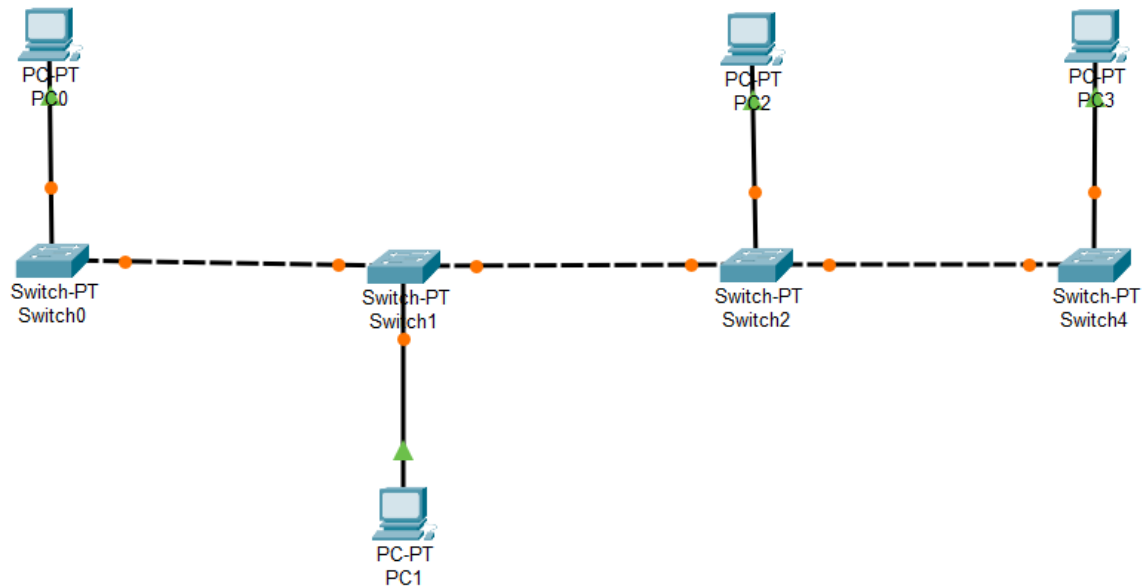


Muhammad Basil k

AM.EN.U4ECE22025

Bus topology:



PC0

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 220.25.2.5

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

PC1

Physical Config Desktop Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 220.25.2.6

