

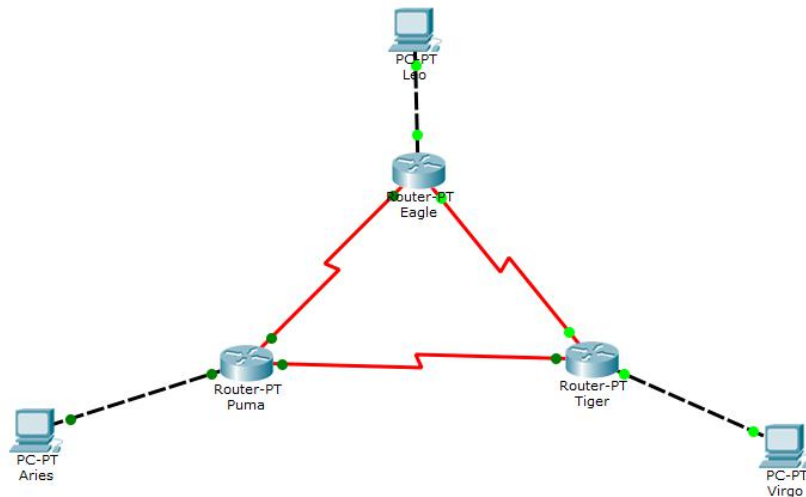
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Kelas C

Modul 7

Kegiatan 1. Topologi 1 (Static Routing)

Nomor 1 dan 2.

Topologi dengan menggunakan Router Generic dan memberi nama masing-masing router dengan eagle (router 1), puma (router 2), dan tiger (router 3)



Nomor 3.

