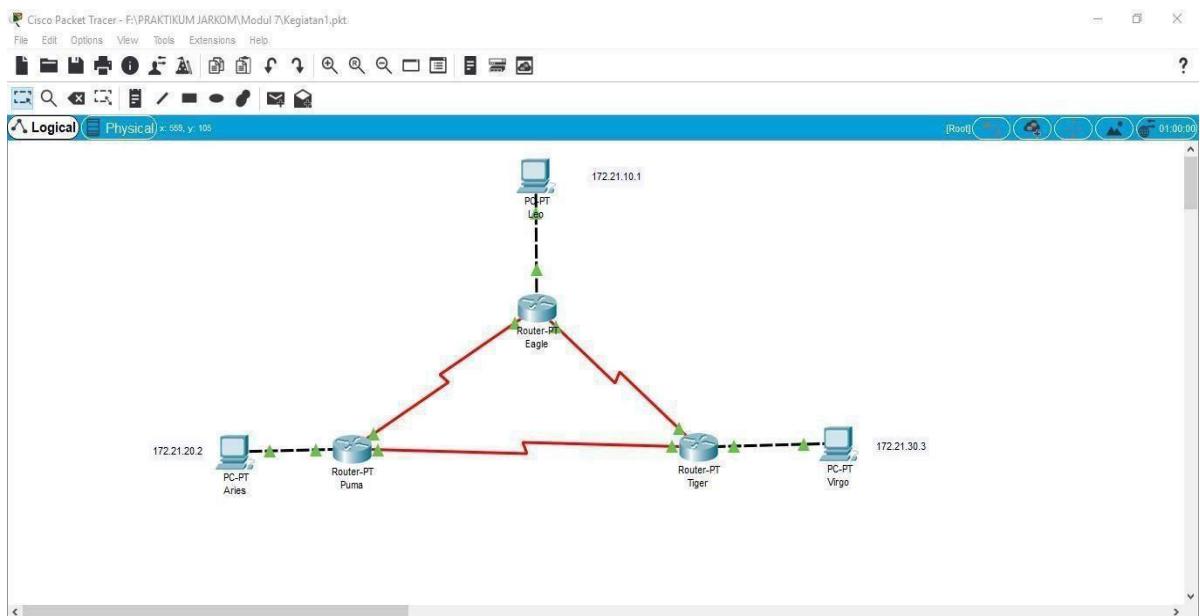


MODUL 7

Nama : Tio Septiadi Murbiantoro
NIM : L200170099
Kelas : C



1. Konfigurasi masing masing interface pada tiap Router

```
Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa 0/0
Router(config-if)#ip address 172.21.10.10 255.255.255.0
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)#int se 2/0
Router(config-if)#clock rate 2000000
Router(config-if)#ip address 172.21.1.1 255.255.255.0
Router(config-if)#no shutdown

%LINK-5-CHANGED: Interface Serial2/0, changed state to down
Router(config-if)#int se 3/0
Router(config-if)#ip address 172.21.2.1 255.255.255.0
Router(config-if)#no shutdown

%LINK-5-CHANGED: Interface Serial3/0, changed state to down
Router(config-if)#

Ctrl+F6 to exit CLI focus
```

Puma

Physical Config **CLI** Attributes

IOS Command Line Interface

```
--- System Configuration Dialog ---  
Would you like to enter the initial configuration dialog? [yes/no]: no  
Press RETURN to get started!  
  
Router>en  
Router#config  
Configuring from terminal, memory, or network [terminal]?  
Enter configuration commands, one per line. End with CNTL/Z.  
Router(config)#int fa 0/0  
Router(config-if)#ip address 172.21.20.20 255.255.255.0  
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)#int se 2/0  
Router(config-if)#ip address 172.21.1.2 255.255.255.0  
Router(config-if)#no shutdown  
  
Router(config-if)#  
%LINK-5-CHANGED: Interface Serial2/0, changed state to up  
  
Router(config-if)#int se 3/0  
Router(config-if)#clo  
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to  
Router(config-if)#int se 3/0  
Router(config-if)#clock rate 2000000  
Router(config-if)#ip address 172.21.3.2 255.255.255.0  
Router(config-if)#no shutdown  
  
%LINK-5-CHANGED: Interface Serial3/0, changed state to down  
Router(config-if)#[
```