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

PC2

Physical Config Desktop Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

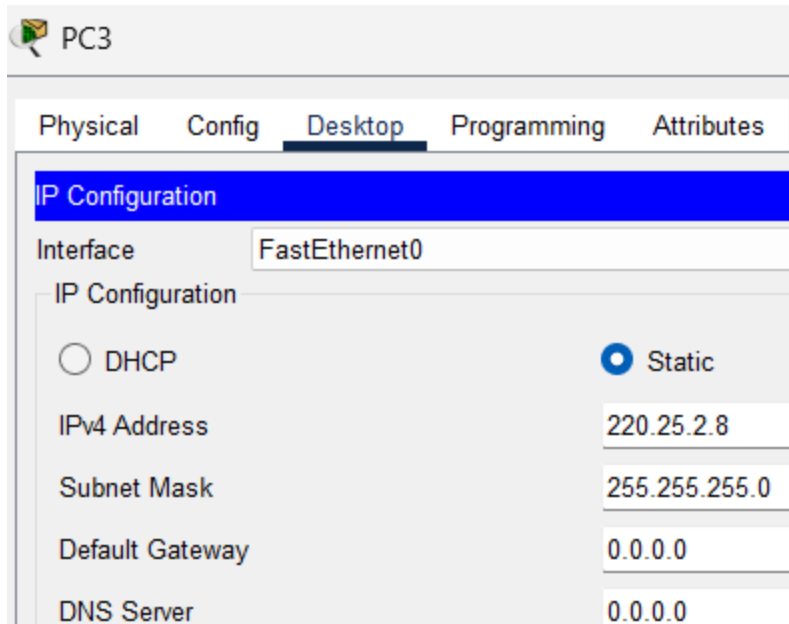
☐ DHCP ☒ Static

IPv4 Address 220.25.2.7

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0



```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 220.25.2.8

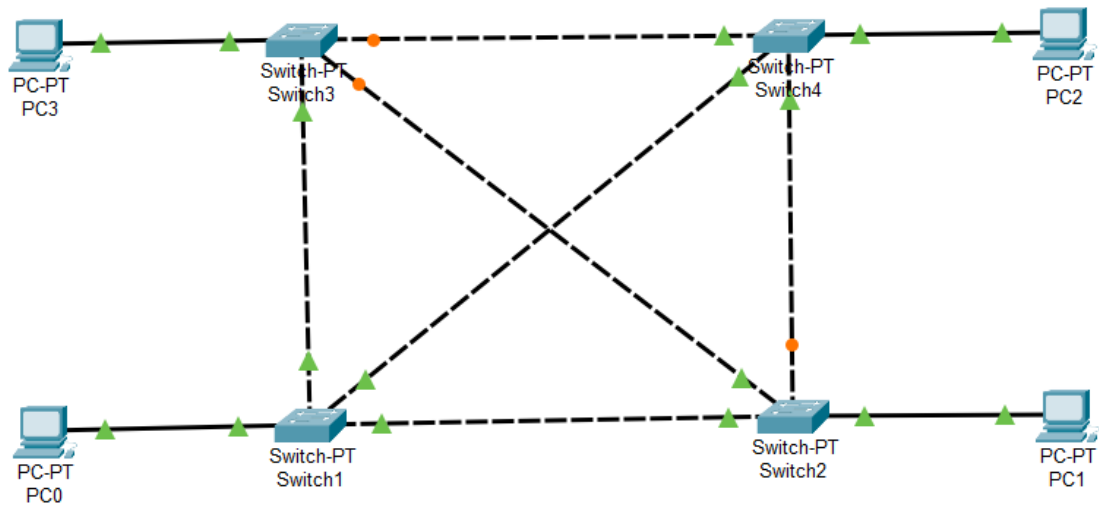
Pinging 220.25.2.8 with 32 bytes of data:

Reply from 220.25.2.8: bytes=32 time=11ms TTL=128
Reply from 220.25.2.8: bytes=32 time=10ms TTL=128
Reply from 220.25.2.8: bytes=32 time=10ms TTL=128
Reply from 220.25.2.8: bytes=32 time=10ms TTL=128

Ping statistics for 220.25.2.8:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 10ms, Maximum = 11ms, Average = 10ms

C:\>|
```

Mesh topology:



PC0

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 220.25.2.5

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0



PC1

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 220.25.2.6

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0



PC2

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

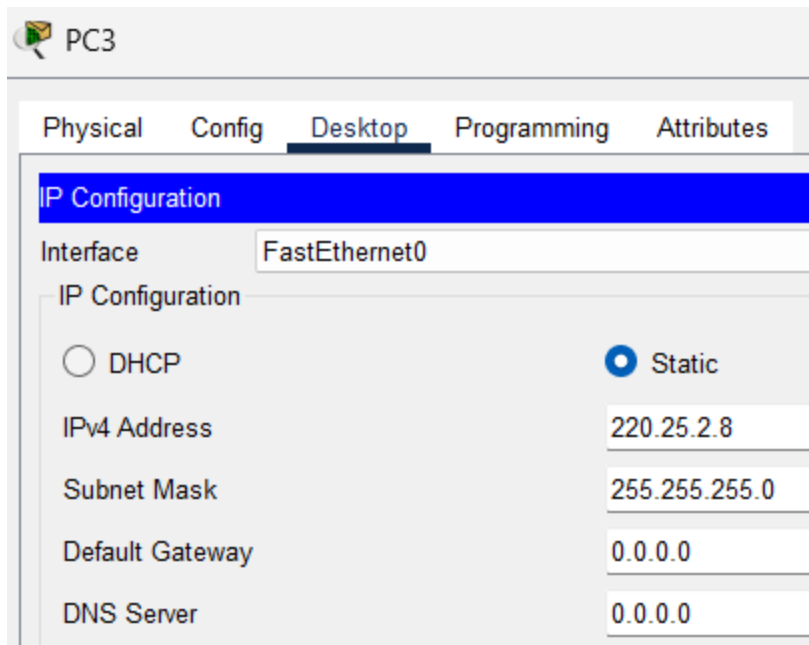
☐ DHCP ☒ Static

IPv4 Address 220.25.2.7

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0



```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 220.25.2.7

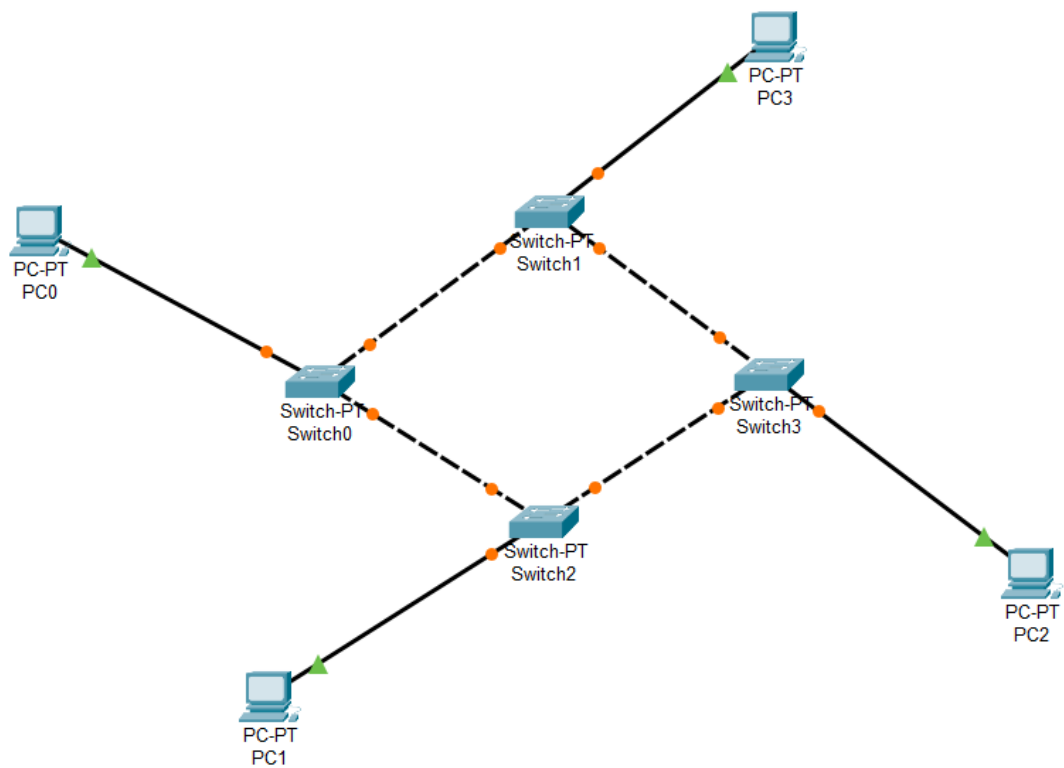
Pinging 220.25.2.7 with 32 bytes of data:

Reply from 220.25.2.7: bytes=32 time=9ms TTL=128
Reply from 220.25.2.7: bytes=32 time=8ms TTL=128
Reply from 220.25.2.7: bytes=32 time=8ms TTL=128
Reply from 220.25.2.7: bytes=32 time=8ms TTL=128

Ping statistics for 220.25.2.7:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 8ms, Maximum = 9ms, Average = 8ms

C:\>|
```

Ring topology:



PC0

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 220.25.2.5

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

PC1

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 220.25.2.6

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

PC2

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

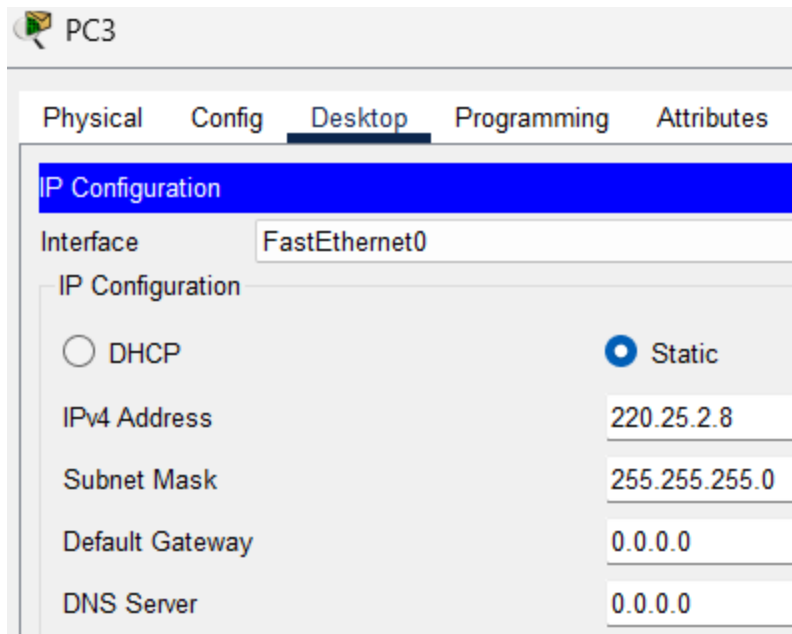
☐ DHCP ☒ Static

IPv4 Address 220.25.2.7

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0



```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 220.25.2.8

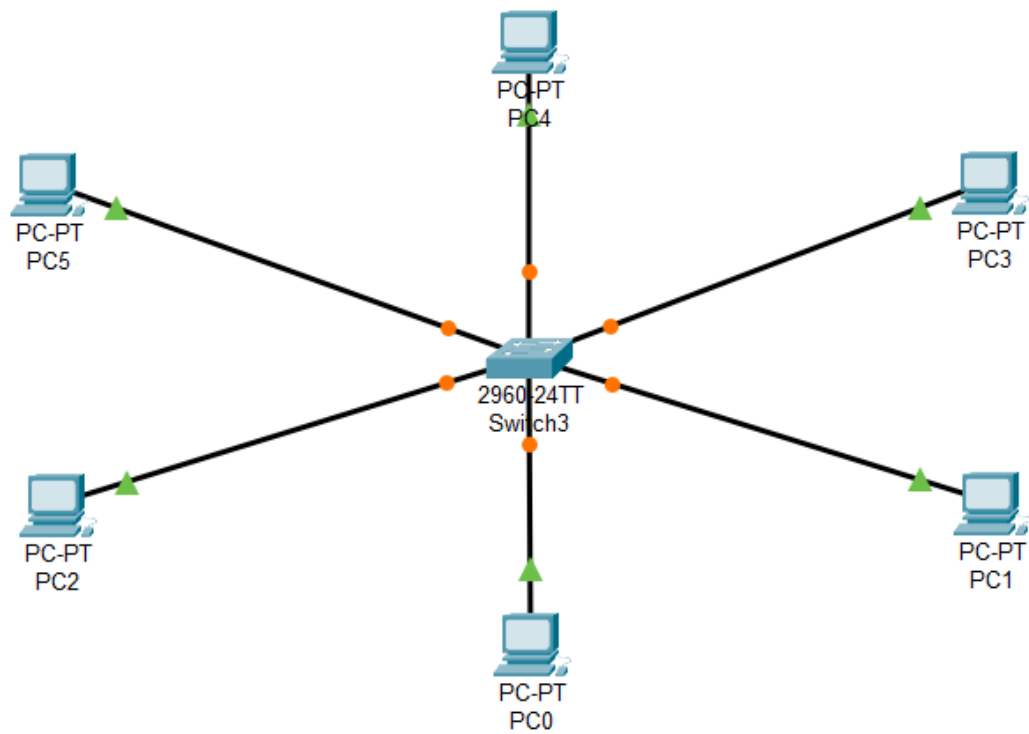
Pinging 220.25.2.8 with 32 bytes of data:

Reply from 220.25.2.8: bytes=32 time=7ms TTL=128
Reply from 220.25.2.8: bytes=32 time=6ms TTL=128
Reply from 220.25.2.8: bytes=32 time=6ms TTL=128
Reply from 220.25.2.8: bytes=32 time=6ms TTL=128

Ping statistics for 220.25.2.8:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 6ms, Maximum = 7ms, Average = 6ms

C:\>
```

