Nama : Nugroho Prihananto
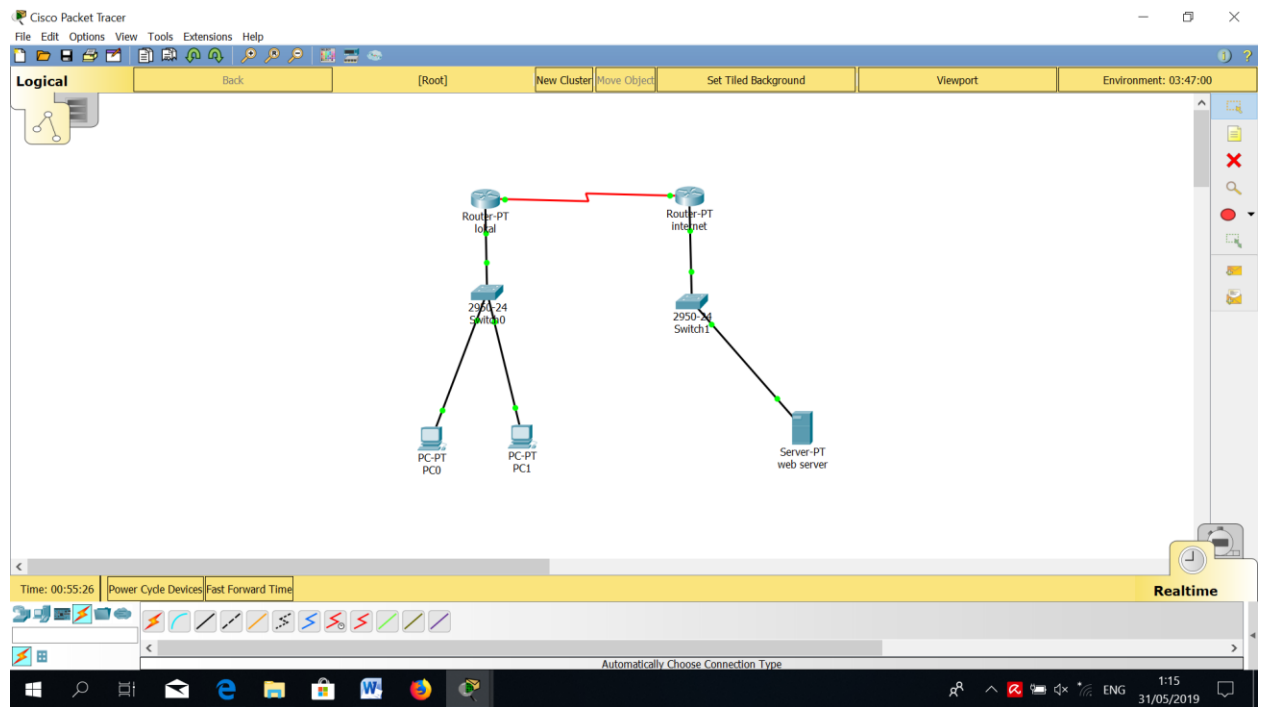
NIM   : L200170186

Kelas : D

MODUL 9

KEGIATAN

1. Topologi

2. Konfigurasi router internet

internet

| Physical | Config | CLI | Attributes |

```
Press RETURN to get started!


Router>en
Router#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#hostname internet
internet(config)#int fa0/0
internet(config-if)#ip address 10.0.0.1 255.0.0.0
internet(config-if)#no shutdown

internet(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

internet(config-if)#exit
internet(config)#int se2/0
internet(config-if)#ip address 20.0.0.2 255.0.0.0
internet(config-if)#no shutdown

%LINK-5-CHANGED: Interface Serial2/0, changed state to down
internet(config-if)#exit
internet(config)#ip route 30.0.0.0 255.0.0.0 20.0.0.1
internet(config)#ip nat inside source static 10.0.0.2 50.0.0.1
internet(config)#int fa0/0
internet(config-if)#ip nat inside
internet(config-if)#exit
internet(config)#int se2/0
internet(config-if)#ip nat outside
internet(config-if)#exit
```

internet — ▣ □ ✕

Physical | **Config** | **CLI** | **Attributes**

GLOBAL	⌃
Settings	
Algorithm Settings	
ROUTING	
Static	
RIP	
INTERFACE	
FastEthernet0/0	
FastEthernet1/0	
Serial2/0	
Serial3/0	
FastEthernet4/0	
FastEthernet5/0	⌄

