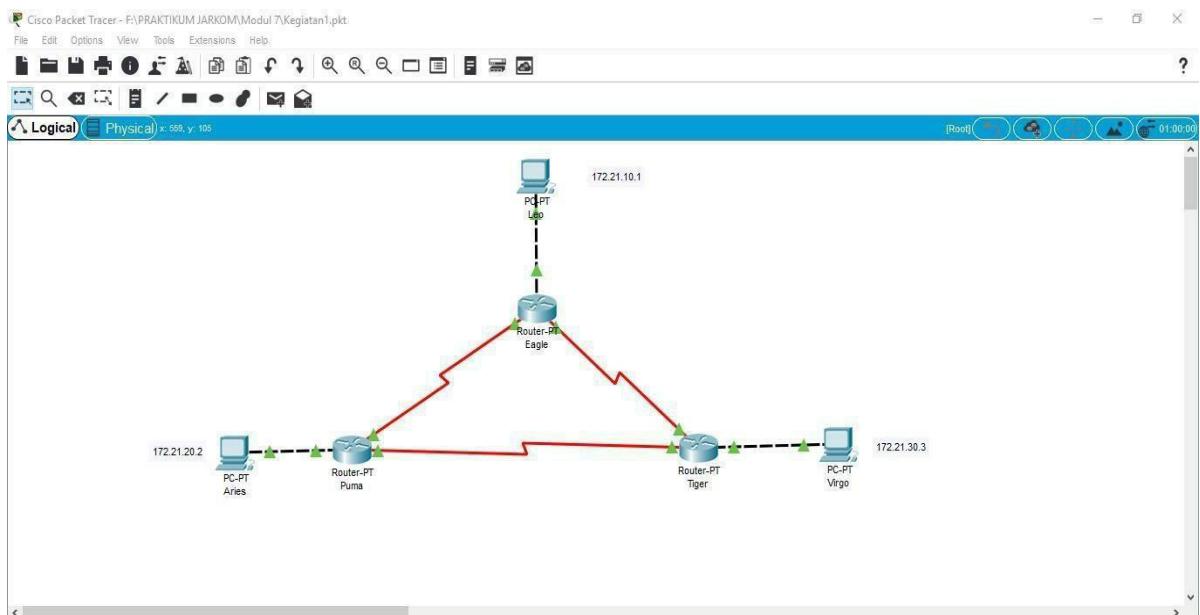


MODUL 7

Nama : Dandung Rahmatdhan
NIM : L200170098
Kelas : C



1. Konfigurasi masing masing interface pada tiap Router

```
Eagle
Physical Config CLI Attributes
IOS Command Line Interface
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
Copy Paste
Top
```

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

Leo

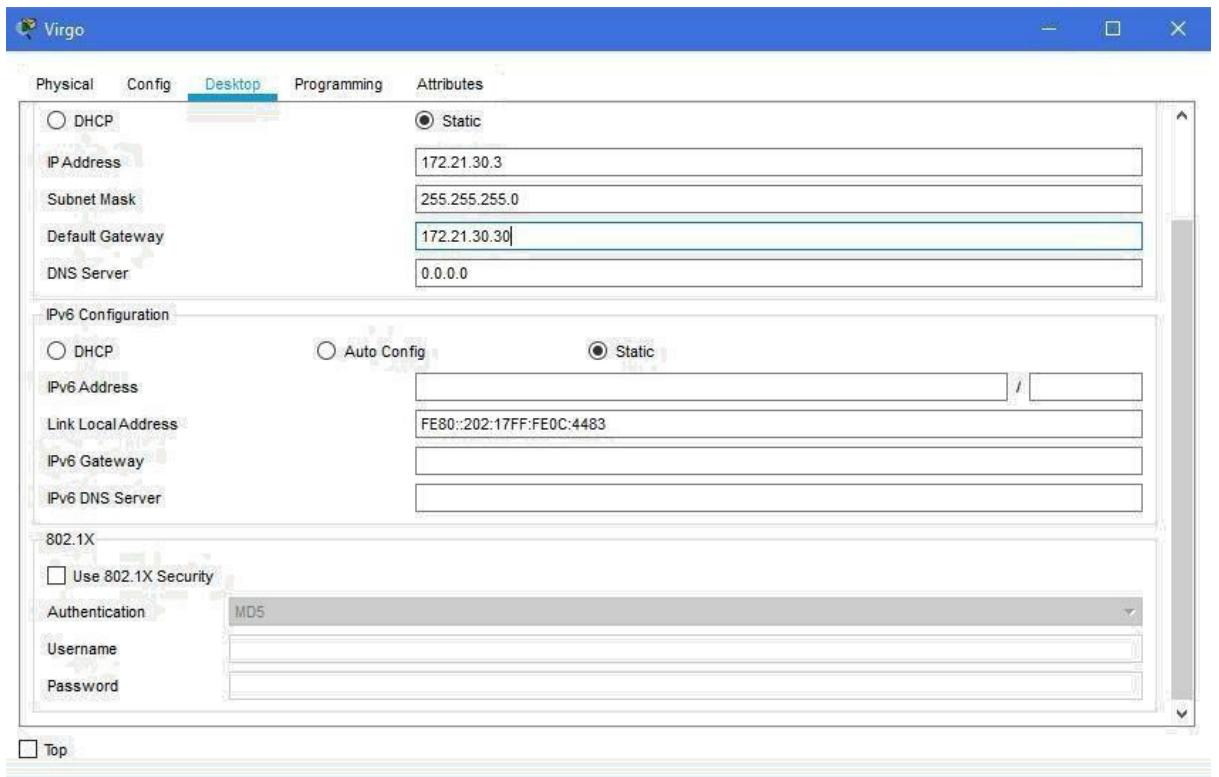
Physical	Config	Desktop	Programming	Attributes
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static			
IP Address	172.21.10.1			
Subnet Mask	255.255.255.0			
Default Gateway	172.21.10.10			
DNS Server	0.0.0.0			
IPv6 Configuration				
<input type="radio"/> DHCP	<input type="radio"/> Auto Config	<input checked="" type="radio"/> Static		
IPv6 Address				
Link Local Address	FE80::207:ECFF:FE5B:7596			
IPv6 Gateway				
IPv6 DNS Server				
802.1X				
<input type="checkbox"/> Use 802.1X Security				
Authentication	MDS			
Username				
Password				