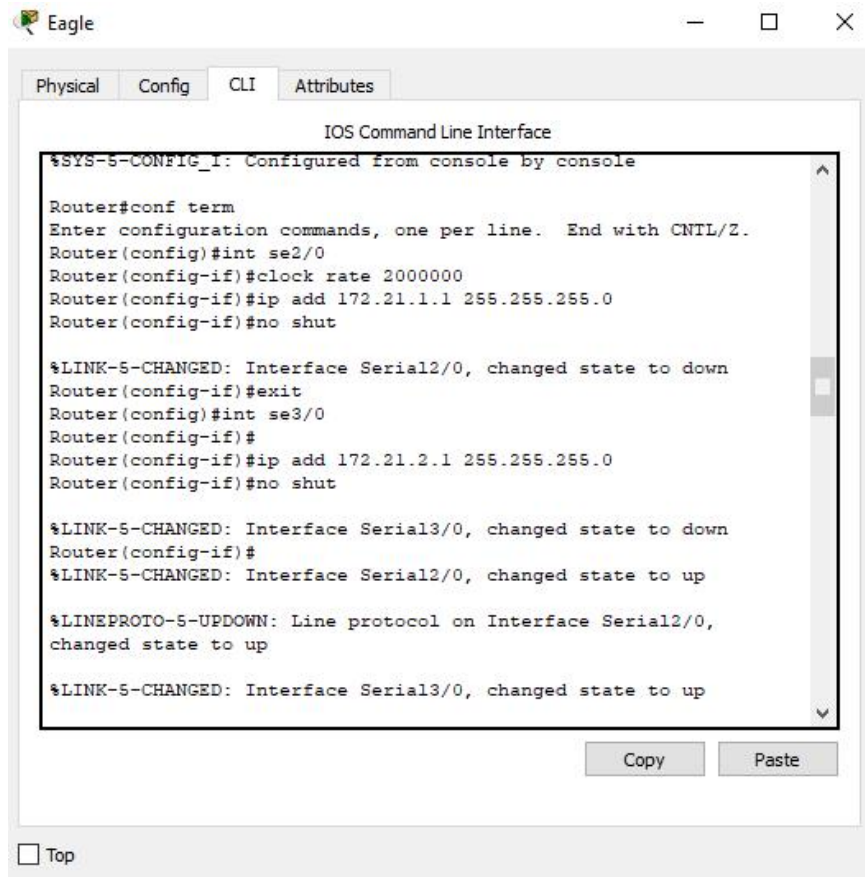
Konfigurasi IP Router Eagle

```
Eagle
Physical Config CLI Attributes
IOS Command Line Interface
Router>en
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa0/0
Router(config-if)#ip add 172.21.10.10 255.255.255.0
Router(config-if)#no shut

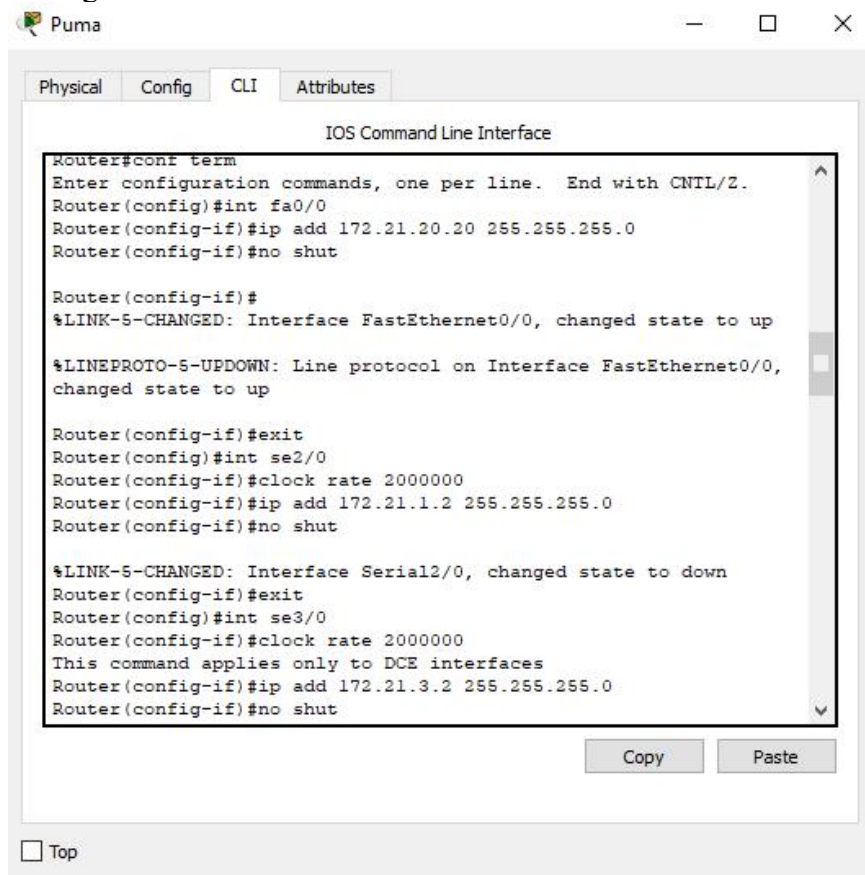
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0,