FastEthernet0/0

Port Status ☑ On
Bandwidth ◉ 100 Mbps ○ 10 Mbps ☑ Auto
Duplex ○ Half Duplex ◉ Full Duplex ☑ Auto
MAC Address `00D0.BA8C.9265`

IP Configuration

IP Address `10.0.0.1`
Subnet Mask `255.0.0.0`

Tx Ring Limit `10`

Equivalent IOS Commands

```
internet(config-if)#ip nat inside
internet(config-if)#exit
internet(config)#int se2/0
internet(config-if)#ip nat outside
internet(config-if)#exit
internet(config)#
```

☐ Top

---

internet — ▣ □ ✕

Physical | **Config** | **CLI** | **Attributes**

GLOBAL	⌃
Settings	
Algorithm Settings	
ROUTING	
Static	
RIP	
INTERFACE	
FastEthernet0/0	
FastEthernet1/0	
Serial2/0	
Serial3/0	
FastEthernet4/0	
FastEthernet5/0	⌄

Serial2/0

Port Status ☑ On
Duplex ◉ Full Duplex
Clock Rate `1200` ▾

IP Configuration

IP Address `20.0.0.2`
Subnet Mask `255.0.0.0`

Tx Ring Limit `10`

Equivalent IOS Commands

```
internet(config-if)#exit
internet(config)#interface FastEthernet0/0
internet(config-if)#
internet(config-if)#exit
internet(config)#interface Serial2/0
internet(config-if)#
```

☐ Top

3. Konfigurasi router local

lokal

| Physical | Config | CLI | Attributes |

```
Router>en
Router#conf term
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#hostname lokal
lokal(config)#int fa0/0
lokal(config-if)#ip address 30.0.0.1 255.0.0.0
lokal(config-if)#no shutdown

lokal(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

lokal(config-if)#exit
lokal(config)#int se2/0
lokal(config-if)#ip address 20.0.0.1 255.0.0.0
lokal(config-if)#clock rate 64000
lokal(config-if)#bandwidth 64
lokal(config-if)#no shutdown

lokal(config-if)#
%LINK-5-CHANGED: Interface Serial2/0, changed state to up

lokal(config-if)#exit
lokal(config)#
%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial2/0, changed state to up

lokal(config)#ip route 50.0.0.0 255.0.0.0 20.0.0.2
lokal(config)#exit
lokal#
%SYS-5-CONFIG_I: Configured from console by console
```

lokal

Physical | Config | CLI | Attributes

GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
INTERFACE
FastEthernet0/0
FastEthernet1/0
Serial2/0
Serial3/0
FastEthernet4/0
FastEthernet5/0

FastEthernet0/0

Port Status ☑ On

Bandwidth ◉ 100 Mbps ○ 10 Mbps ☑ Auto

Duplex ○ Half Duplex ◉ Full Duplex ☑ Auto

MAC Address 0001.420A.D06A

IP Configuration

IP Address 30.0.0.1

Subnet Mask 255.0.0.0

Tx Ring Limit 10

Equivalent IOS Commands

```
lokal>enable
lokal#
lokal#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
lokal(config)#interface FastEthernet0/0
lokal(config-if)#
```

☐ Top

---

lokal

Physical | Config | CLI | Attributes

GLOBAL
Settings
Algorithm Settings
ROUTING
Static
RIP
INTERFACE
FastEthernet0/0
FastEthernet1/0
Serial2/0
Serial3/0
FastEthernet4/0
FastEthernet5/0

