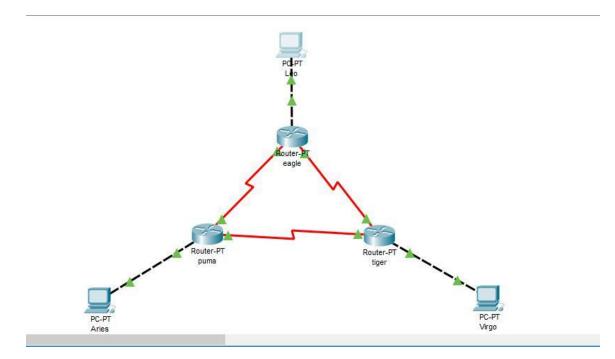
NAMA: AGATHA FEBIANANDA P

NIM : L200170127

KELAS : C

MODUL: 7

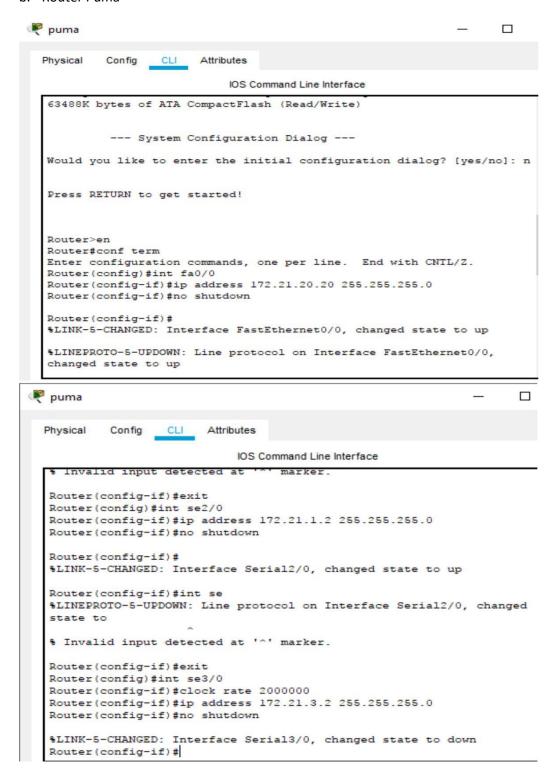


1. Konfigurasi masing-masing Interface pada tiap Router dengan IP Address.

a. Router Eagle



b. Router Puma



c. Router Tiger

Router(config) #int se3/0

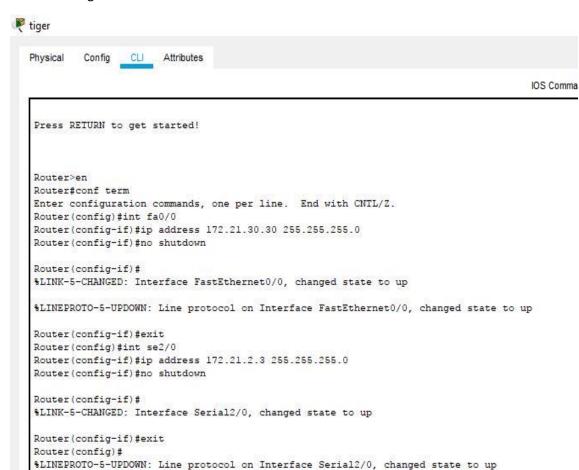
Router(config-if)#

Router(config-if) #no shutdown

Router(config-if)#clock rate 2000000 This command applies only to DCE interfaces

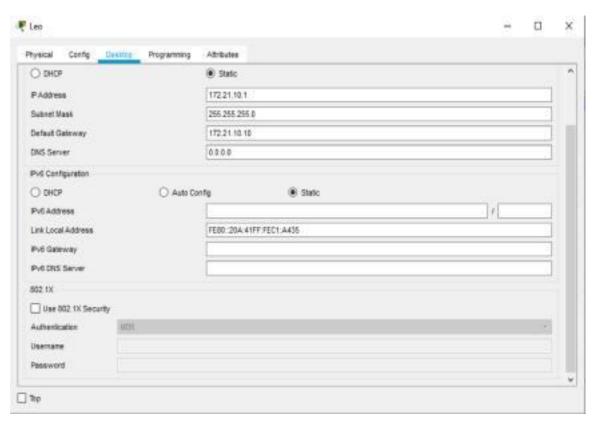
Router(config-if) #ip address 172.21.3.3 255.255.255.0