changed state to up

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

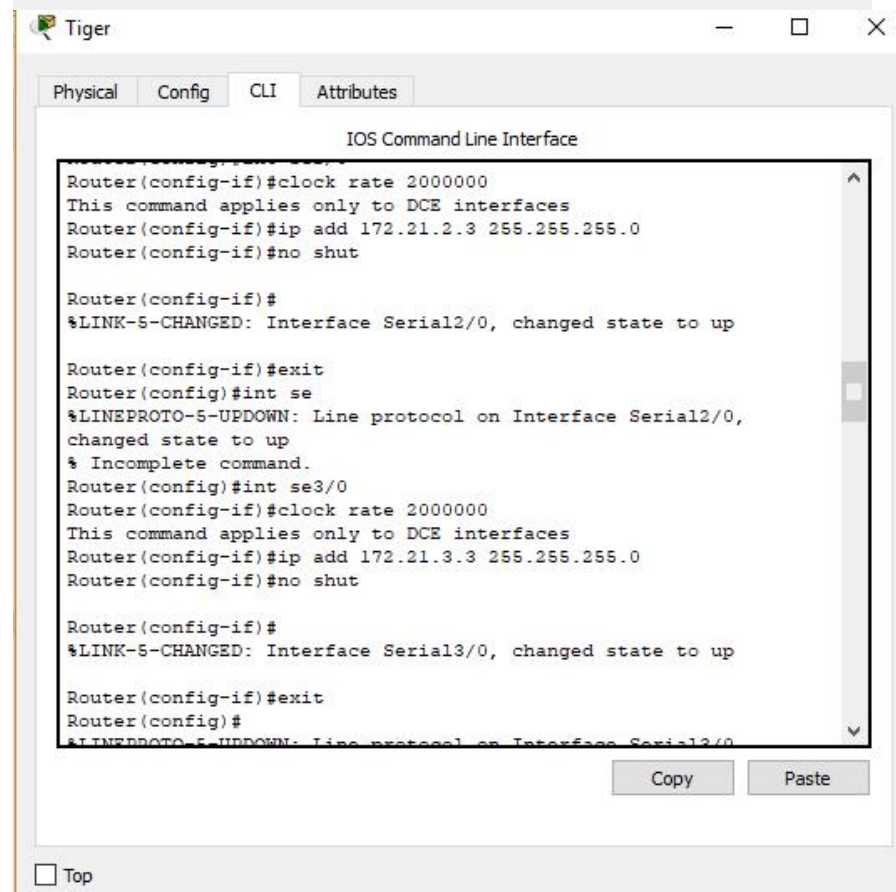
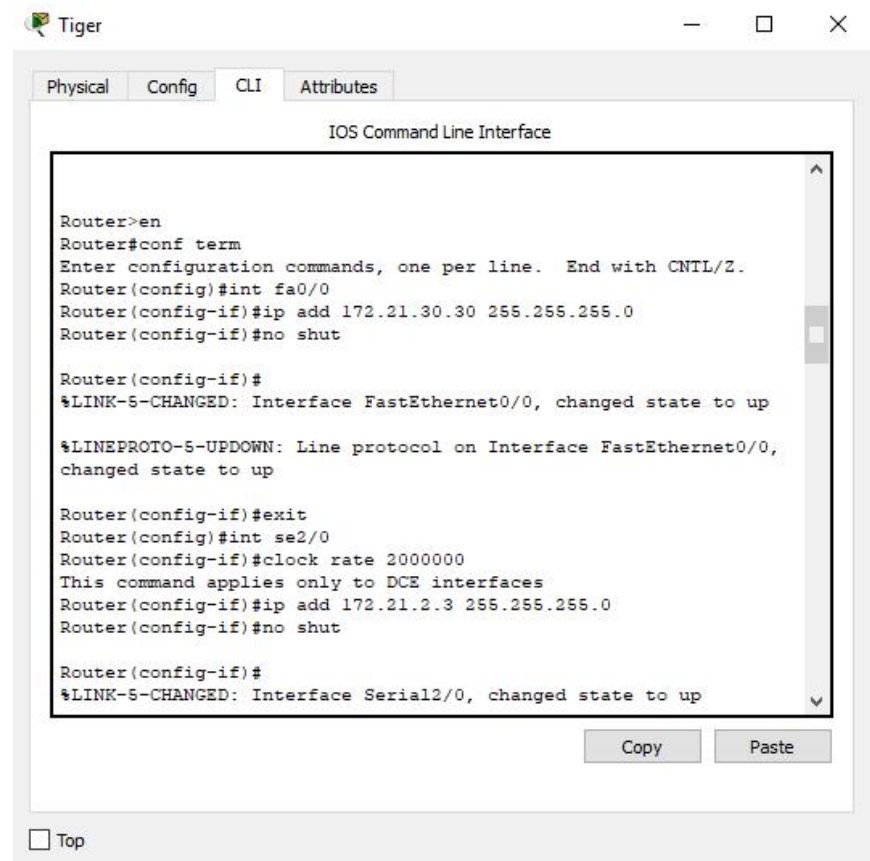
Router#conf term
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int se2/0
Router(config-if)#clock rate 2000000
Router(config-if)#ip add 172.21.1.1 255.255.255.0
Router(config-if)#no shut
```



