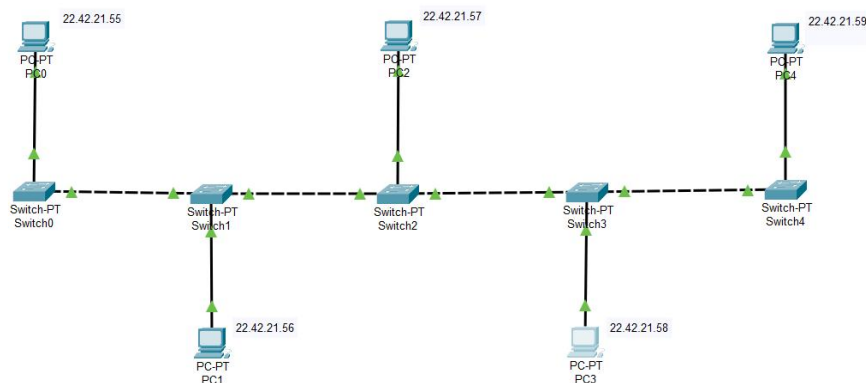19ECE311: Computer Networks

Name: M.VARSHITH REDDY   **Roll No:** AM.EN.U4ECE22155

__Assignment – 2__

(Q) Build a simple LAN using 5 packets. Implement each topology separately and show the packet transmission statistics using cisco packet tracer.
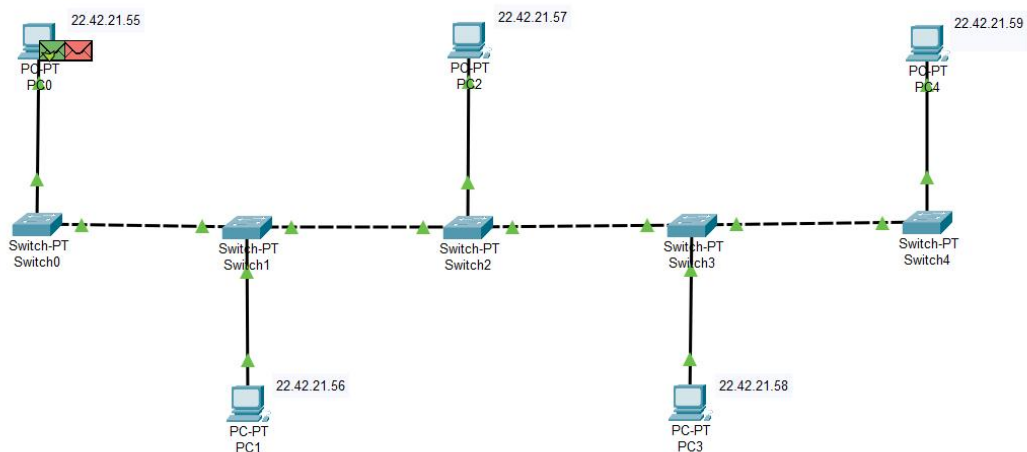
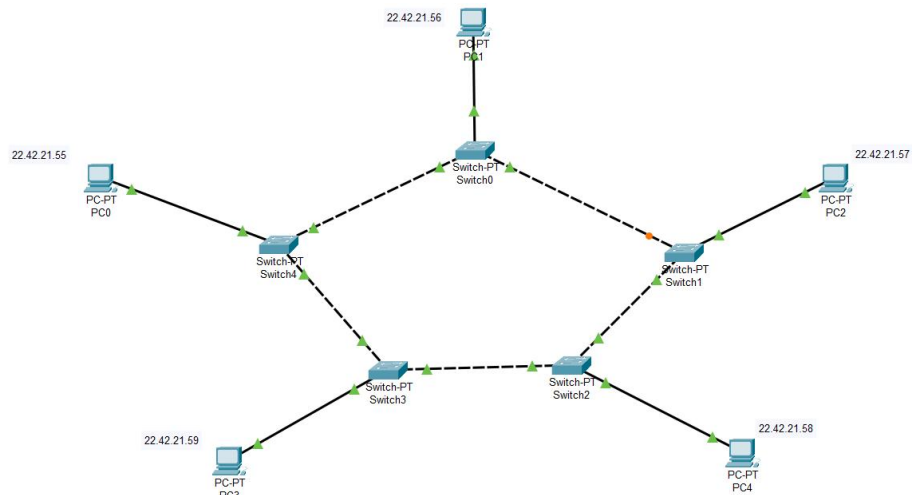   i.   Bus Topology:


```
C:\> ping 22.42.21.56

Pinging 22.42.21.56 with 32 bytes of data:

Reply from 22.42.21.56: bytes=32 time=9ms TTL=128
Reply from 22.42.21.56: bytes=32 time=6ms TTL=128
Reply from 22.42.21.56: bytes=32 time=6ms TTL=128
Reply from 22.42.21.56: bytes=32 time=6ms TTL=128

Ping statistics for 22.42.21.56:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 6ms, Maximum = 9ms, Average = 6ms