%LINK-5-CHANGED: Interface Serial3/0, changed state to up

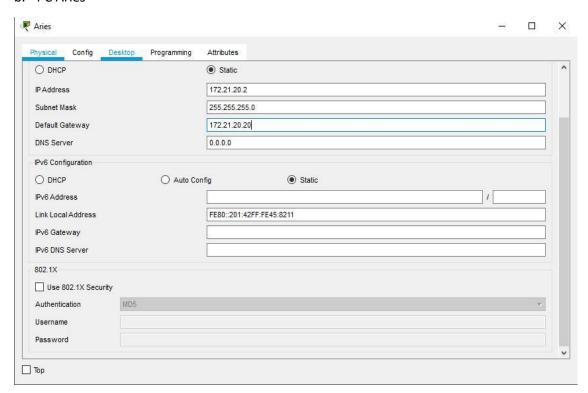


2. Konfigurasi IP Address pada setiap PC.

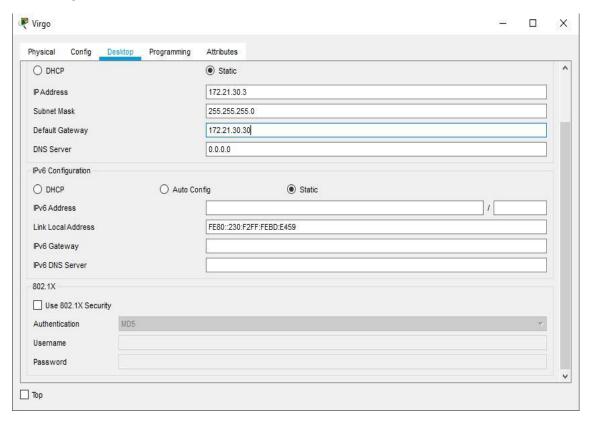
a. PC Leo



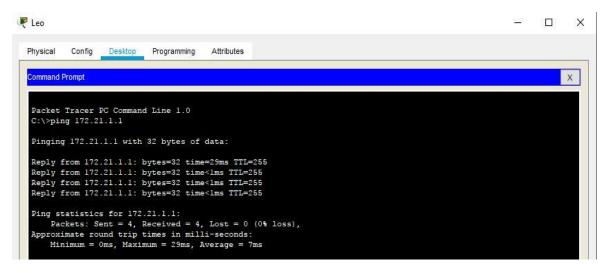
b. PC Aries



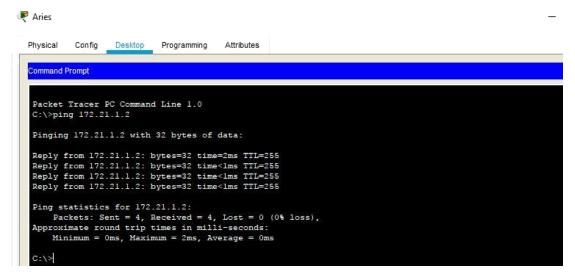
c. PC Virgo



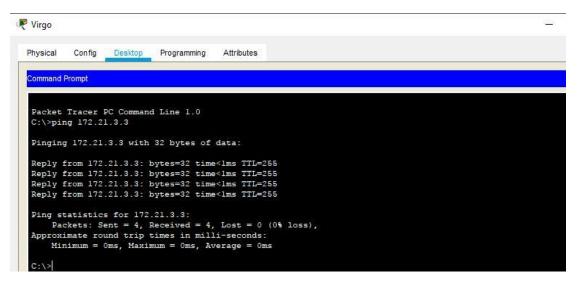
- 3. Uji konfigurasi telah sesuai (proses ping)
 - a. PC Leo ke router eagle