Konfigurasi IP Router Puma



Konfigurasi IP Router Tiger



Nomor 4.

Konfigurasi IP Leo (PC1)

Leo

Physical Config Desktop Attributes Software/Services

IP Configuration

IP Configuration

☐ DHCP ☒ Static

IP Address: 172.21.10.1

Subnet Mask: 255.255.255.0

Default Gateway: 172.21.10.10

DNS Server:

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address: /

Link Local Address: FE80::200:CFF:FE18:CADB

IPv6 Gateway:

IPv6 DNS Server:

☐ Top

Konfigurasi IP Aries (PC2)

Aries

Physical Config Desktop Attributes Software/Services

IP Configuration

IP Configuration

☐ DHCP ☒ Static

IP Address: 172.21.20.2

Subnet Mask: 255.255.255.0

Default Gateway: 172.21.20.20

DNS Server:

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address: /

Link Local Address: FE80::260:70FF:FE04:9412

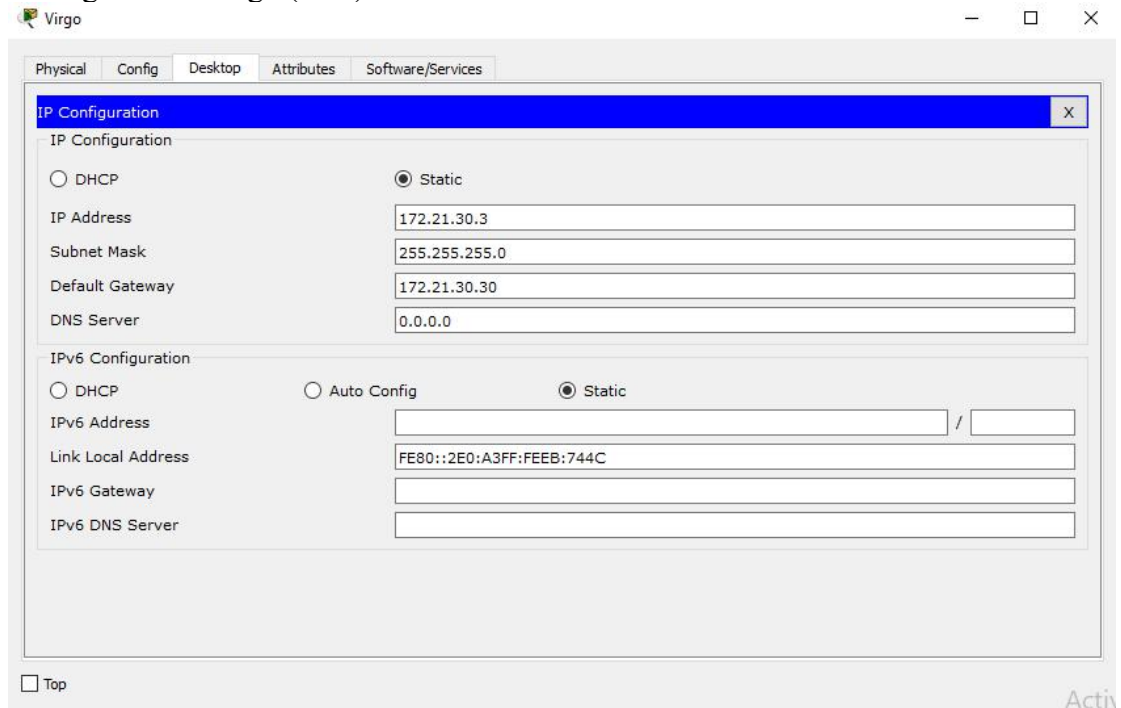
IPv6 Gateway:

IPv6 DNS Server:

☐ Top

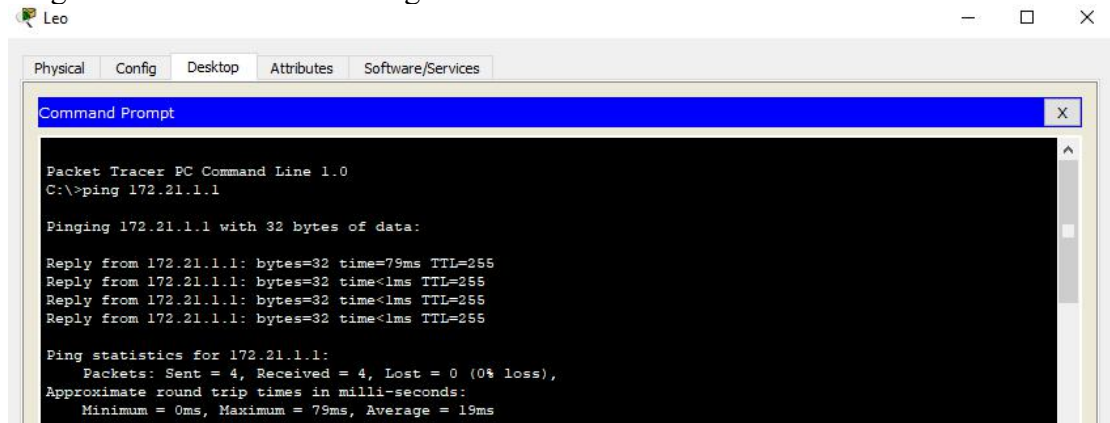
Activ

Konfigurasi IP Virgo (PC3)