Star topology:



PC0

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 220.25.2.5

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

PC1

Physical Config Desktop Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 220.25.2.6

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

PC3

Physical Config Desktop Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 220.25.2.7

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0



PC4

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 220.25.2.8

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0



PC5

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

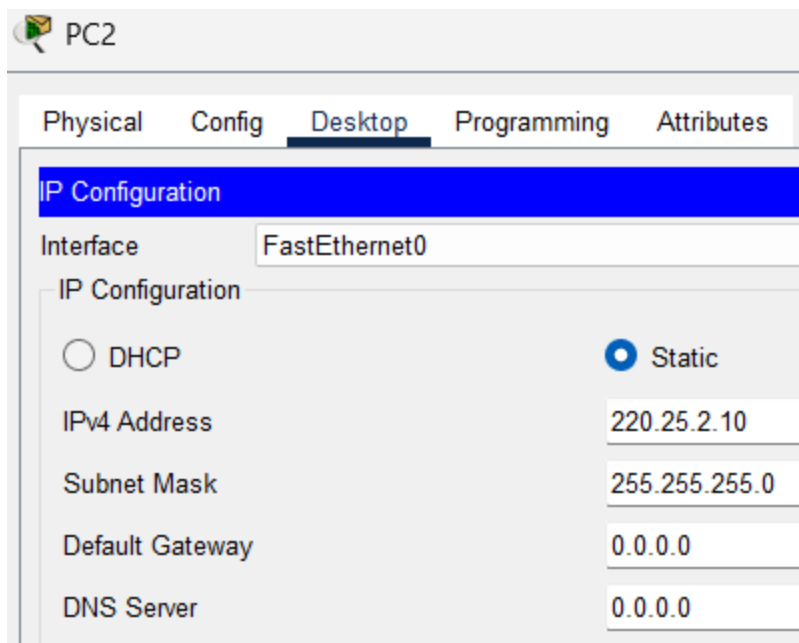
☐ DHCP ☒ Static

IPv4 Address 220.25.2.9

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0



```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 220.25.2.6

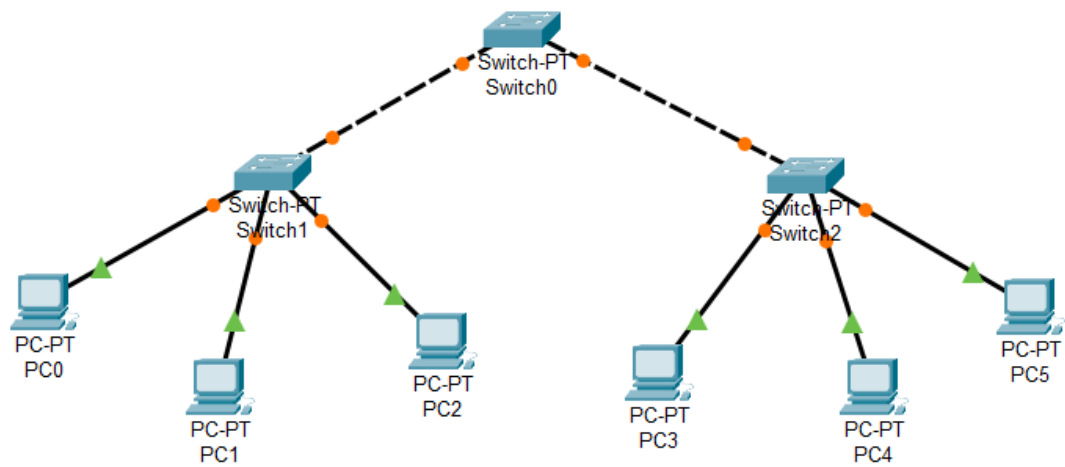
Pinging 220.25.2.6 with 32 bytes of data:

Reply from 220.25.2.6: bytes=32 time=5ms TTL=128
Reply from 220.25.2.6: bytes=32 time=4ms TTL=128
Reply from 220.25.2.6: bytes=32 time=4ms TTL=128
Reply from 220.25.2.6: bytes=32 time=4ms TTL=128

Ping statistics for 220.25.2.6:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 4ms, Maximum = 5ms, Average = 4ms

C:\>|
```

