Nama   : Angieta Putri Wahendra
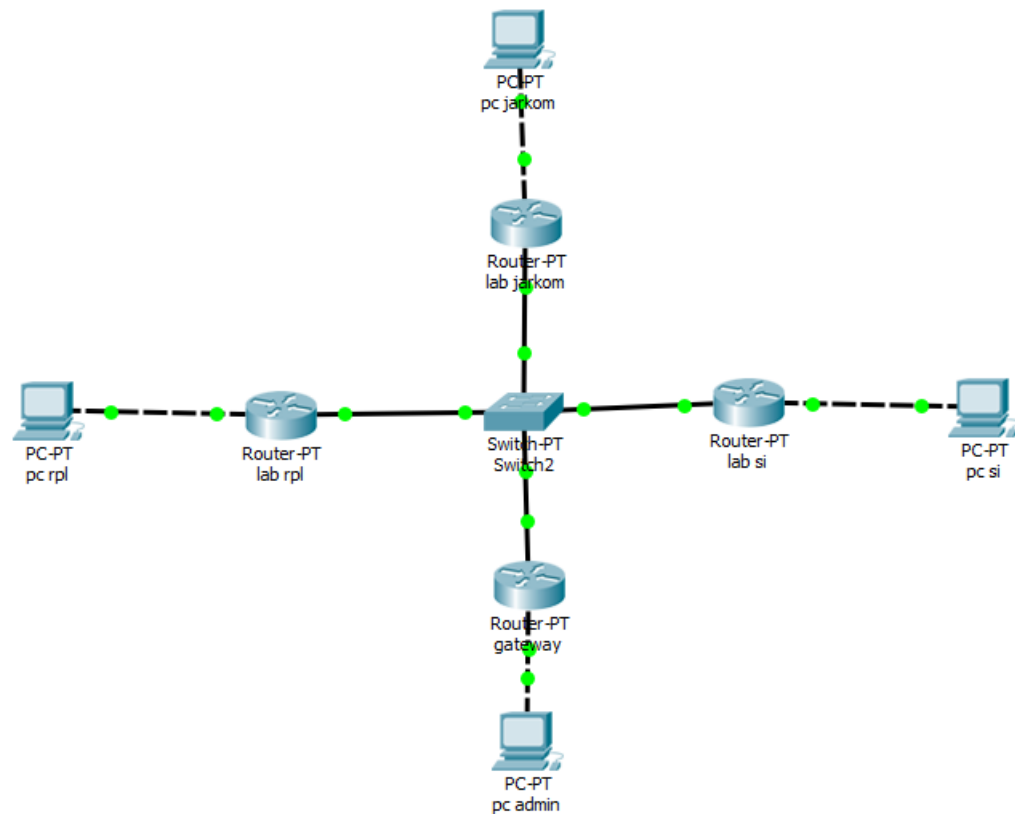
NIM   : L200170096