Serial2/0

Port Status ☑ On

Duplex ◉ Full Duplex

Clock Rate 64000

IP Configuration

IP Address 20.0.0.1

Subnet Mask 255.0.0.0

Tx Ring Limit 10

Equivalent IOS Commands

```
Enter configuration commands, one per line.  End with CNTL/Z.
lokal(config)#interface FastEthernet0/0
lokal(config-if)#
lokal(config-if)#exit
lokal(config)#interface Serial2/0
lokal(config-if)#
```

☐ Top

4. Konfigurasi IP server

5. Konfigurasi PC 0

PC0

Physical | Config | Desktop | Programming | Attributes

GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Bluetooth

FastEthernet0

Port Status — ☑ On
Bandwidth — ⦿ 100 Mbps ◯ 10 Mbps ☑ Auto
Duplex — ◯ Half Duplex ⦿ Full Duplex ☑ Auto
MAC Address — 00E0.8FE6.5E41

IP Configuration
◯ DHCP
⦿ Static
IP Address — 30.0.0.2
Subnet Mask — 255.0.0.0

IPv6 Configuration
◯ DHCP
◯ Auto Config
⦿ Static
IPv6 Address — /
Link Local Address: FE80::2E0:8FFF:FEE6:5E41

☐ Top

6. Konfigurasi PC 1

PC1 — □ ×

Physical | Config | Desktop | Programming | Attributes

GLOBAL
Settings
Algorithm Settings
INTERFACE
FastEthernet0
Bluetooth

FastEthernet0

Port Status ☑ On
Bandwidth ○ 100 Mbps ○ 10 Mbps ☑ Auto
Duplex ○ Half Duplex ● Full Duplex ☑ Auto
MAC Address 0002.1683.17C7

IP Configuration
○ DHCP
● Static
IP Address 30.0.0.3
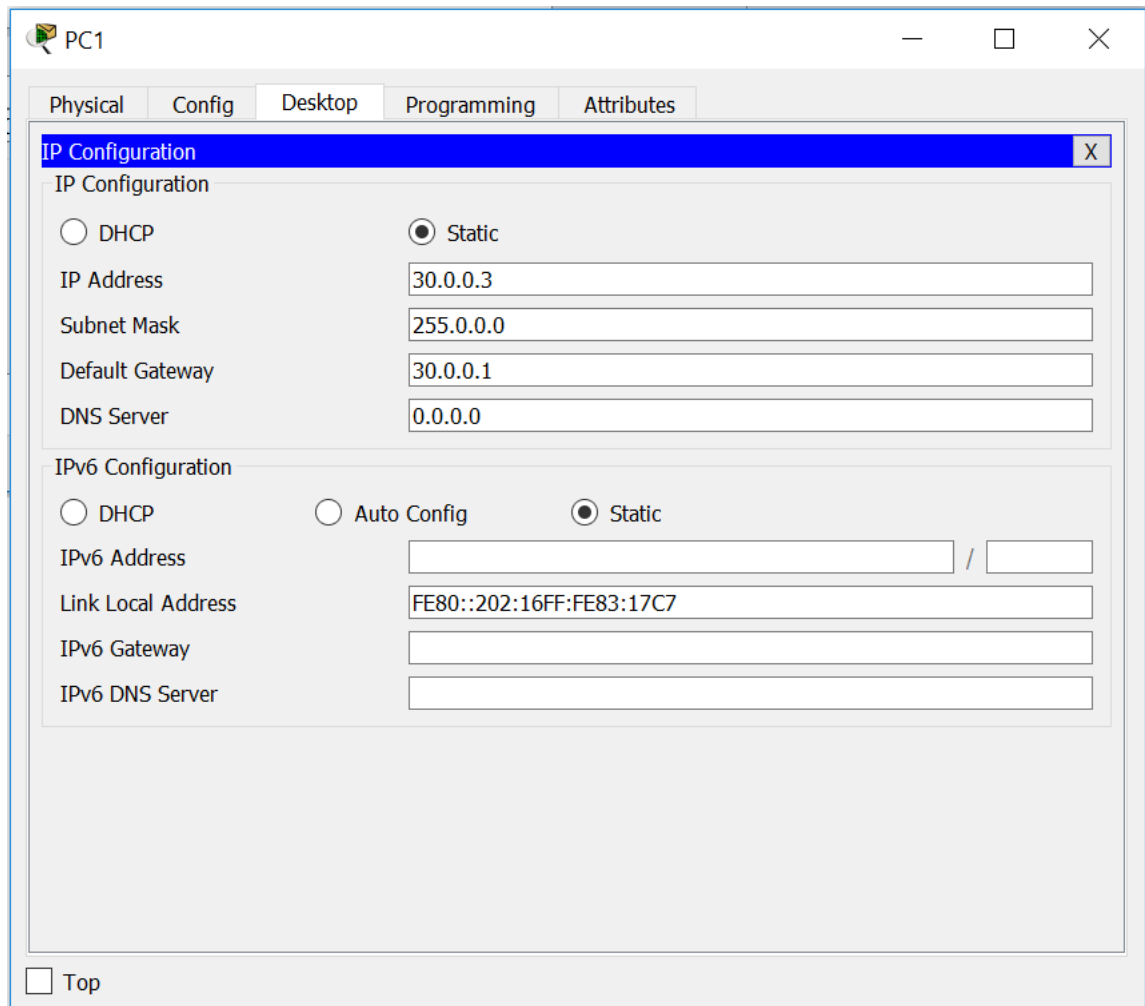Subnet Mask 255.0.0.0