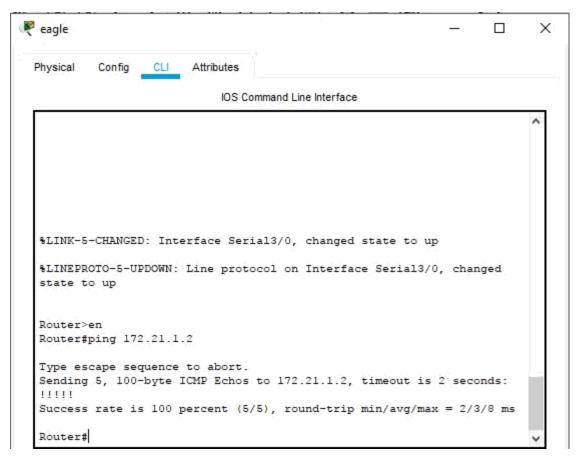
b. PC Aries ke router puma



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

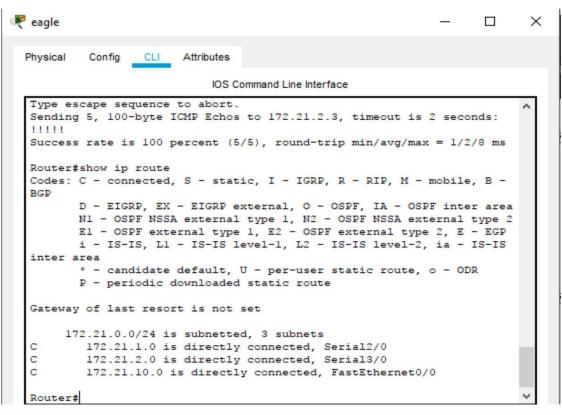
Router#
```

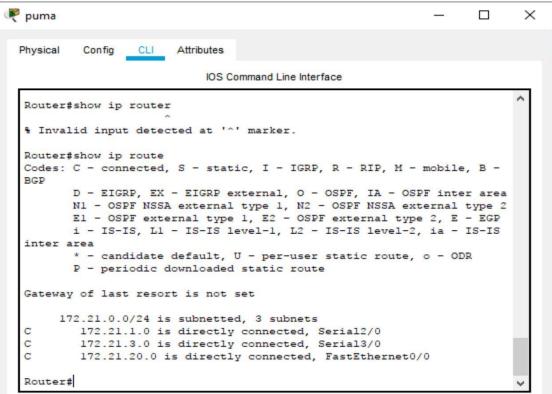
f. Router puma ke tiger

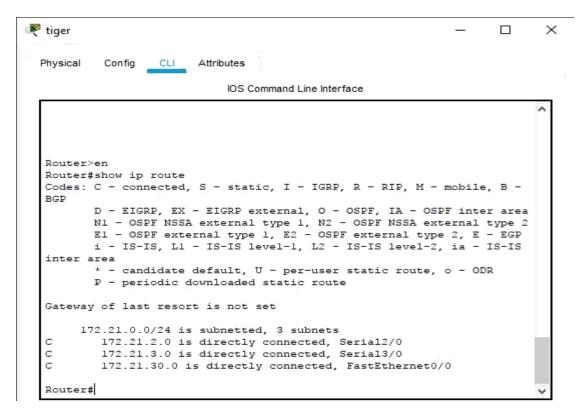
```
Router>en
Router#ping 172.21.3.3

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)

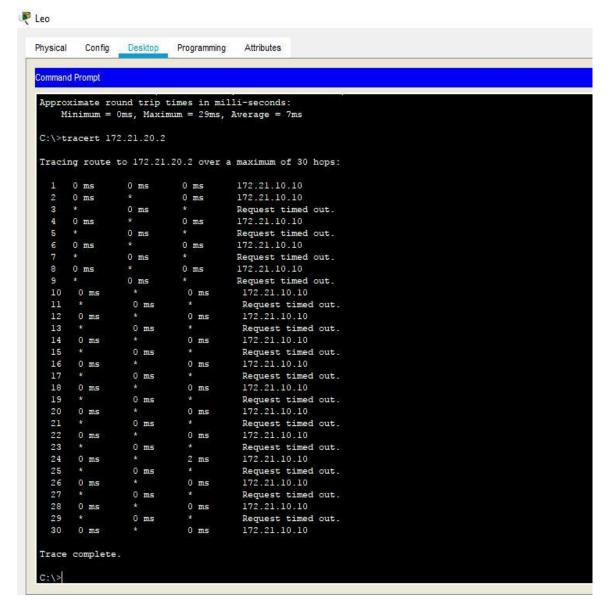
```
Router#ping 172.21.20.20

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)

Router#
```

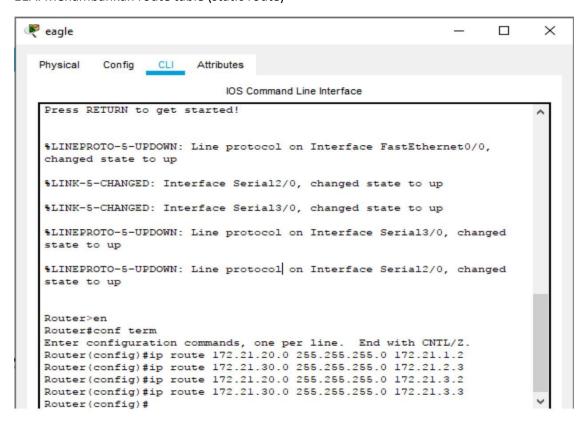
Tugas 8A: pada gambar di atas dijelaskan bahwa router eagle dengan alamat fa router puma saling terhubung.

