

**LAPORAN KUIS
JARINGAN KOMPUTER**

Kuis – 2



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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 $25 \rightarrow 2^5 = 32 \rightarrow$ subnet /27
 - PC1: Butuh $13 \rightarrow 2^4 = 16 \rightarrow$ subnet /28
 - PC2: Butuh $13 \rightarrow 2^4 = 16 \rightarrow$ 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 Ghoffar4
Ghoffar4(config)#enable secret 12345
Ghoffar4(config)#exit
Ghoffar4#
%SYS-5-CONFIG_I: Configured from console by console

Ghoffar4#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Ghoffar4(config)#interface fastethernet0/0
Ghoffar4(config-if)#ip address 192.168.13.9 255.255.255.224
Ghoffar4(config-if)#no shutdown

Ghoffar4(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

Ghoffar4(config-if)#exit
Ghoffar4(config)#interface fastethernet0/1
Ghoffar4(config-if)#ip address 192.168.13.78 255.255.255.252
Ghoffar4(config-if)#no shutdown

Ghoffar4(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

Ghoffar4(config-if)#exit
Ghoffar4(config)#

Ghoffar4#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

Ghoffar4#
```

Router 0

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

Ghoffar0(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

Ghoffar0(config-if)#exit
Ghoffar0(config)#interface fastethernet0/1
Ghoffar0(config-if)#ip address 192.168.13.70 255.255.255.252
Ghoffar0(config-if)#no shutdown

Ghoffar0(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

Ghoffar0(config-if)#exit
Ghoffar0(config)#interface ethernet0/0/0
Ghoffar0(config-if)#ip address 192.168.13.73 255.255.255.252
Ghoffar0(config-if)#no shutdown

Ghoffar0(config-if)#
%LINK-5-CHANGED: Interface Ethernet0/0/0, changed state to up

Ghoffar0(config-if)#exit
Ghoffar0(config)#

Ghoffar0#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 192.168.13.69
S       192.168.13.32/28 [1/0] via 192.168.13.69
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, Ethernet0/0/0

Ghoffar0#
```

Router 2

<pre>Ghoffer2>enable Password: Ghoffer2#configure terminal Enter configuration commands, one per line. End with CNTL/Z. Ghoffer2(config)#interface fastEthernet0/0 Ghoffer2(config-if)#ip address 192.168.13.49 255.255.255.240 Ghoffer2(config-if)#no shutdown Ghoffer2(config-if)# %LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up Ghoffer2(config-if)#exit Ghoffer2(config)#interface fastEthernet0/1 Ghoffer2(config-if)#ip address 192.168.13.74 255.255.255.252 Ghoffer2(config-if)#no shutdown Ghoffer2(config-if)# %LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up Ghoffer2(config-if)#exit Ghoffer2(config)#</pre>	<pre>Ghoffer2#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 Ghoffer2#</pre>
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Router 3

<pre>Ghoffer3>enable Password: Ghoffer3#configure terminal Enter configuration commands, one per line. End with CNTL/Z. Ghoffer3(config)#interface fastEthernet0/0 Ghoffer3(config-if)#ip address 192.168.13.33 255.255.255.240 Ghoffer3(config-if)#no shutdown Ghoffer3(config-if)# %LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up Ghoffer3(config-if)#exit Ghoffer3(config)#interface fastEthernet0/1 Ghoffer3(config-if)#ip address 192.168.13.66 255.255.255.252 Ghoffer3(config-if)#no shutdown Ghoffer3(config-if)# %LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up Ghoffer3(config-if)#exit Ghoffer3(config)#</pre>	<pre>Ghoffer3#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 Ghoffer3#</pre>
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Running

3. Screenshot hasil konfigurasi running dan startup serta :

a. 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.
Reply from 192.168.13.9: Destination host unreachable.
Reply from 192.168.13.9: Destination host unreachable.
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),

C:\>
```

b. 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),

C:\>
```

c. 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.
Reply from 192.168.13.33: Destination host unreachable.
Reply from 192.168.13.33: Destination host unreachable.
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),

C:\>
```

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