IPv6 Configuration
○ DHCP
○ Auto Config
● Static
IPv6 Address /
Link Local Address: FE80::202:16FF:FE83:17C7

☐ Top

7. Uji coba koneksi dari PC-lokal ke web server
   - Ping terhadap IP asli dari web server(10.0.0.2)


```
C:\>ping 10.0.0.2

Pinging 10.0.0.2 with 32 bytes of data:

Reply from 30.0.0.1: Destination host unreachable.
Reply from 30.0.0.1: Destination host unreachable.
Reply from 30.0.0.1: Destination host unreachable.
Reply from 30.0.0.1: Destination host unreachable.

Ping statistics for 10.0.0.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
```

   - Ping terhadap ip public dari web server(50.0.0.1)

```
C:\>ping 50.0.0.1

Pinging 50.0.0.1 with 32 bytes of data:

Reply from 50.0.0.1: bytes=32 time=2ms TTL=126
Reply from 50.0.0.1: bytes=32 time=1ms TTL=126
Reply from 50.0.0.1: bytes=32 time=10ms TTL=126
Reply from 50.0.0.1: bytes=32 time=1ms TTL=126

Ping statistics for 50.0.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 10ms, Average = 3ms
```
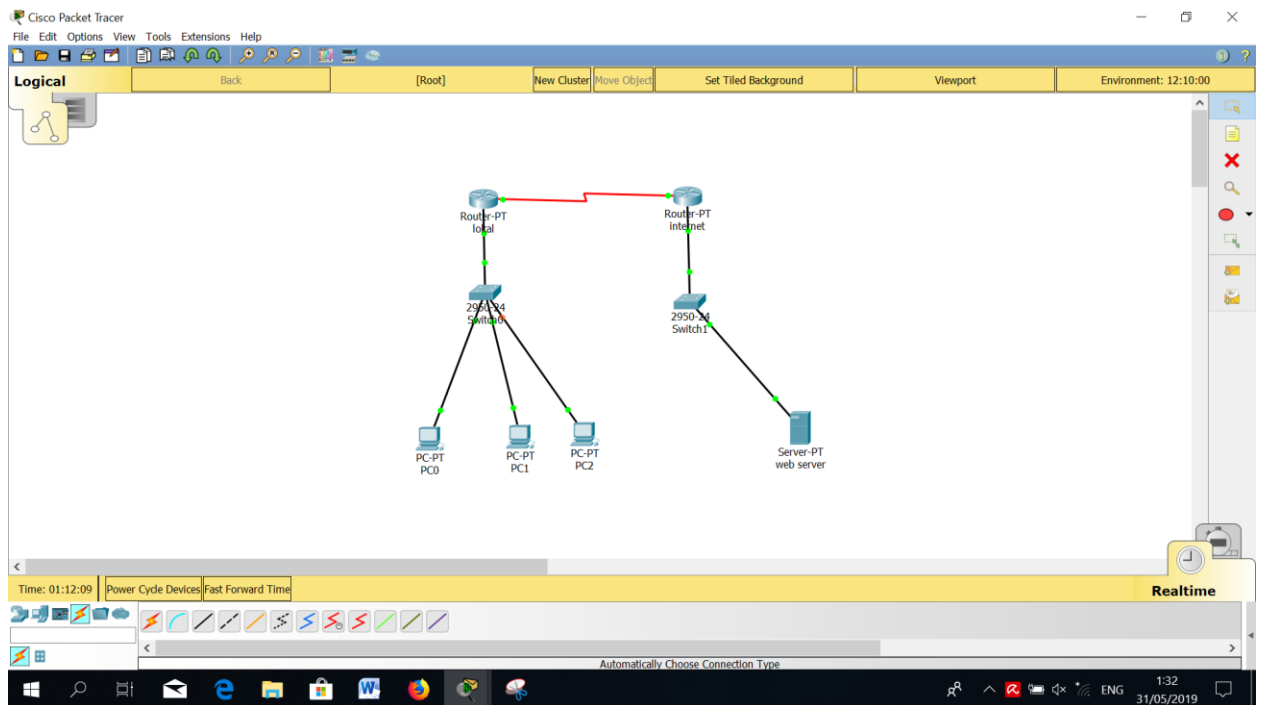
KEMBANGKAN TOPOLOGI