Kelas   : C
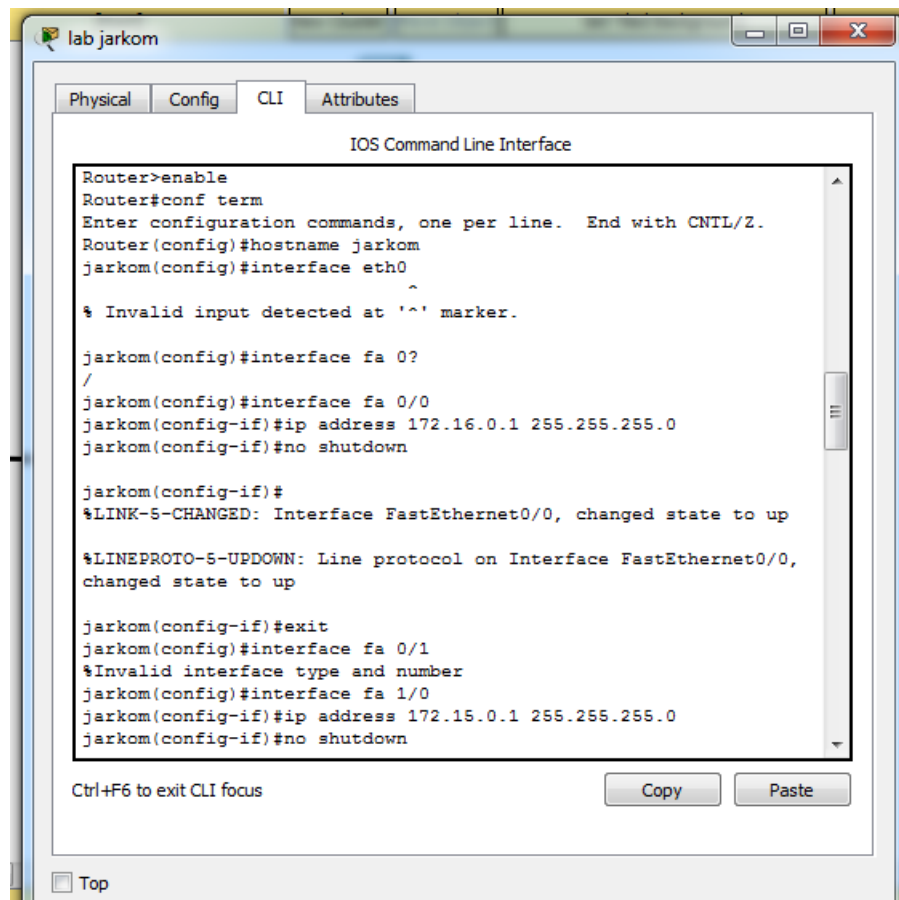
Modul   : 11

Kegiatan

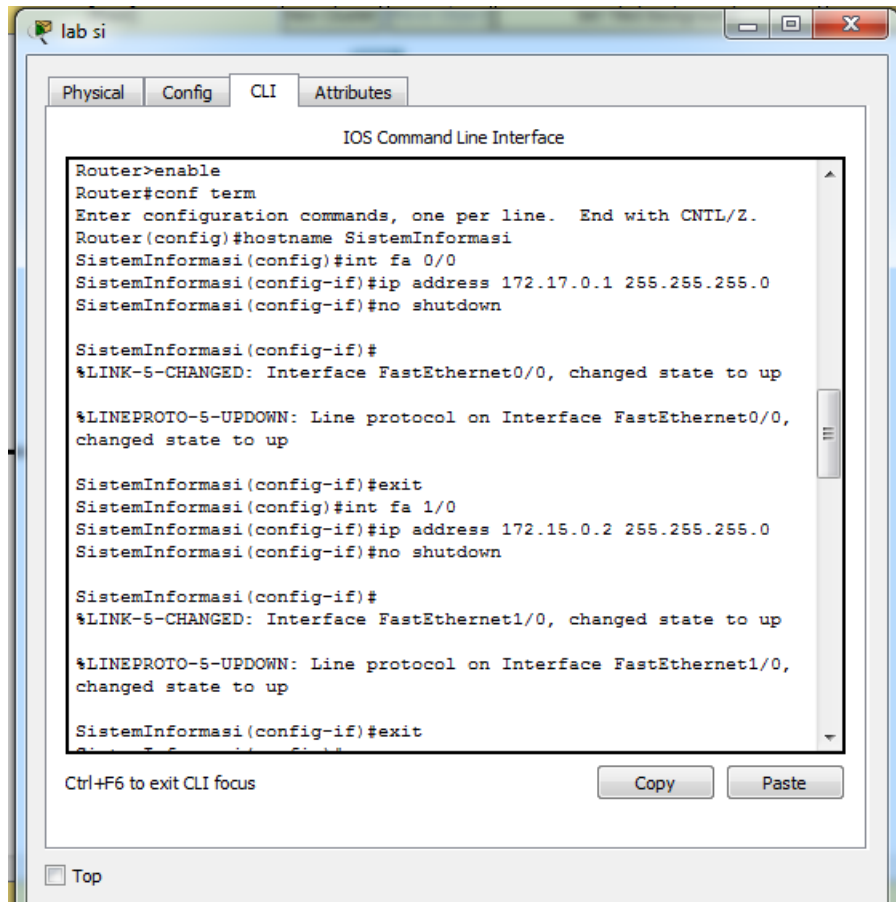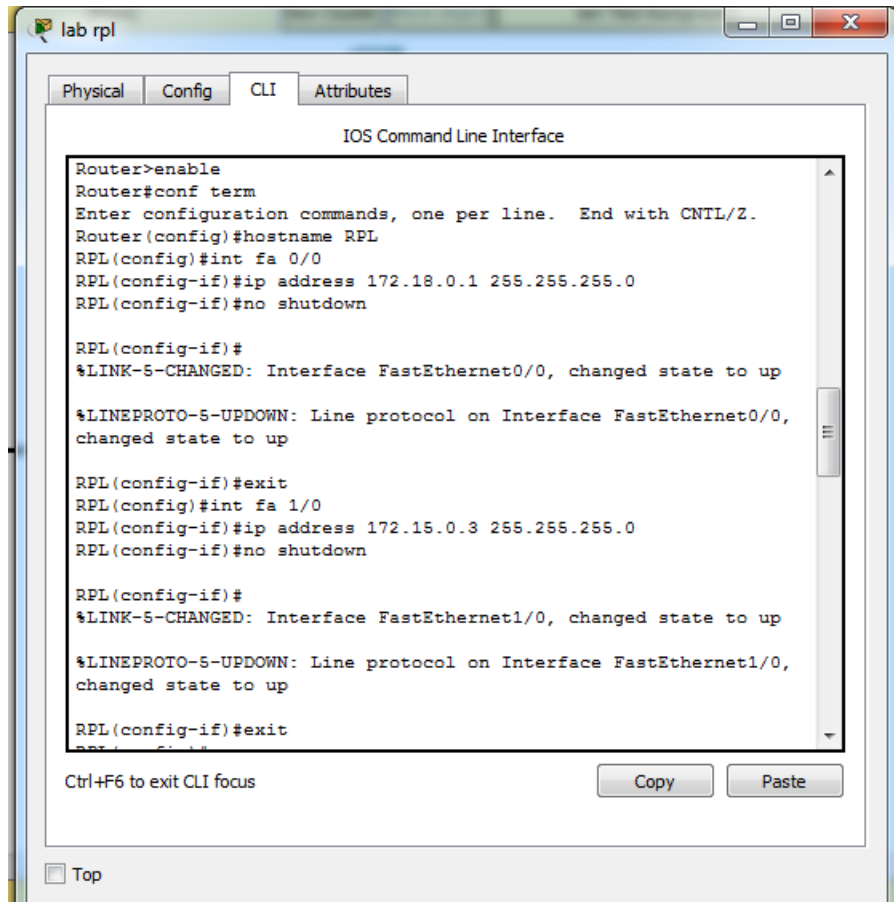1. Topologi Jaringan

2. Konfigurasi Router
   - Router Lab Jarkom


```
Router>enable
Router#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#hostname jarkom
jarkom(config)#interface eth0
                        ^
% Invalid input detected at '^' marker.

jarkom(config)#interface fa 0?
/
jarkom(config)#interface fa 0/0
jarkom(config-if)#ip address 172.16.0.1 255.255.255.0
jarkom(config-if)#no shutdown

jarkom(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

jarkom(config-if)#exit
jarkom(config)#interface fa 0/1
%Invalid interface type and number
jarkom(config)#interface fa 1/0
jarkom(config-if)#ip address 172.15.0.1 255.255.255.0
jarkom(config-if)#no shutdown
```

- Router Lab Sistem Informasi


```
Router>enable
Router#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#hostname SistemInformasi
SistemInformasi(config)#int fa 0/0
SistemInformasi(config-if)#ip address 172.17.0.1 255.255.255.0
SistemInformasi(config-if)#no shutdown

SistemInformasi(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

SistemInformasi(config-if)#exit
SistemInformasi(config)#int fa 1/0
SistemInformasi(config-if)#ip address 172.15.0.2 255.255.255.0
SistemInformasi(config-if)#no shutdown

SistemInformasi(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0,
changed state to up

SistemInformasi(config-if)#exit
```