Tree topology:



PC0

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface: FastEthernet0

IP Configuration


☐ DHCP ☒ Static

IPv4 Address: 220.25.2.5

Subnet Mask: 255.255.255.0

Default Gateway: 0.0.0.0

DNS Server: 0.0.0.0

 PC1

Physical Config Desktop Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration


☐ DHCP ☒ Static

IPv4 Address 220.25.2.6

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

 PC2

Physical Config Desktop Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 220.25.2.7

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

PC3

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 220.25.2.8

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

PC4

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 220.25.2.9

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

PC5

Physical Config **Desktop** Programming Attributes

IP Configuration

Interface FastEthernet0

IP Configuration

☐ DHCP ☒ Static

IPv4 Address 220.25.2.10

Subnet Mask 255.255.255.0

Default Gateway 0.0.0.0

DNS Server 0.0.0.0

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 220.25.2.8

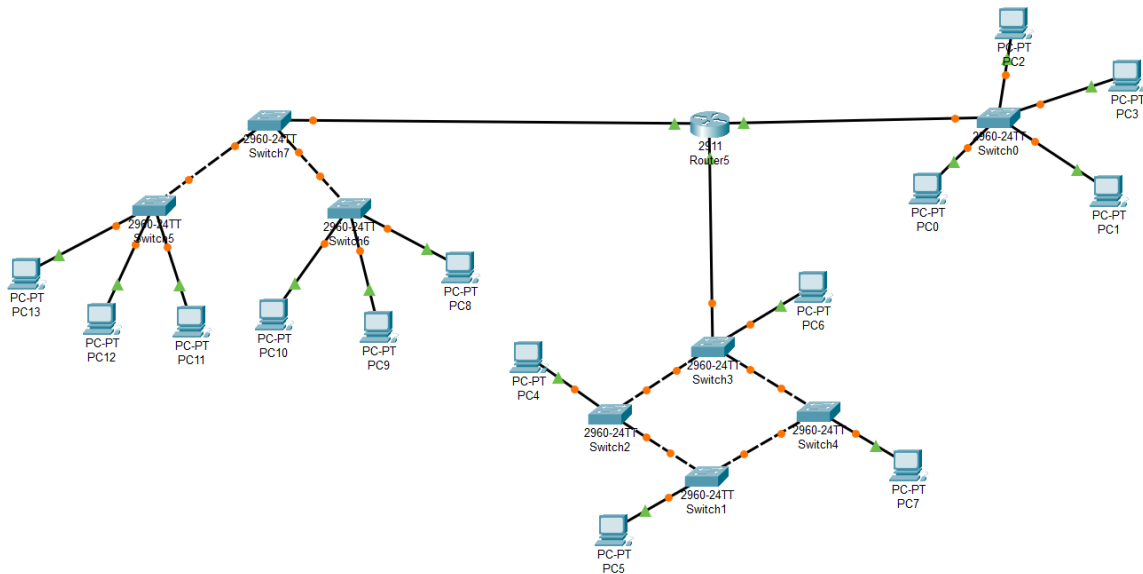
Pinging 220.25.2.8 with 32 bytes of data:

Reply from 220.25.2.8: bytes=32 time=9ms TTL=128
Reply from 220.25.2.8: bytes=32 time=8ms TTL=128
Reply from 220.25.2.8: bytes=32 time=8ms TTL=128
Reply from 220.25.2.8: bytes=32 time=8ms TTL=128

Ping statistics for 220.25.2.8:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 8ms, Maximum = 9ms, Average = 8ms

