

**LAPORAN KUIS  
JARINGAN KOMPUTER**

**Kuis – 2**



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**JURUSAN TEKNOLOGI INFORMASI  
POLITEKNIK NEGERI MALANG  
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Tugas

1. Tentukan berapa subnet yang dibutuhkan untuk dibuat
    - a. Buat subnet seefisien mungkin sesuai kebutuhan
      - PC0 : 25 host (/27)
      - PC1 : 13 host (/28)
      - PC2 : 13 host (/28)
    - b. Tuliskan perhitungan subnet yang dibutuhkan
      - PC0: Butuh 25 →  $2^5 = 32$  → subnet /27
      - PC1: Butuh 13 →  $2^4 = 16$  → subnet /28
      - PC2: Butuh 13 →  $2^4 = 16$  → subnet /28
  2. Terapkan subnetting pada no.1 dalam packet tracer
    - a. Screenshot Langkah-langkah konfigurasi
    - b. Beri nama dan secret password untuk tiap router (bebas)
    - c. Buat dan screenshot tabel routing pada tiap router agar setiap pc bisa ping pc yang lain

Router 4

```

Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname Ghoффar4
Ghoффar4(config)#enable secret 12345
Ghoффar4(config)#exit
Ghoффar4#
%SYS-5-CONFIG_I: Configured from console by console

Ghoффar#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Ghoффar4(config)#interface fastethernet0/0
Ghoффar4(config-if)#ip address 192.168.13.9 255.255.255.224
Ghoффar4(config-if)#no shutdown

Ghoффar4(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

Ghoффar4(config-if)#exit
Ghoффar4(config)#interface fastethernet0/1
Ghoффar4(config-if)#ip address 192.168.13.78 255.255.255.252
Ghoффar4(config-if)#no shutdown

Ghoффar4(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

Ghoффар4(config-if)#exit
Ghoффар4(config)#
Ghoффар4#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

          192.168.13.0/24 is variably subnetted, 2 subnets, 2 masks
C           192.168.13.0/27 is directly connected, FastEthernet0/0
C           192.168.13.76/30 is directly connected, FastEthernet0/1
Ghoффар4#

```

## Router 0

```

Router#enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#hostname Ghoffar0
Ghoffer0(config)#enable secret 12345
Ghoffer0(config)#interface fastethernet0/0
Ghoffer0(config-if)#ip address 192.168.13.65 255.255.255.252
Ghoffer0(config-if)#no shutdown

Ghoffer0(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

Ghoffer0(config-if)#exit
Ghoffer0(config)#interface fastethernet0/1
Ghoffer0(config-if)#ip address 192.168.13.70 255.255.255.252
Ghoffer0(config-if)#no shutdown

Ghoffer0(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

Ghoffer0(config-if)#exit
Ghoffer0(config)#interface ethernet0/0/0
Ghoffer0(config-if)#ip address 192.168.13.73 255.255.255.252
Ghoffer0(config-if)#no shutdown

Ghoffer0(config-if)#
%LINK-5-CHANGED: Interface Ethernet0/0/0, changed state to up

Ghoffer0(config-if)#exit
Ghoffer0(config)#

```

Ghoffer0#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

	192.168.13.0/24 is variably subnetted, 5 subnets, 3 masks
S	192.168.13.32/27 [1/0] via 192.168.13.65
S	192.168.13.32/28 [1/0] via 192.168.13.65
C	192.168.13.64/30 is directly connected, FastEthernet0/0
C	192.168.13.68/30 is directly connected, FastEthernet0/1
C	192.168.13.72/30 is directly connected, Ethernet0/0

Ghoffer0#

## Router 2

```

Ghoffar2>enable
Password:
Ghoffar2#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Ghoffar2(config)#interface fastethernet0/0
Ghoffar2(config-if)#ip address 192.168.13.49 255.255.255.240
Ghoffar2(config-if)#no shutdown

Ghoffar2(config-if)# %LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
Ghoffar2(config-if)#exit
Ghoffar2(config)#interface fastethernet0/1
Ghoffar2(config-if)#ip address 192.168.13.74 255.255.255.252
Ghoffar2(config-if)#no shutdown

Ghoffar2(config-if)# %LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
Ghoffar2(config-if)#exit
Ghoffar2(config)#

```

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```

Ghoffar2#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

      192.168.13.0/24 is variably subnetted, 2 subnets, 2 masks
C        192.168.13.48/28 is directly connected, FastEthernet0/0
C        192.168.13.72/30 is directly connected, FastEthernet0/1

Ghoffar2#

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## Router 3

```

Ghoffar3>enable
Password:
Ghoffar3#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Ghoffar3(config)#interface fastethernet0/0
Ghoffar3(config-if)#ip address 192.168.13.33 255.255.255.240
Ghoffar3(config-if)#no shutdown

Ghoffar3(config-if)# %LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
Ghoffar3(config-if)#exit
Ghoffar3(config)#interface fastethernet0/1
Ghoffar3(config-if)#ip address 192.168.13.66 255.255.255.252
Ghoffar3(config-if)#no shutdown

Ghoffar3(config-if)# %LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up
Ghoffar3(config-if)#exit
Ghoffar3(config)#

```

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```

Ghoffar3#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

      192.168.13.0/24 is variably subnetted, 2 subnets, 2 masks
C        192.168.13.32/28 is directly connected, FastEthernet0/0
C        192.168.13.64/30 is directly connected, FastEthernet0/1

Ghoffar3#

```

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## Running

### 3. Screenshot hasil konfigurasi running dan startup serta :

- ping PC0 ke PC1

```

C:\>ping 192.168.13.34

Pinging 192.168.13.34 with 32 bytes of data:

Reply from 192.168.13.9: Destination host unreachable.

Ping statistics for 192.168.13.34:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

```

- ping PC0 ke PC2

```

C:\>ping 192.168.13.130

Pinging 192.168.13.130 with 32 bytes of data:

Reply from 192.168.13.9: Destination host unreachable.
Request timed out.
Reply from 192.168.13.9: Destination host unreachable.
Reply from 192.168.13.9: Destination host unreachable.

Ping statistics for 192.168.13.130:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

```

- ping PC1 ke PC2

```

Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.13.130

Pinging 192.168.13.130 with 32 bytes of data:

Reply from 192.168.13.33: Destination host unreachable.

Ping statistics for 192.168.13.130:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

```

4. Buat dan kumpulkan laporan (dalam bentuk pdf) dan hasil paket tracer (dalam bentuk pkt)