Ctrl+F6 to exit CLI focus   Copy   Paste

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- Router Lab RPL


```
lab rpl

Physical   Config   CLI   Attributes

                    IOS Command Line Interface

Router>enable
Router#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#hostname RPL
RPL(config)#int fa 0/0
RPL(config-if)#ip address 172.18.0.1 255.255.255.0
RPL(config-if)#no shutdown

RPL(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

RPL(config-if)#exit
RPL(config)#int fa 1/0
RPL(config-if)#ip address 172.15.0.3 255.255.255.0
RPL(config-if)#no shutdown

RPL(config-if)#
%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0,
changed state to up

RPL(config-if)#exit

Ctrl+F6 to exit CLI focus                    Copy        Paste

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```

- Router Gateway

3. Konfigurasi Routing Table

- RIP Routing Router 1/ Jarkom

```
jarkom>enable
jarkom#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
jarkom(config)#router rip
jarkom(config-router)#network 172.15.0.0
jarkom(config-router)#network 172.16.0.0
jarkom(config-router)#network 172.17.0.0
jarkom(config-router)#network 172.18.0.0
jarkom(config-router)#network 172.19.0.0
jarkom(config-router)#exit
jarkom(config)#
```

- RIP Routing Router 2/ Sistem Informasi

```
SistemInformasi>enable
SistemInformasi#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
SistemInformasi(config)#router rip
SistemInformasi(config-router)#network 172.15.0.0
SistemInformasi(config-router)#network 172.16.0.0
SistemInformasi(config-router)#network 172.17.0.0
SistemInformasi(config-router)#network 172.18.0.0
SistemInformasi(config-router)#network 172.19.0.0
SistemInformasi(config-router)#exit
SistemInformasi(config)#
```

- RIP Routing Router 3/ RPL

```
RPL>enable
RPL#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
RPL(config)#router rip
RPL(config-router)#network 172.15.0.0
RPL(config-router)#network 172.16.0.0
RPL(config-router)#network 172.17.0.0
RPL(config-router)#network 172.18.0.0
RPL(config-router)#network 172.19.0.0
RPL(config-router)#exit
RPL(config)#
```

- RIP Routing Router 4/ gateway UMS

```
UMS>enable
UMS#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
UMS(config)#router rip
UMS(config-router)#network 172.15.0.0
UMS(config-router)#network 172.16.0.0
UMS(config-router)#network 172.17.0.0
UMS(config-router)#network 172.18.0.0
UMS(config-router)#network 172.19.0.0
UMS(config-router)#exit
UMS(config)#
```

4. Pengujian ICMP request(ping) untuk test koneksi.

```
Pinging 172.16.0.2 with 32 bytes of data:

Reply from 172.16.0.2: bytes=32 time=1ms TTL=126
Reply from 172.16.0.2: bytes=32 time<1ms TTL=126
Reply from 172.16.0.2: bytes=32 time=1ms TTL=126
Reply from 172.16.0.2: bytes=32 time<1ms TTL=126

Ping statistics for 172.16.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>ping 172.17.0.2

Pinging 172.17.0.2 with 32 bytes of data:

Reply from 172.19.0.1: Destination host unreachable.
Reply from 172.19.0.1: Destination host unreachable.
Reply from 172.19.0.1: Destination host unreachable.
Request timed out.

Ping statistics for 172.17.0.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

```
C:\>ping 172.18.0.2

Pinging 172.18.0.2 with 32 bytes of data:

Request timed out.
Reply from 172.18.0.2: bytes=32 time<1ms TTL=126
Reply from 172.18.0.2: bytes=32 time=1ms TTL=126
Reply from 172.18.0.2: bytes=32 time<1ms TTL=126

Ping statistics for 172.18.0.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
```