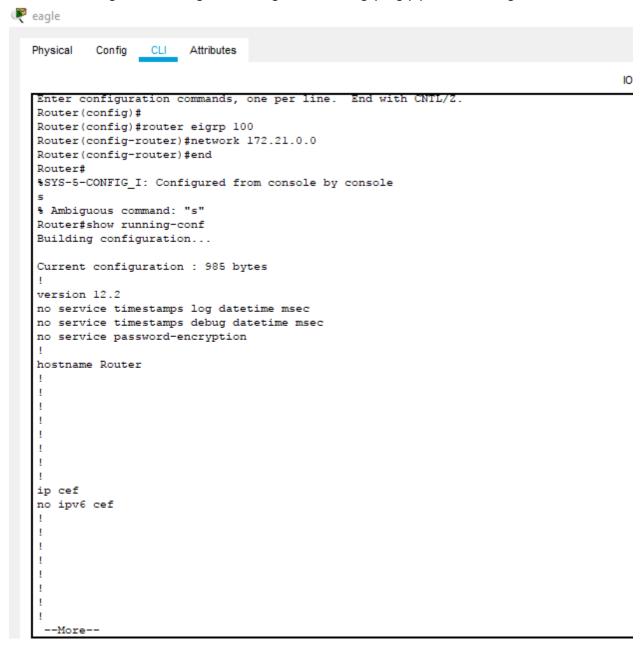
Router(config-if) #
%LINK-5-CHANGED: Interface Serial2/0, changed state to
administratively down
```

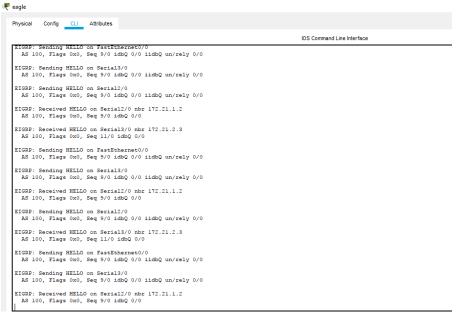
### Trace dari leo ke aries

```
C:\>tracert 172.21.20.2
Tracing route to 172.21.20.2 over a maximum of 30 hops:
                0 ms
                          0 ms
                                    172.21.10.10
  1
     0 ms
  2
     1 ms
                2 ms
                          1 ms
                                    172.21.2.3
                2 ms
                          1 ms
                                    172.21.3.2
  3
      0 ms
                0 ms
      0 ms
                          0 ms
                                    172.21.20.2
Trace complete.
```

# **Kegiatan 3**

Pada mode configuration, konfigurasi routing RIP dan debug ip eigrp pada router eagle.





## Pada mode configuration, konfigurasi routing RIP dan debug ip eigrp pada router puma



## Pada mode configuration, konfigurasi routing RIP dan debug ip eigrp pada router tiger

```
EIGRP: Received HELLO on Serial2/0 nbr 172.21.1.1
AS 100, Flags 0x0, Seq 9/0 idbQ 0/0

EIGRP: Received HELLO on Serial3/0 nbr 172.21.3.3
AS 100, Flags 0x0, Seq 11/0 idbQ 0/0

EIGRP: Sending HELLO on Serial3/0
AS 100, Flags 0x0, Seq 9/0 idbQ 0/0 iidbQ un/rely 0/0

EIGRP: Sending HELLO on Serial2/0
AS 100, Flags 0x0, Seq 9/0 idbQ 0/0 iidbQ un/rely 0/0

EIGRP: Sending HELLO on FastEthernet0/0
AS 100, Flags 0x0, Seq 9/0 idbQ 0/0 iidbQ un/rely 0/0

EIGRP: Sending HELLO on Serial2/0 nbr 172.21.1.1
AS 100, Flags 0x0, Seq 9/0 idbQ 0/0 iidbQ un/rely 0/0

EIGRP: Received HELLO on Serial2/0
AS 100, Flags 0x0, Seq 9/0 idbQ 0/0 iidbQ un/rely 0/0

EIGRP: Sending HELLO on Serial2/0
AS 100, Flags 0x0, Seq 9/0 idbQ 0/0 iidbQ un/rely 0/0

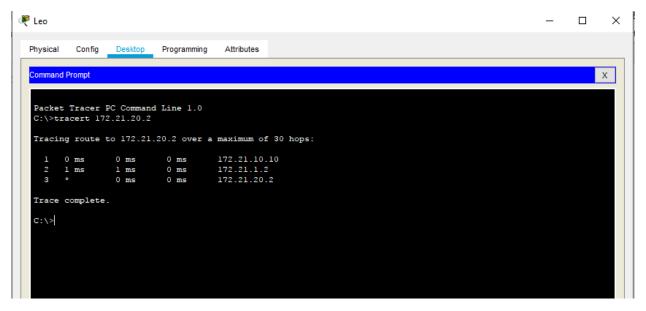
EIGRP: Sending HELLO on Serial3/0
AS 100, Flags 0x0, Seq 9/0 idbQ 0/0 iidbQ un/rely 0/0

EIGRP: Received HELLO on Serial3/0 nbr 172.21.3.3
AS 100, Flags 0x0, Seq 11/0 idbQ 0/0

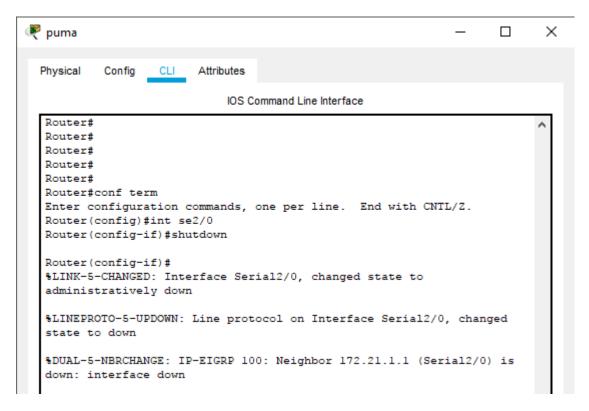
EIGRP: Sending HELLO on FastEthernet0/0
AS 100, Flags 0x0, Seq 9/0 idbQ 0/0 iidbQ un/rely 0/0

EIGRP: Received HELLO on Serial2/0 nbr 172.21.1.1
AS 100, Flags 0x0, Seq 9/0 idbQ 0/0 iidbQ un/rely 0/0
```

### Melakukan trace dari leo ke aries



Buat hubungan antara router eagle dan puma terputus dan perhatikan proses update routing RIP yang terjadi.



#### Melakukan trace dari leo ke aries

```
C:\>tracert 172.21.20.2
Tracing route to 172.21.20.2 over a maximum of 30 hops:
      0 ms
                 0 ms
                           0 ms
                                      172.21.10.10
                                      172.21.10.10
      0 ms
                           0 ms
                 0 ms
                                      Request timed out.
     0 ms
                           0 ms
                                      172.21.10.10
                                      Request timed out. 172.21.10.10
                 0 ms
     0 ms
                           0 ms
                 0 ms
                                      Request timed out.
     0 ms
                                      172.21.10.10
                           0 ms
                                      Request timed out.
172.21.10.10
                 0 ms
                            0 ms
      0 ms
                  0 ms
                                       Request timed out.
      0 ms
                            0 ms
                                       172.21.10.10
                                       Request timed out. 172.21.10.10
                 0 ms
  14
15
      0 ms
                            0 ms
                 0 ms
                                       Request timed out.
```