C:\>|
```

Q2) 3 LAN network connected via single router:



Router config for each Topology:

Router5

Physical **Config** CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0

GigabitEthernet0/1

GigabitEthernet0/2

GigabitEthernet0/0

Port Status ☒ On

Bandwidth ☐ 1000 Mbps ☐ 100 Mbps ☐ 10 Mbps ☒ Auto

Duplex ☐ Half Duplex ☒ Full Duplex ☒ Auto

MAC Address 0050.0F7B.8801

IP Configuration

IPv4 Address 220.25.2.9

Subnet Mask 255.255.255.0

Tx Ring Limit 10

Router5

Physical Config CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0

GigabitEthernet0/1

GigabitEthernet0/2

GigabitEthernet0/1

Port Status

Bandwidth

Duplex

MAC Address

IP Configuration

IPv4 Address

Subnet Mask

Tx Ring Limit

☒ On
 ☐ 1000 Mbps
 ☐ 100 Mbps
 ☐ 10 Mbps
 ☒ Auto

☐ Half Duplex
 ☒ Full Duplex
 ☒ Auto

0050.0F7B.8802

220.25.3.9

255.255.255.0

10

Router5

Physical Config CLI Attributes

GLOBAL

Settings

Algorithm Settings

ROUTING

Static

RIP

SWITCHING

VLAN Database

INTERFACE

GigabitEthernet0/0

GigabitEthernet0/1

GigabitEthernet0/2

GigabitEthernet0/2

Port Status

Bandwidth

Duplex

MAC Address

IP Configuration

IPv4 Address

Subnet Mask

Tx Ring Limit

☒ On
 ☐ 1000 Mbps
 ☒ 100 Mbps
 ☐ 10 Mbps
 ☒ Auto

☐ Half Duplex
 ☒ Full Duplex
 ☒ Auto

0050.0F7B.8803

220.25.1.9

255.255.255.0

10

Fire	Last Status	Source	Destination	Type	Color	Time(sec)	Periodic	Num	Edit	Delete
	Successful	PC3	PC6	ICMP		0.000	N	0	(edit)	(delete)
	Successful	PC4	PC8	ICMP		0.000	N	1	(edit)	(delete)
	Successful	PC13	PC1	ICMP		0.000	N	2	(edit)	(delete)

From 220.25.1.8 to 220.25.2.6:

PC13

Physical Config Desktop Programming Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 220.25.2.6

Pinging 220.25.2.6 with 32 bytes of data:

Reply from 220.25.2.6: bytes=32 time=11ms TTL=127
Reply from 220.25.2.6: bytes=32 time=10ms TTL=127
Reply from 220.25.2.6: bytes=32 time=10ms TTL=127
Reply from 220.25.2.6: bytes=32 time=10ms TTL=127

Ping statistics for 220.25.2.6:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 10ms, Maximum = 11ms, Average = 10ms
```

From 220.25.2.8 to 220.25.3.7:

PC3

Physical Config Desktop Programming Attributes

Command Prompt

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 220.25.3.7

Pinging 220.25.3.7 with 32 bytes of data:

Reply from 220.25.3.7: bytes=32 time=10ms TTL=127
Reply from 220.25.3.7: bytes=32 time=8ms TTL=127
Reply from 220.25.3.7: bytes=32 time=9ms TTL=127
Reply from 220.25.3.7: bytes=32 time=8ms TTL=127

Ping statistics for 220.25.3.7:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 8ms, Maximum = 10ms, Average = 8ms

C:\>
```

From 220.25.3.5 to 220.25.1.3:

Command Prompt

Cisco Packet Tracer PC Command Line 1.0

C:\>ping 220.25.1.3

Pinging 220.25.1.3 with 32 bytes of data:

Reply from 220.25.1.3: bytes=32 time=17ms TTL=127

Reply from 220.25.1.3: bytes=32 time=16ms TTL=127

Reply from 220.25.1.3: bytes=32 time=16ms TTL=127

Reply from 220.25.1.3: bytes=32 time=16ms TTL=127

Ping statistics for 220.25.1.3:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:

Minimum = 16ms, Maximum = 17ms, Average = 16ms

C:\>