

Task#1

```
Router>enable
Router#config terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface Gigabit0/0/0
^
% Invalid input detected at '^' marker.

Router(config)#interface Gig0/0/0
^
% Invalid input detected at '^' marker.

Router(config)#interface
Router(config)#interface GigabitEthernet0/0/0
Router(config-if)#ip address 10.20.0.4 255.0.0.0
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0/0,
changed state to up
Router(config-if)#
```

PC0

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface: FastEthernet0

IP Configuration

☐ DHCP ☒ Static This address is already used in the network.

IP Address: 10.20.0.5

Subnet Mask: 255.0.0.0

Default Gateway: 10.20.0.1

DNS Server: 0.0.0.0

IPv6 Configuration

☐ DHCP ☐ Auto Config ☒ Static

IPv6 Address: /

Link Local Address: FE80::240:BFF:FE6E:565E

IPv6 Gateway:

IPv6 DNS Server:

802.1X

☐ Use 802.1X Security

Press RETURN to get started!

```
Router>enable
Router#config terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface GigabitEthernet0/0/1
Router(config-if)#ip address 10.20.0.8 255.0.0.0
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0/1,
changed state to up

Router(config-if)#exit
Router(config)#
```

Router1

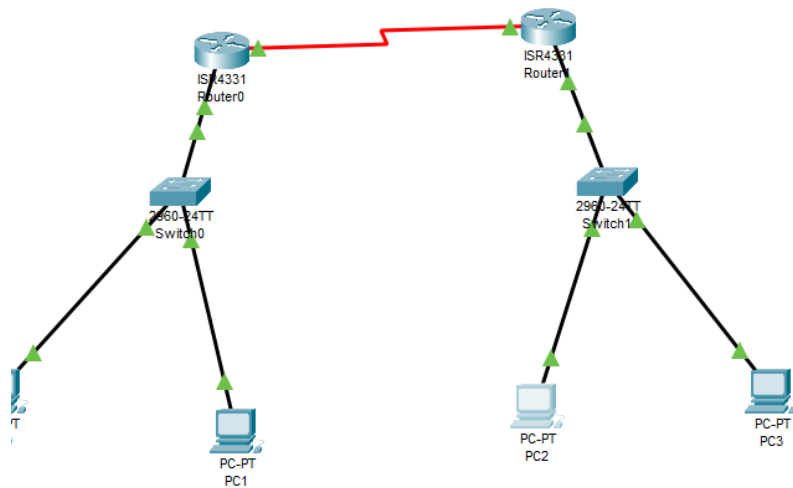
Physical Config **CLI** Attributes

IOS Command Line Interface

```
Router>enable
Router#config terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface GigabitEthernet0/0/1
Router(config-if)#ip address 192.168.60.65 255.255.255.224
Router(config-if)#no shutdown
Router(config-if)#exit
Router(config)#interface se 2/0
%Invalid interface type and number
Router(config)#interface serial0/1/0
Router(config-if)#ip address 192.168.60.130 255.255.255.24
Bad mask 0xFFFFF18 for address 192.168.60.130
Router(config-if)#no shutdown

Router(config-if)#
%LINK-5-CHANGED: Interface Serial0/1/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/1/0, changed
state to up
```



```
Pinging 10.20.0.4 with 32 bytes of data:

Reply from 10.20.0.4: bytes=32 time<1ms TTL=255
Reply from 10.20.0.4: bytes=32 time<1ms TTL=255
Reply from 10.20.0.4: bytes=32 time<1ms TTL=255
Reply from 10.20.0.4: bytes=32 time=1ms TTL=255

Ping statistics for 10.20.0.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

C:\>
```

Task#2

Task #2

For Development: 120 PCs $\Rightarrow 2^7 - 2 = 126$

For Finance: 35 PCs $\Rightarrow 2^6 - 2 = 62$

For HR: 10 PCs $\Rightarrow 2^4 - 2 = 14$

Now Subnet Mask

Subnet 1: $200.16.100.0/26$ (62 hosts)

Subnet 2: $200.16.100.64/26$ (62 hosts)

Subnet 3: $200.16.100.128/26$ (62 hosts)

Subnet 4: $200.16.100.192/26$ (62 hosts)

Development
Subnet

HR: $200.16.100.0 - 200.16.100.63$

Finance: $200.16.100.64 - 200.16.100.127$

Development: $200.16.100.128 - 200.16.100.255$