Ctrl+F6 to exit CLI focus

Tiger

Physical Config **CLI** Attributes

IOS Command Line Interface

```
Press RETURN to get started!

Router>en
Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa 0/0
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)#int se 3/0
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

Router(config-if)#ip address 172.21.3.3 255.255.255.0
*LINEPROTO-5-UPDOWN: Line protocol on Interface Serial3/0, changed state to up

Router(config-if)#int se 2/0
Router(config-if)#clock rate 2000000
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)#
*LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up

Router(config-if)#
Ctrl+F6 to exit CLI focus
```

2. Konfigurasi ip PC

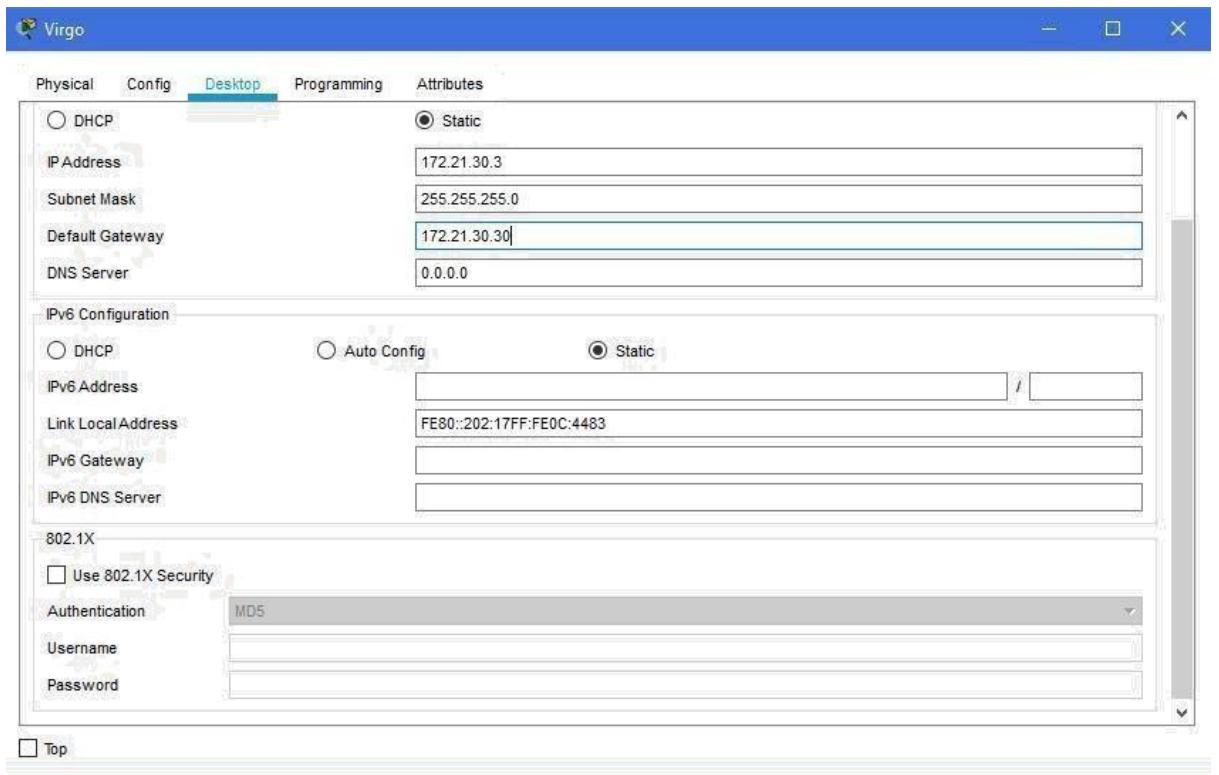
The image displays two separate computer configuration windows, one for 'Leo' and one for 'Aries'. Both windows have a blue header bar with tabs for Physical, Config, Desktop, Programming, and Attributes. The 'Desktop' tab is selected.

Leo Configuration:

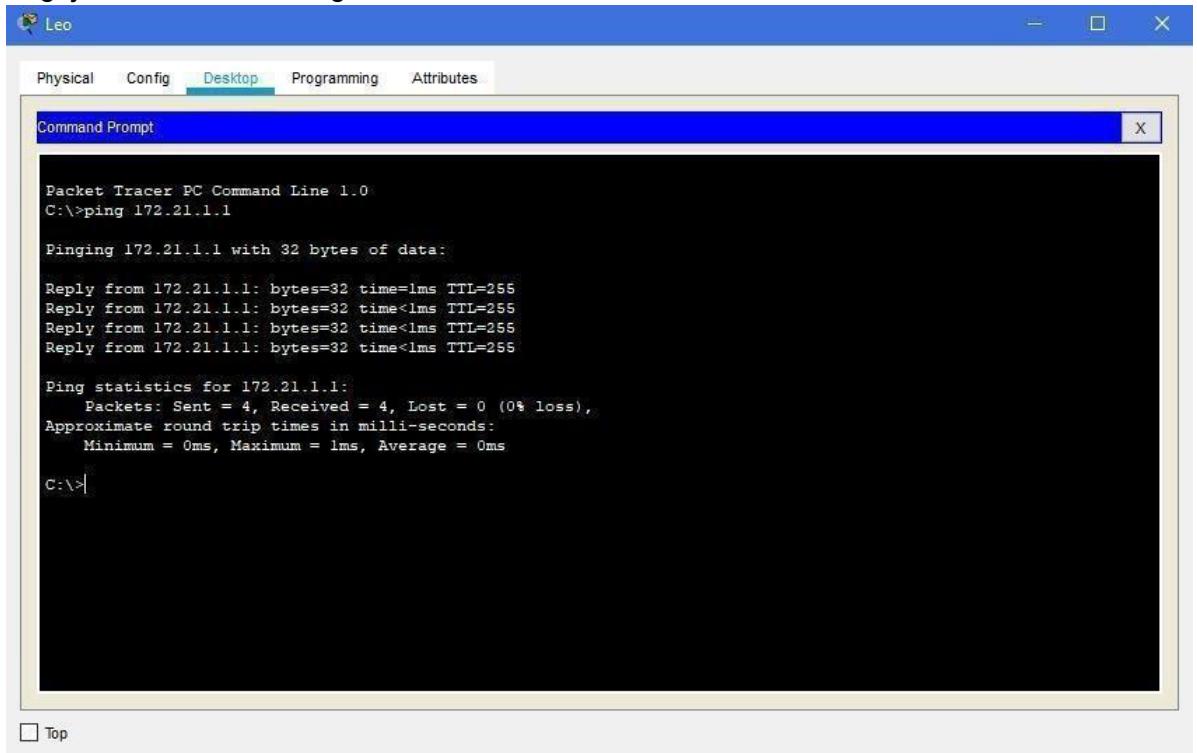
Setting	Value
IP Address	172.21.10.1
Subnet Mask	255.255.255.0
Default Gateway	172.21.10.10
DNS Server	0.0.0.0
IPv6 Configuration	Static (radio button selected)
IPv6 Address	FE80::207:ECFF:FE5B:7596
Link Local Address	FE80::207:ECFF:FE5B:7596
IPv6 Gateway	
IPv6 DNS Server	
802.1X	Use 802.1X Security (checkbox unchecked)
Authentication	MDS
Username	
Password	

Aries Configuration:

Setting	Value
IP Address	172.21.20.2
Subnet Mask	255.255.255.0
Default Gateway	172.21.20.20
DNS Server	0.0.0.0
IPv6 Configuration	Static (radio button selected)
IPv6 Address	FE80::203:E4FF:FE08:BB97
Link Local Address	FE80::203:E4FF:FE08:BB97
IPv6 Gateway	
IPv6 DNS Server	
802.1X	Use 802.1X Security (checkbox unchecked)
Authentication	MDS
Username	
Password	



3. Pengujian kesesuaian konfigurasi



Alien

Physical Config **Script** 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<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 = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

Virgin

Physical Config **Script** Programming Attributes

Command Prompt

```
Packet Tracer PC Command Line 1.0
C:\>ping 172.21.3.3

Pinging 172.21.3.3 with 32 bytes of data:

Reply from 172.21.3.3: bytes=32 time<1ms TTL=255

Ping statistics for 172.21.3.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
```



Physical Config **CLI** Attributes

IOS Command Line Interface

```
Router>en
Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ping 172.21.1.2
^
% Invalid input detected at '^' marker.

Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#ping 172.21.1.2

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 172.21.1.2, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/2/6 ms

Router#
```

Ctrl+F6 to exit CLI focus

Copy

Paste

Top

```
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 = 0/1/6 ms

Router#
```

Ctrl+F6 to exit CLI focus

Copy

Paste

Top

Puma

Physical Config **CLI** Attributes

IOS Command Line Interface

```
Press RETURN to get started.

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 = 1/3/8 ms
Router#
```