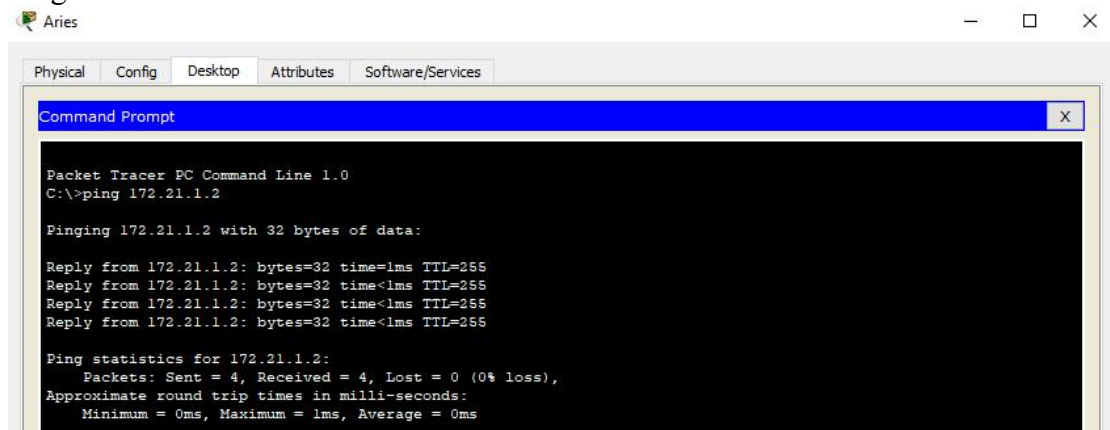


Nomor 5

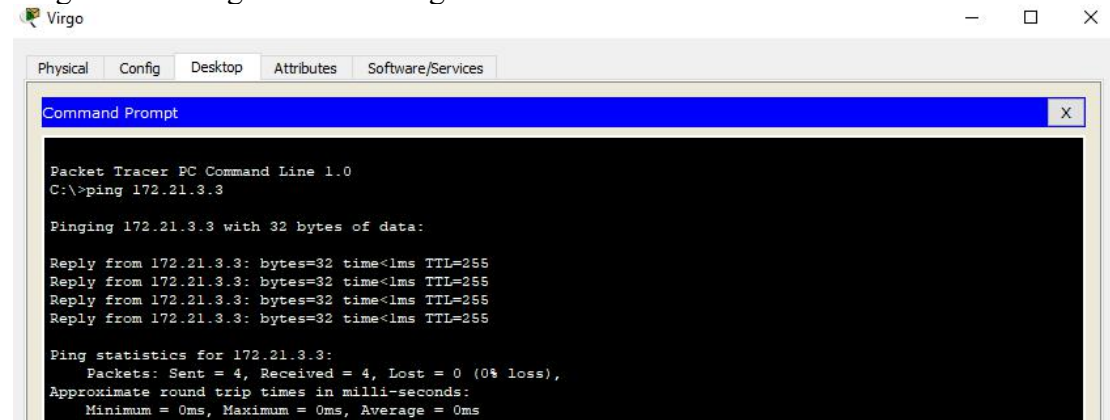
Ping dari PC Leo ke Router Eagle



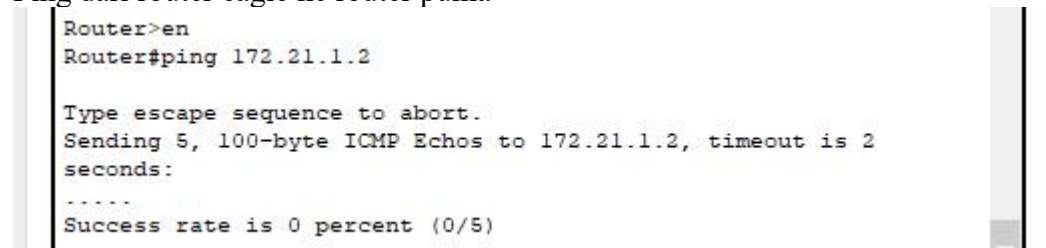
Ping dari PC Aries ke Router Puma



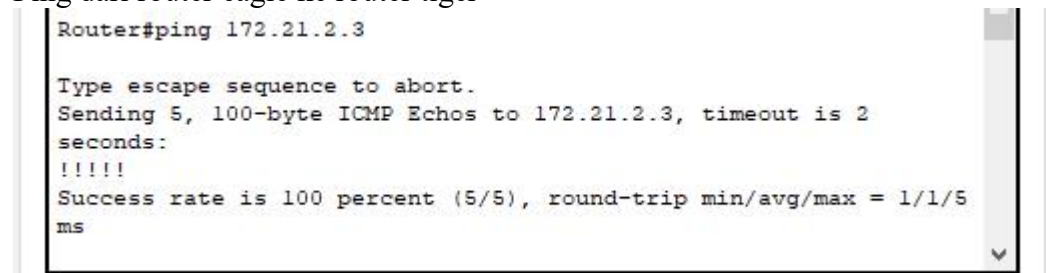
Ping dari PC Virgo ke Router Tiger



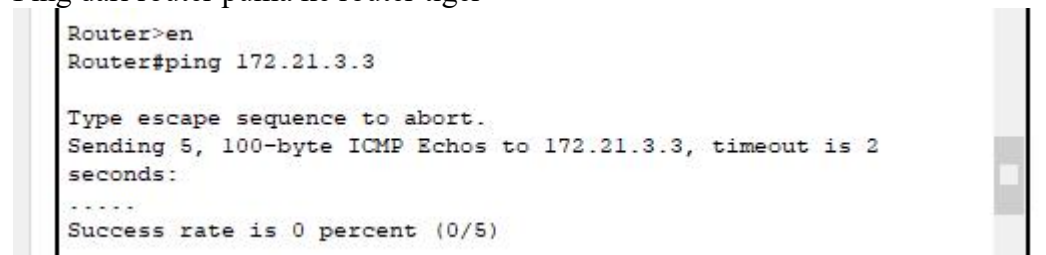
Ping dari router eagle ke router puma



Ping dari router eagle ke router tiger



Ping dari router puma ke router tiger



Nomor 7.

Eagle

Physical Config CLI Attributes

IOS Command Line Interface

```