1. Topologi

2. Konfigurasi pc 1

PC1 — □ ✕

Physical | Config | Desktop | Programming | Attributes

| GLOBAL |
| Settings |
| Algorithm Settings |
| INTERFACE |
| FastEthernet0 |
| Bluetooth |

FastEthernet0

Port Status ☑ On

Bandwidth ○ 100 Mbps ○ 10 Mbps ☑ Auto

Duplex ○ Half Duplex ○ Full Duplex ☑ Auto

MAC Address 0002.1683.17C7

IP Configuration

○ DHCP
◉ Static

IP Address 30.0.0.3

Subnet Mask 255.0.0.0

IPv6 Configuration

○ DHCP
○ Auto Config
◉ Static

IPv6 Address [ ] / [ ]

Link Local Address: FE80::202:16FF:FE83:17C7

☐ Top

3. Konfigurasi pc 2

PC2   — □ ✕

Physical | Config | Desktop | Programming | Attributes

| GLOBAL |
| Settings |
| Algorithm Settings |
| INTERFACE |
| FastEthernet0 |
| Bluetooth |

FastEthernet0

Port Status   ☑ On
Bandwidth   ○ 100 Mbps ○ 10 Mbps ☑ Auto
Duplex   ○ Half Duplex ● Full Duplex ☑ Auto
MAC Address   0030.A358.DD16

IP Configuration
  ○ DHCP
  ● Static
  IP Address   30.0.0.4
  Subnet Mask   255.0.0.0

IPv6 Configuration
  ○ DHCP
  ○ Auto Config
  ● Static
  IPv6 Address   /
  Link Local Address: FE80::230:A3FF:FE58:DD16