Ctrl+F6 to exit CLI focus

Copy

Paste

Top

4. Menampilkan ip route

The screenshot shows the Cisco Eagle software interface with the 'CLI' tab selected. The main window displays the IOS Command Line Interface (CLI) output for the command 'show ip route'. The output includes information about ICMP echo requests sent to 172.21.2.3, route codes (C, S, I, R, M, B, D, E, N, L), and a detailed list of routes including their subnet masks and interfaces.

```
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 = 0/1/6 ms

Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B -
BGP
      D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
      N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
      E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
      i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS
      inter area
      * - candidate default, U - per-user static route, o - ODR
      ? - periodic downloaded static route

Gateway of last resort is not set

      172.21.0.0/24 is subnetted, 3 subnets
C        172.21.1.0 is directly connected, Serial2/0
C        172.21.2.0 is directly connected, Serial3/0
C        172.21.10.0 is directly connected, FastEthernet0/0

Router#
```

Ctrl+F6 to exit CLI focus

Top

Puma

Physical Config **CLI** Attributes

IOS Command Line Interface

```
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 = 1/3/8 ms

Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B -
BGP
          D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
          N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
          E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
          i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS
inter area
          * - candidate default, U - per-user static route, o - ODR
          P - periodic downloaded static route

Gateway of last resort is not set

      172.21.0.0/24 is subnetted, 3 subnets
C        172.21.1.0 is directly connected, Serial2/0
C        172.21.3.0 is directly connected, Serial3/0
C        172.21.20.0 is directly connected, FastEthernet0/0

Router#
```

Ctrl+F6 to exit CLI focus

Copy

Paste

Top

Tiger

Physical Config **CLI** Attributes

IOS Command Line Interface

```
Router>en
Router#show ip route
Codes: C - connected, S - static, I - IGRP, R - RIP, M - mobile, B -
BGP
      D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
      N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
      E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
      i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS
      inter area
      * - candidate default, U - per-user static route, o - ODR
      P - periodic downloaded static route

Gateway of last resort is not set

      172.21.0.0/24 is subnetted, 3 subnets
C        172.21.2.0 is directly connected, Serial2/0
C        172.21.3.0 is directly connected, Serial3/0
C        172.21.30.0 is directly connected, FastEthernet0/0

Router#
```

Ctrl+F6 to exit CLI focus

Top

5. Melakukan ping dari router eagle ke interface 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#
```

Ctrl+F6 to exit CLI focus

Top

6. Trace PC leo ke PC aries

```
C:\>tracert 172.21.20.2

Tracing route to 172.21.20.2 over a maximum of 30 hops:

 1  131 ms      0 ms      0 ms      172.21.10.10
 2  0 ms        *         52 ms      172.21.10.10
 3  *          0 ms      *         Request timed out.
 4  0 ms        *         13 ms      172.21.10.10
 5  *          0 ms      *         Request timed out.
 6  0 ms        *         0 ms      172.21.10.10
 7
Control-C
^C
C:\>
```

Top

7. Trace dari PC leo ke 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      0 ms      172.21.1.1

Trace complete.

C:\>
```

8. Melakukan ip route pada masing masing router

```
Router>en
Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.21.20.0 255.255.255.0 172.21.1.2
Router(config)#ip route 172.21.30.0 255.255.255.0 172.21.2.3
Router(config)#
▼
```

Ctrl+F6 to exit CLI focus

Copy

Paste

Top

```
Router>en
Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.21.10.0 255.255.255.0 172.21.1.1
Router(config)#ip route 172.21.30.0 255.255.255.0 172.21.3.3
Router(config)#
▼
```

Ctrl+F6 to exit CLI focus

Copy

Paste

Top

```
Router>en
Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.21.10.0 255.255.255.0 172.21.2.1
Router(config)#ip route 172.21.20.0 255.255.255.0 172.21.3.2
Router(config)#[
```

Ctrl+F6 to exit CLI focus

Copy

Paste

Top

9. Ping PC leo ke PC aries dan tracer PC leo ke PC aries

```
C:\>ping 172.21.20.2

Pinging 172.21.20.2 with 32 bytes of data:

Request timed out.
Reply from 172.21.20.2: bytes=32 time=130ms TTL=126
Reply from 172.21.20.2: bytes=32 time=15ms 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 = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 130ms, Average = 48ms

C:\>|
```