Success rate is 100 percent (5/5), round-trip min/avg/max = 1/1/5 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       172.21.2.0 is directly connected, Serial3/0
C       172.21.10.0 is directly connected, FastEthernet0/0

Router#ping 172.21.20.20
```

Copy Paste

☐ Top

Puma

Physical Config CLI Attributes

IOS Command Line Interface

```
Success rate is 0 percent (0/5)

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#conf term
Enter configuration commands, one per line. End with CNTL/Z.
```

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#
```

Copy Paste

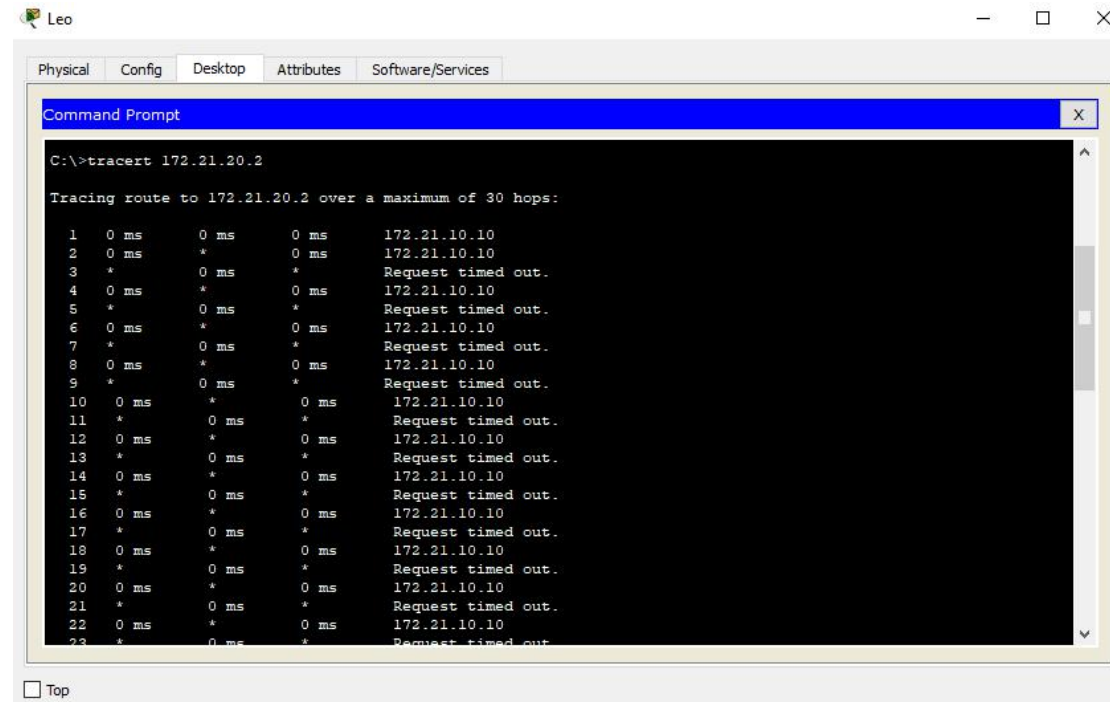
☐ Top

Nomor 8.

