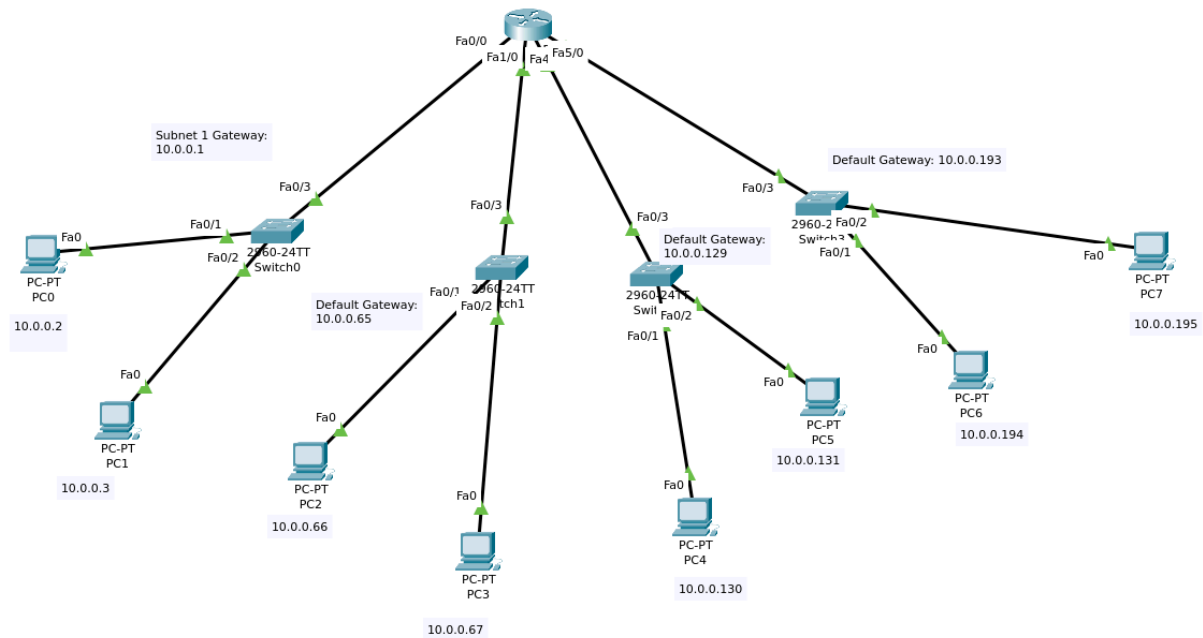Q3)

SUBNET MASK = 255.255.255.192
Network Topology:

SUBNET 1:
Default Gateway: 10.0.0.1
PC0: 10.0.0.2
PC1: 10.0.0.3

SUBNET 2:
Default Gateway: 10.0.0.65
PC2: 10.0.0.66
PC3: 10.0.0.67

SUBNET 3:
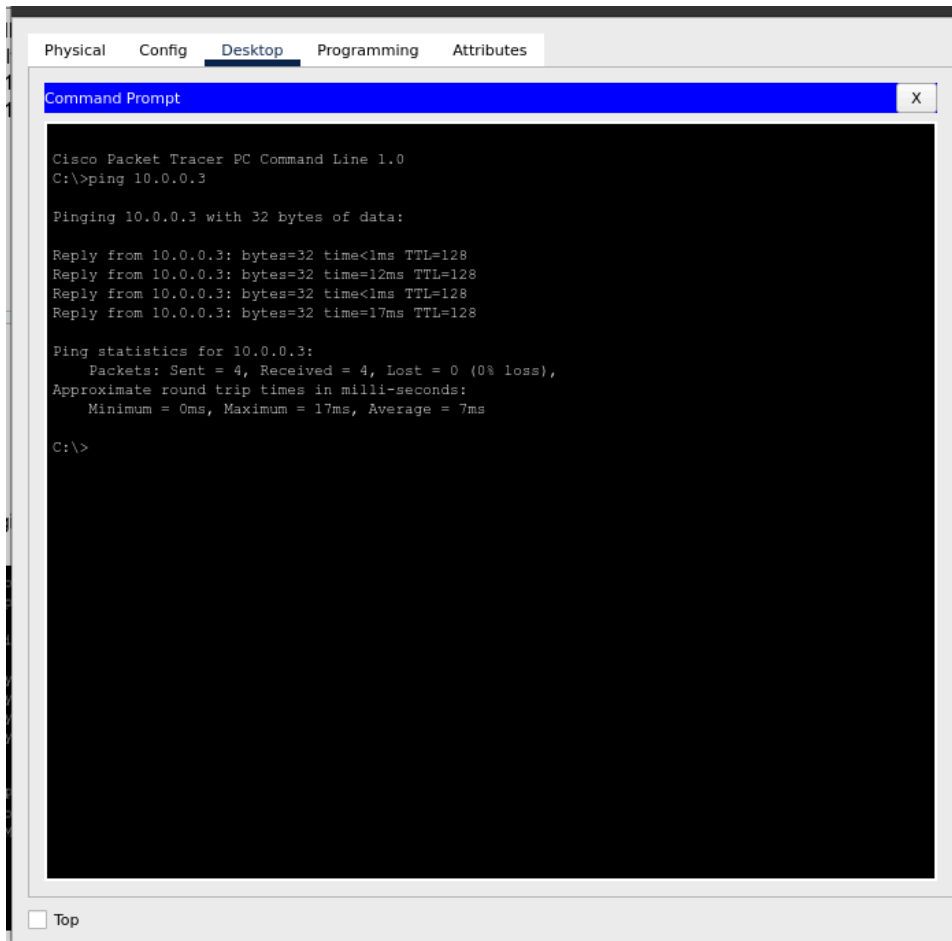Default Gateway: 10.0.0.129
PC4: 10.0.0.130
PC5: 10.0.0.131

SUBNET 4:
Default Gateway: 10.0.0.193
PC6: 10.0.0.194
PC7: 10.0.0.195

PING:

i) Pinging from PC0 to PC1 (SUBNET 1 to SUBNET 1)

```
Physical    Config    Desktop    Programming    Attributes

Command Prompt                                                    X

Cisco Packet Tracer PC Command Line 1.0
C:\>ping 10.0.0.3

Pinging 10.0.0.3 with 32 bytes of data:

Reply from 10.0.0.3: bytes=32 time<1ms TTL=128
Reply from 10.0.0.3: bytes=32 time=12ms TTL=128
Reply from 10.0.0.3: bytes=32 time<1ms TTL=128
Reply from 10.0.0.3: bytes=32 time=17ms TTL=128

Ping statistics for 10.0.0.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 17ms, Average = 7ms

C:\>
```

Top

ii) PC0 to PC2 (SUBNET 1 to SUBNET 2):

```
Pinging 10.0.0.66 with 32 bytes of data:

Reply from 10.0.0.66: bytes=32 time<1ms TTL=127
Reply from 10.0.0.66: bytes=32 time=11ms TTL=127
Reply from 10.0.0.66: bytes=32 time=1ms TTL=127
Reply from 10.0.0.66: bytes=32 time<1ms TTL=127

Ping statistics for 10.0.0.66:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 11ms, Average = 3ms

C:\>
```

iii) PC0 to PC4 (SUBNET 1 to SUBNET 3):

```
C:\>ping 10.0.0.130

Pinging 10.0.0.130 with 32 bytes of data:

Request timed out.
Reply from 10.0.0.130: bytes=32 time=1ms TTL=127
Reply from 10.0.0.130: bytes=32 time=17ms TTL=127
Reply from 10.0.0.130: bytes=32 time<1ms TTL=127

Ping statistics for 10.0.0.130:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 17ms, Average = 6ms

C:\>
```

iv) PC0 to PC6

```
C:\>ping 10.0.0.194

Pinging 10.0.0.194 with 32 bytes of data:

Request timed out.
Reply from 10.0.0.194: bytes=32 time=18ms TTL=127
Reply from 10.0.0.194: bytes=32 time<1ms TTL=127
Reply from 10.0.0.194: bytes=32 time<1ms TTL=127

Ping statistics for 10.0.0.194:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 18ms, Average = 6ms
```