Top

```
C:\>tracert 172.21.20.2

Tracing route to 172.21.20.2 over a maximum of 30 hops:

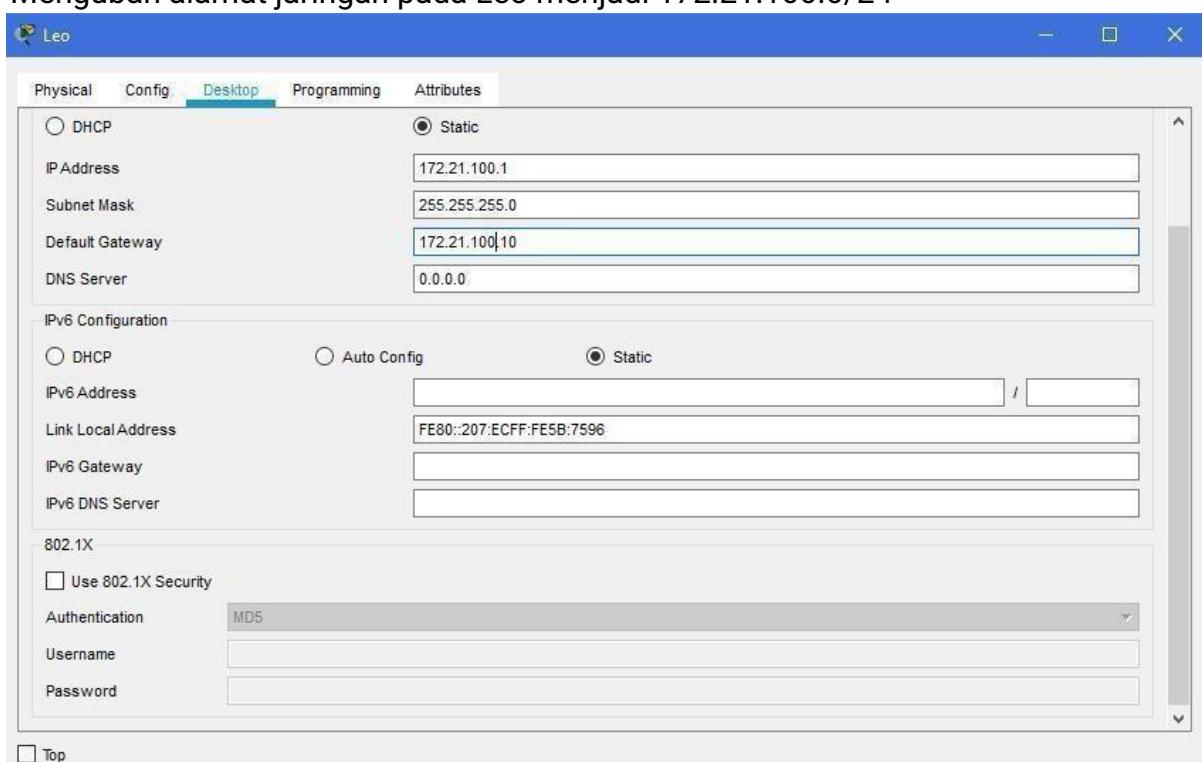
  1  0 ms      0 ms      0 ms      172.21.10.10
  2  1 ms      1 ms      4 ms      172.21.1.2
  3  0 ms     13 ms      0 ms      172.21.20.2

Trace complete.

C:\>|
```

Top

10. Mengubah alamat jaringan pada Leo menjadi 172.21.100.0/24



11. Konfigurasi ip baru pada router eagle

```
Router#en
Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa 0/0
Router(config-if)#ip address 172.21.100.10 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#

```

Ctrl+F6 to exit CLI focus

Copy

Top

12. Menambahkan konfigurasi ip route baru pada router puma dan tiger

```
Router>en
Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.21.100.0 255.255.255.0 172.21.1.1
Router(config)#

```

Ctrl+F6 to exit CLI focus

Copy

Paste

Top

```
Router>en
Router#conf
Configuring from terminal, memory, or network [terminal]?
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#ip route 172.21.100.0 255.255.255.0 172.21.2.1
Router(config)#

```

Ctrl+F6 to exit CLI focus

Copy

Paste

Top

13. Melakukan ping dan tracer dari Leo ke Aries dan Virgo

The screenshot shows a Windows Command Prompt window titled "Leo". The window has tabs at the top: Physical, Config, Desktop (which is selected), Programming, and Attributes. The main area of the window displays command-line output:

```
C:\>
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=4ms TTL=126
Reply from 172.21.20.2: bytes=32 time=6ms TTL=126
Reply from 172.21.20.2: bytes=32 time=4ms 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 = 6ms, Average = 3ms

C:\>tracert 172.21.20.2

Tracing route to 172.21.20.2 over a maximum of 30 hops:
  1  1 ms      0 ms      0 ms      172.21.100.10
  2  0 ms      57 ms      1 ms      172.21.1.2
  3  0 ms      4 ms      2 ms      172.21.20.2

Trace complete.

C:\>
```

At the bottom left of the window, there is a checkbox labeled "Top".