```
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)
```


Nomor 9.



The screenshot shows a Windows desktop with a taskbar at the top containing icons for Leo, a window manager, and a close button. Below the taskbar is a menu bar with options: Physical, Config, Desktop, Attributes, and Software/Services. A Command Prompt window is open, displaying the following text:

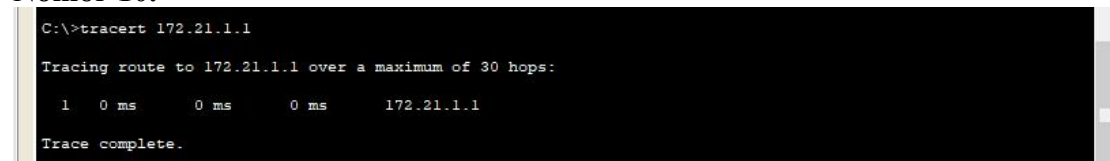
```
C:\>tracert 172.21.20.2

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  0 ms    *        0 ms    172.21.10.10
  3  *        0 ms    *        Request timed out.
  4  0 ms    *        0 ms    172.21.10.10
  5  *        0 ms    *        Request timed out.
  6  0 ms    *        0 ms    172.21.10.10
  7  *        0 ms    *        Request timed out.
  8  0 ms    *        0 ms    172.21.10.10
  9  *        0 ms    *        Request timed out.
 10  0 ms    *        0 ms    172.21.10.10
 11  *        0 ms    *        Request timed out.
 12  0 ms    *        0 ms    172.21.10.10
 13  *        0 ms    *        Request timed out.
 14  0 ms    *        0 ms    172.21.10.10
 15  *        0 ms    *        Request timed out.
 16  0 ms    *        0 ms    172.21.10.10
 17  *        0 ms    *        Request timed out.
 18  0 ms    *        0 ms    172.21.10.10
 19  *        0 ms    *        Request timed out.
 20  0 ms    *        0 ms    172.21.10.10
 21  *        0 ms    *        Request timed out.
 22  0 ms    *        0 ms    172.21.10.10
 23  *        0 ms    *        Request timed out.
```

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

Nomor 10.



The screenshot shows a Command Prompt window with the following text:

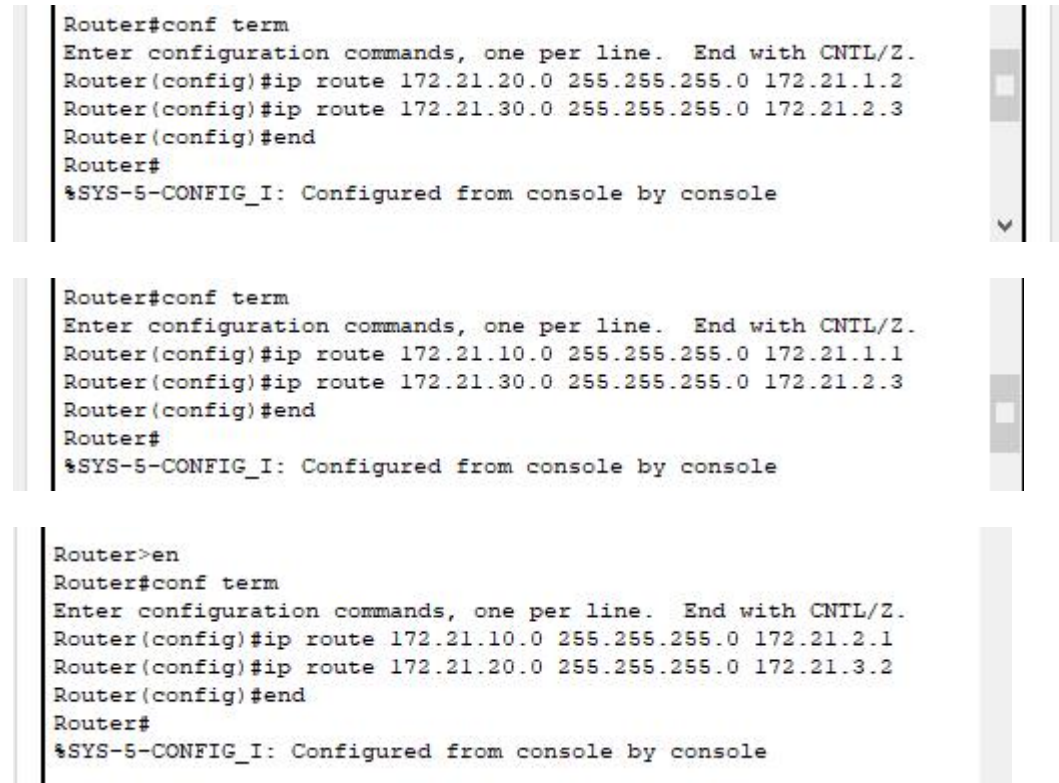
```
C:\>tracert 172.21.1.1