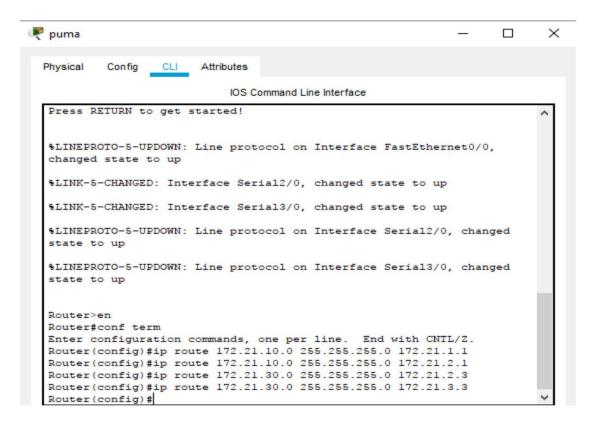
9. Melakukan trace dari PC Leo ke PC Aries

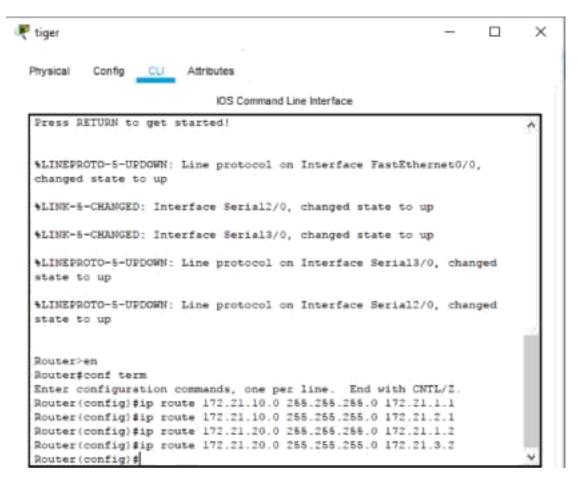


10. melakukan trace dari PC Leo ke alamat s0 router eagle(172.21.1.1)

11A. Menambahkan route table (static route)







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

```
₹ Leo
                                                                                                                               X
 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=lms 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 = lms, Maximum = 3ms, Average = lms
  C:\>tracert 172.21.20.2
  Tracing route to 172.21.20.2 over a maximum of 30 hops:
                    0 ms
                                          172.21.10.10
         1 ms
                               0 ms
                               1 ms
4 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



```
🥐 eagle
```

Physical Config CLI Attributes IOS Command Line Interface

Puma puma

Physical

Config CLI Attributes

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
```

Config CLI Attributes Physical

IOS Command Line

```
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 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 vl 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
Router#debug ip rip
RIP protocol debugging is on
Router#RIP: sending vl update to 255.265.255.255 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 172.21.30.0 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 vl update to 255.255.255.255 via Serial3/0 (172.21.3.2)
 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
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
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 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 172.21.2.0 metric 2
    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 Desitop Programming Attributes

Command Prompt

X

Packet Tracer PC Command Line 1.0
G:\>tracer 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.

G:\>|
```

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
      0 ms
                          1 ms
                                    172.21.3.2
  3
                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.

```
eagle.
  Physical
            Config CLI Attributes
   Enter configuration commands, one per line. End with CNTL/Z.
   Router(config)#
   Router(config) #router eigrp 100
   Router(config-router) #network 172.21.0.0
   Router(config-router) #end
   Router#
   %SYS-5-CONFIG_I: Configured from console by console
   % Ambiguous command: "s"
   Router#show running-conf
   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
```

```
🤻 eagle
    Physical Config CLI Attributes
                                                                                                                                      IOS Command Line Interface
     EIGRP: Sending HELLO on FastEthernet0/
        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: Sending HELLO on Serial2/0
AS 100, Flags 0x0, Seq 9/0 idbQ 0/0 iidbQ un/rely 0/0
     EIGRP: Received HELLO on Serial2/0 nbr 172.21.1.2
AS 100, Flags 0x0, Seq 9/0 idbQ 0/0
     EIGRP: Received HELLO on Serial3/0 nbr 172.21.2.3
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: Sending HELLO on Serial3/0
AS 100, Flags 0x0, Seq 9/0 idbQ 0/0 iidbQ un/rely 0/0
     EIGRP: Received HELLO on Serial2/0 nbr 172.21.1.2
AS 100, Flags 0x0, Seq 9/0 idbQ 0/0
     EIGRP: Sending HELLO on Serial2/0
AS 100, Flags 0x0, Seq 9/0 idbQ 0/0 iidbQ un/rely 0/0
     EIGRP: Received HELLO on Serial3/0 nbr 172.21.2.3
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: Sending HELLO on Serial3/0
AS 100, Flags 0x0, Seq 9/0 idbQ 0/0 iidbQ un/rely 0/0
     EIGRP: Received HELLO on Serial2/0 nbr 172.21.1.2
AS 100, Flags 0x0, Seq 9/0 idbQ 0/0
```