☐ Top
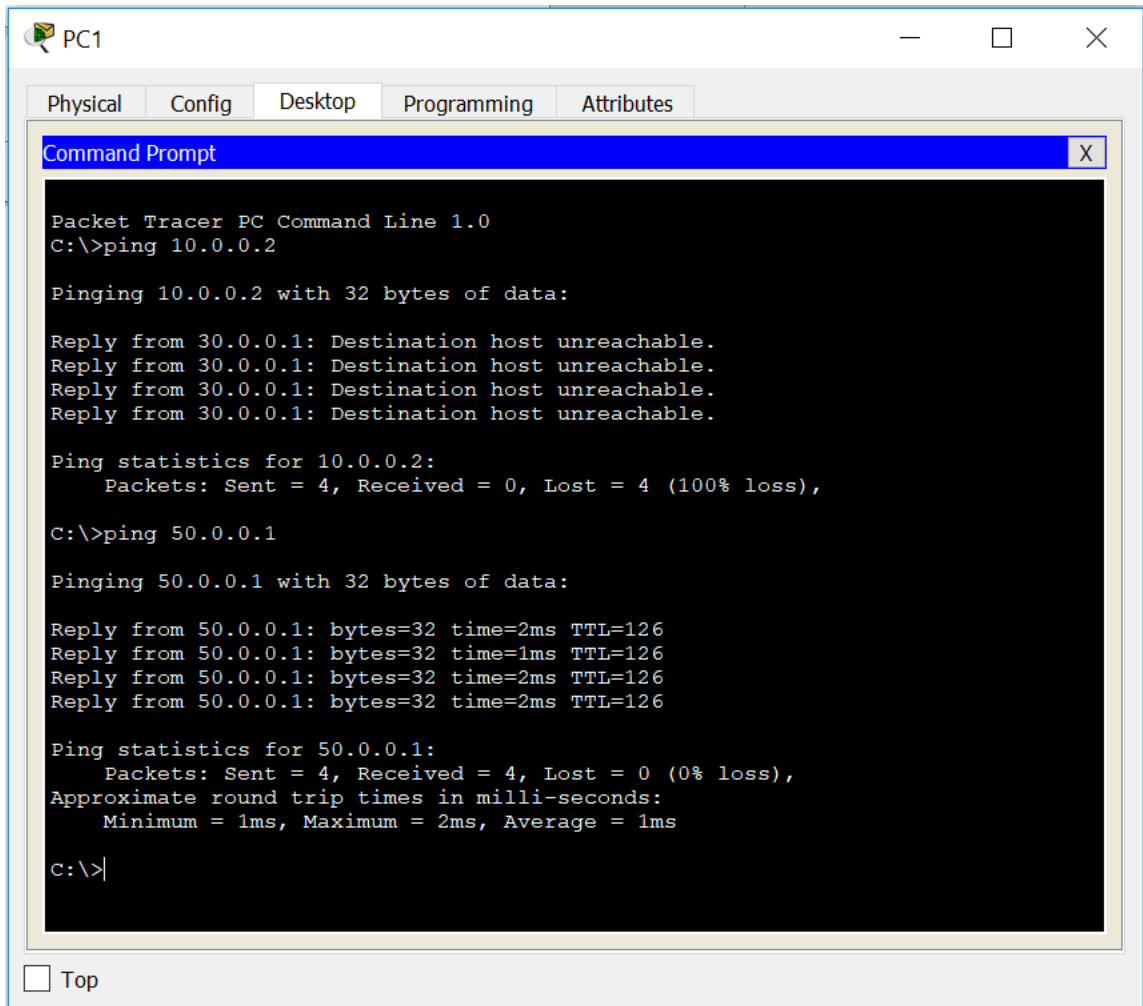
4. Uji koneksi pc1

5. Uji koneksi pc 2

PC2 — □ ×

Physical | Config | Desktop | Programming | Attributes

Command Prompt [X]

```
Ping statistics for 10.0.0.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ping 10.0.0.2

Pinging 10.0.0.2 with 32 bytes of data:

Reply from 30.0.0.1: Destination host unreachable.
Reply from 30.0.0.1: Destination host unreachable.
Reply from 30.0.0.1: Destination host unreachable.
Reply from 30.0.0.1: Destination host unreachable.

Ping statistics for 10.0.0.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>ping 50.0.0.1

Pinging 50.0.0.1 with 32 bytes of data:

Reply from 50.0.0.1: bytes=32 time=1ms TTL=126
Reply from 50.0.0.1: bytes=32 time=2ms TTL=126
Reply from 50.0.0.1: bytes=32 time=1ms TTL=126
Reply from 50.0.0.1: bytes=32 time=1ms TTL=126

Ping statistics for 50.0.0.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 2ms, Average = 1ms

C:\>
```

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