Top

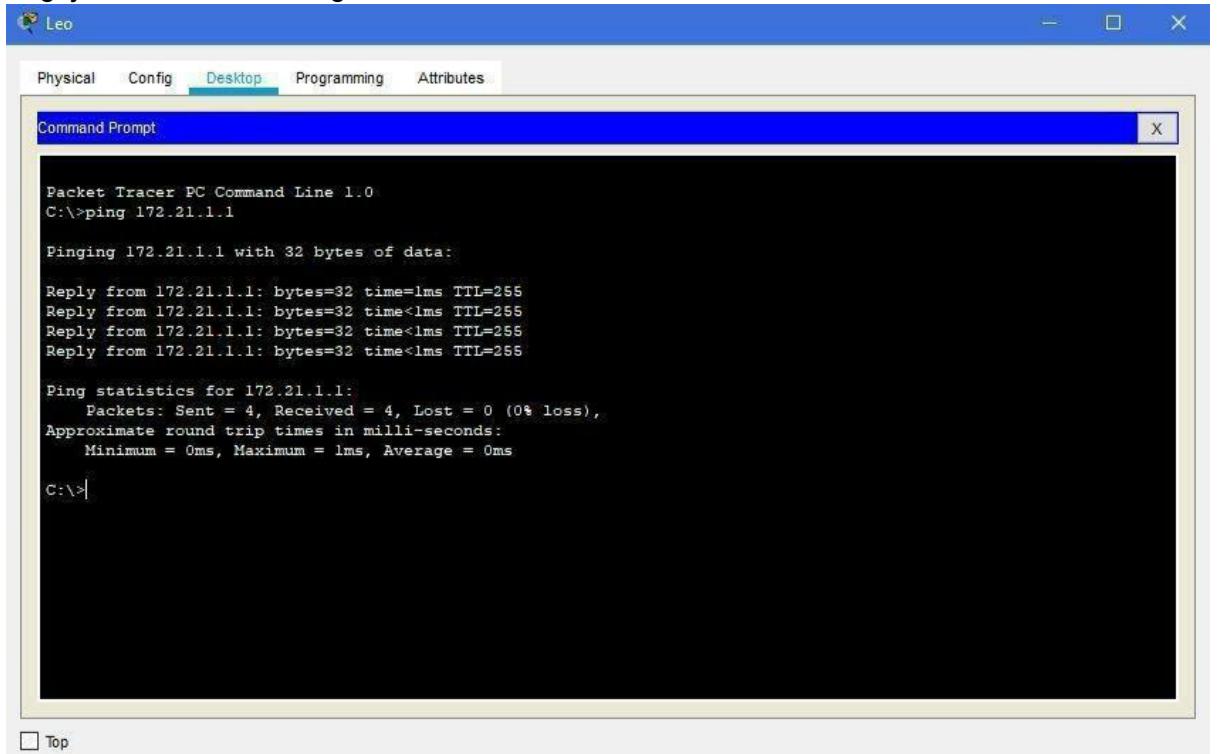
Aries

Physical	Config	Desktop	Programming	Attributes
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static			
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				
<input type="radio"/> DHCP	<input type="radio"/> Auto Config	<input checked="" type="radio"/> Static		
IPv6 Address				
Link Local Address	FE80::203:E4FF:FE08:BB97			
IPv6 Gateway				
IPv6 DNS Server				
802.1X				
<input type="checkbox"/> Use 802.1X Security				
Authentication	MDS			
Username				
Password				