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.
```

Nomor 11.



The first screenshot shows the configuration of static routes on a Cisco router:

```
Router#conf term
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)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

The second screenshot shows the configuration of static routes on a Cisco router:

```
Router#conf term
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 172.21.30.0 255.255.255.0 172.21.2.3
Router(config)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

The third screenshot shows the configuration of static routes on a Cisco router:

```
Router>en
Router#conf term
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)#end
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

Nomor 12.

```
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=3ms TTL=125
Reply from 172.21.20.2: bytes=32 time=1ms TTL=125
Reply from 172.21.20.2: bytes=32 time=2ms TTL=125
Reply from 172.21.20.2: bytes=32 time=3ms TTL=125

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 = 2ms
```

```
C:\>tracert 172.21.20.2

Tracing route to 172.21.20.2 over a maximum of 30 hops:

  0  1 ms    0 ms    0 ms    172.21.10.10
  1  1 ms    1 ms    1 ms    172.21.1.2
  2  1 ms    0 ms    0 ms    172.21.20.2

Trace complete.
```

Nomor 12B.

Leo

Physical Config Desktop Attributes Software/Services

IP Configuration

IP Configuration

☐ DHCP ☒ Static

IP Address 172.21.100.1

Subnet Mask 255.255.255.0

Default Gateway 172.21.10.10

DNS Server

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address /

Link Local Address FE80::200:CFF:FE18:CADB

IPv6 Gateway

IPv6 DNS Server

```
Router>en
Router#conf term
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)#ip route 172.21.100.0 255.255.255.0 172.21.1.1
Router(config)#
```

```

Router>en
Router#conf term
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)#

```

Aries

Physical Config Desktop Attributes Software/Services

Command Prompt

```

C:\>ping 172.21.100.1

Pinging 172.21.100.1 with 32 bytes of data:

Reply from 172.21.1.1: Destination host unreachable.
Reply from 172.21.1.1: Destination host unreachable.
Reply from 172.21.1.1: Destination host unreachable.
Reply from 172.21.1.1: Destination host unreachable.

Ping statistics for 172.21.100.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>tracert 172.21.100.1

Tracing route to 172.21.100.1 over a maximum of 30 hops:

  0  0 ms    0 ms    0 ms    172.21.20.20
  1  1 ms    3 ms    1 ms    172.21.3.3
  2  1 ms    2 ms    1 ms    172.21.1.1
  3  1 ms    *        1 ms    172.21.1.1
  4  *        1 ms    *        Request timed out.
  5  11 ms   *        2 ms    172.21.1.1
  6  *        1 ms    *        Request timed out.
  7  13 ms   *        2 ms    172.21.1.1
  8  *        1 ms    *        Request timed out.
  9  1 ms    *        2 ms    172.21.1.1
 10  *        1 ms    *        Request timed out.
 11  *        1 ms    *        Request timed out.

```

☐ Top

Leo

Physical Config Desktop Attributes Software/Services

Command Prompt

```

  3  1 ms    0 ms    0 ms    172.21.20.2

Trace complete.

C:\>ping 172.21.100.1

Pinging 172.21.100.1 with 32 bytes of data:

Reply from 172.21.100.1: bytes=32 time=331ms TTL=128
Reply from 172.21.100.1: bytes=32 time=4ms TTL=128
Reply from 172.21.100.1: bytes=32 time=1ms TTL=128
Reply from 172.21.100.1: bytes=32 time<1ms TTL=128

Ping statistics for 172.21.100.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 331ms, Average = 84ms

C:\>tracert 172.21.100.1

Tracing route to 172.21.100.1 over a maximum of 30 hops:

  0  5 ms    3 ms    3 ms    172.21.100.1

Trace complete.

```