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



IGSC Command Line Interface

BIGRP: Sending HELLO on FastEthernet0/0
AS 100, Flags 0x0, Seq 5/0 idbQ 0/0 iddbQ un/rely 0/0

EIGRP: Received HELLO on Serial2/0 nbr 172.21.1.1
AS 100, Flags 0x0, Seq 5/0 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: Received HELLO on Serial2/0 nbr 172.21.1.1
AS 100, Flags 0x0, Seq 9/0 idbQ 0/0
EIGRP: Sending HELLO on Serial2/0 nbr 172.21.1.1
AS 100, Flags 0x0, Seq 9/0 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: Received 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 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

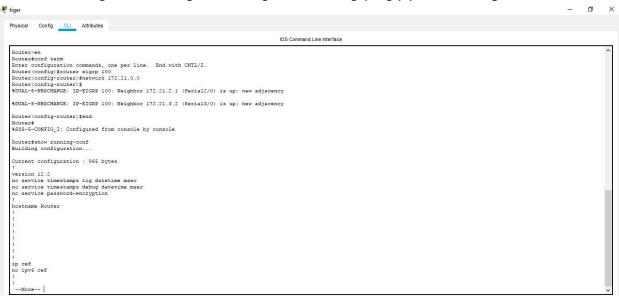
EIGRP: Received HELLO on Serial2/0 nbr 172.21.1.1
AS 100, Flags 0x0, Seq 9/0 idbQ 0/0

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

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

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

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

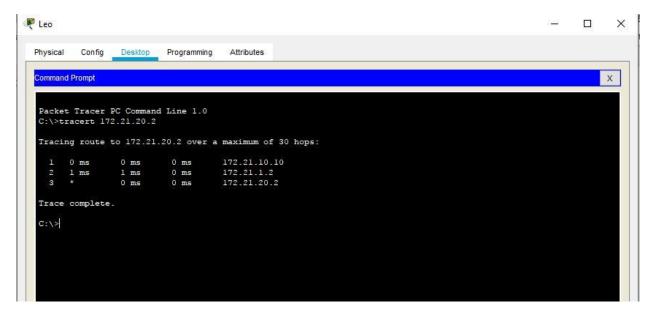
EIGRP: Received HELLO on Serial3/0 nbr 172.21.3.3
AS 100, Flags 0x0, Seq 11/0 idbQ 0/0

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

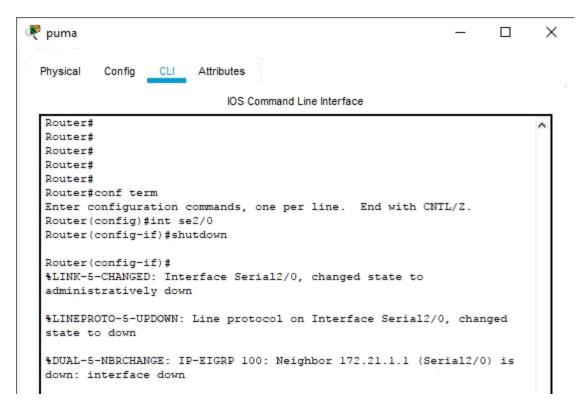
EIGRP: Received HELLO on FastEthernet0/0
AS 100, Flags 0x0, Seq 9/0 idbQ 0/0 iidbQ un/rely 0/0

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
                                     172.21.10.10
                0 ms
                                     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
 10
      0 ms
                           0 ms
                 0 ms
                                      Request timed out.
      0 ms
                           0 ms
                                      172.21.10.10
                 0 ms
                                      Request timed out.
      0 ms
                            0 ms
                                      172.21.10.10
                 0 ms
                                      Request timed out.
```