Top



3. Pengujian kesesuaian konfigurasi



Alien

Physical Config **Scripting** 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 **Scripting** 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:\>
```



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

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

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 a Windows application window titled "Eagle" with a blue header bar. Below the header are tabs: "Physical", "Config", "CLI" (which is underlined in green), and "Attributes". The main area is labeled "IOS Command Line Interface". Inside, the terminal session displays the following text:

```
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#
```

At the bottom left of the terminal window, it says "Ctrl+F6 to exit CLI focus". To the right are "Copy" and "Paste" buttons. Below the terminal window, there is a small toolbar with a "Top" button.

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:

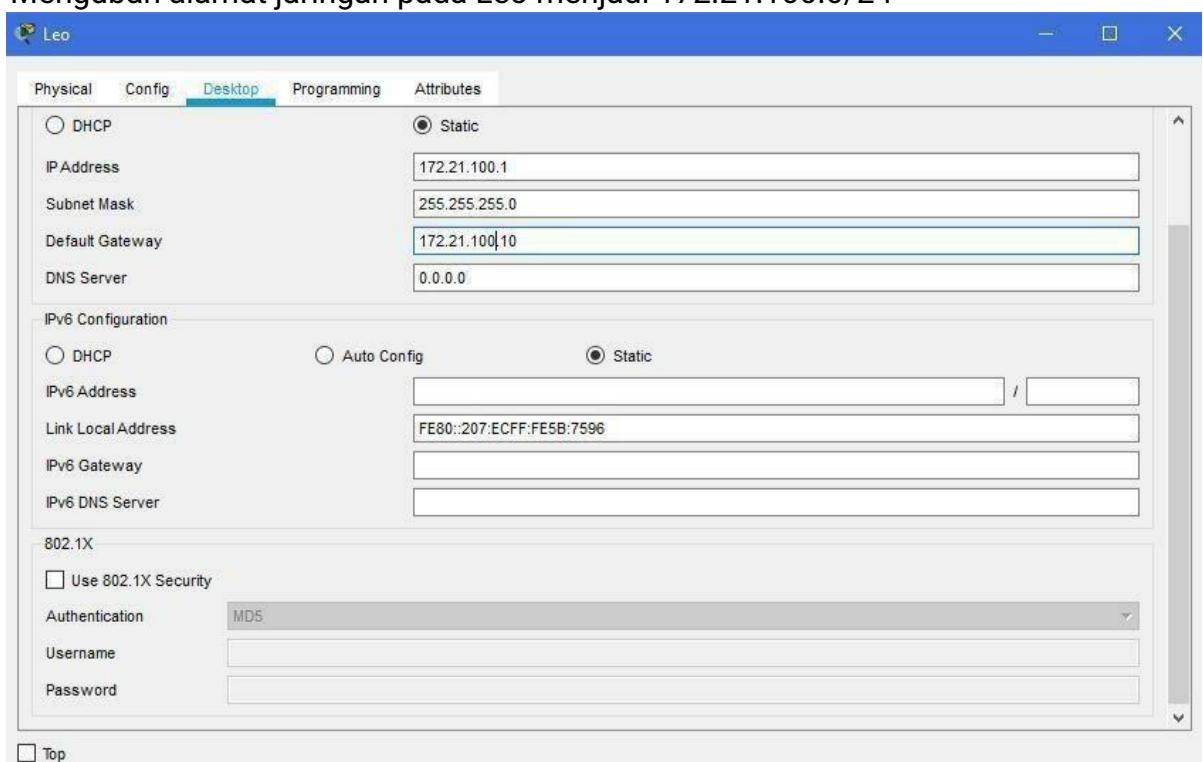
  1  0 ms      0 ms      0 ms      172.21.10.10
  2  1 ms      1 ms      4 ms      172.21.1.2
  3  0 ms     13 ms      0 ms      172.21.20.2

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 desktop environment with a title bar "Leo". Below it is a menu bar with tabs: Physical, Config, Desktop (which is selected), Programming, and Attributes. A "Command Prompt" window is open, displaying the following text:

```
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 desktop, there is a small icon labeled "Top".