```
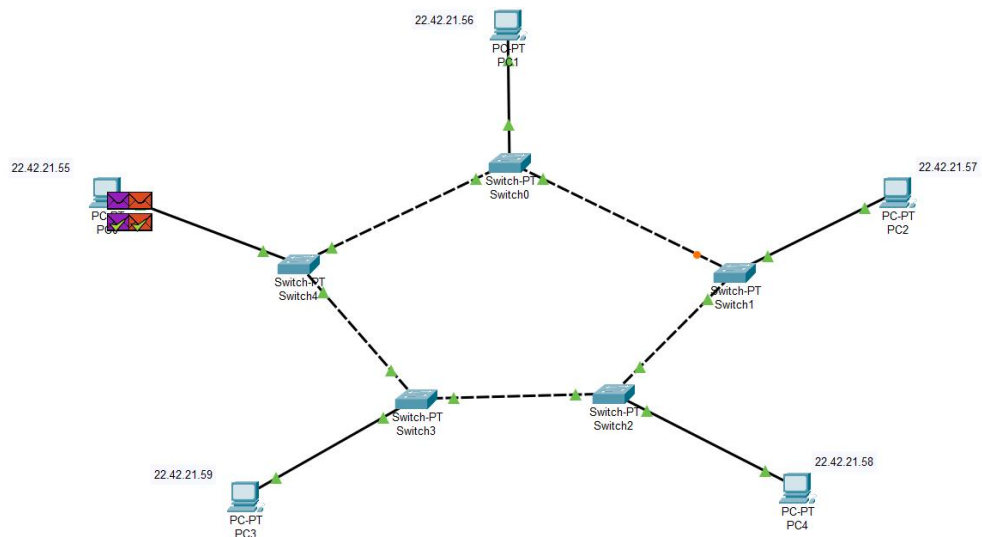
ii) ring topology:


```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 22.42.21.58

Pinging 22.42.21.58 with 32 bytes of data:

Reply from 22.42.21.58: bytes=32 time<1ms TTL=128
Reply from 22.42.21.58: bytes=32 time<1ms TTL=128
Reply from 22.42.21.58: bytes=32 time<1ms TTL=128
Reply from 22.42.21.58: bytes=32 time<1ms TTL=128

Ping statistics for 22.42.21.58:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```
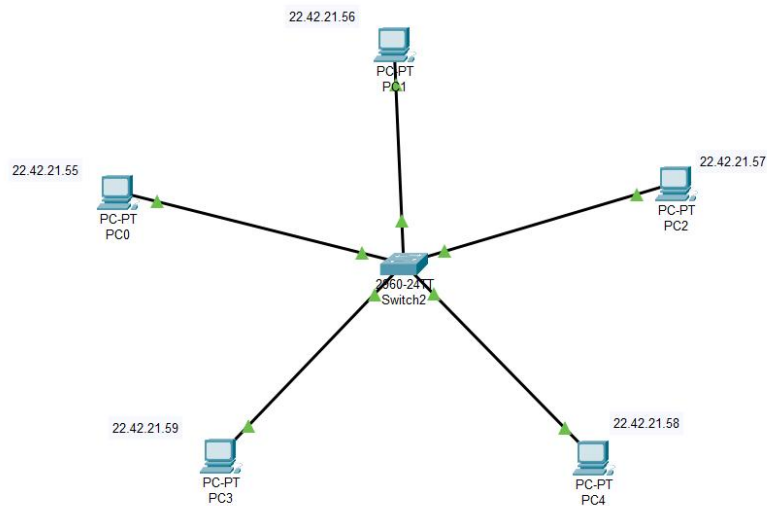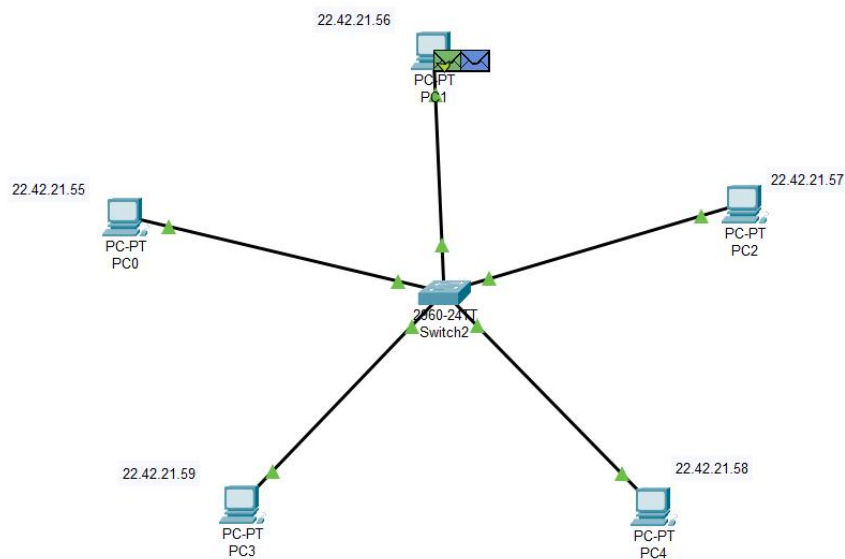
iii star topology:


```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 22.42.21.58

Pinging 22.42.21.58 with 32 bytes of data:

Reply from 22.42.21.58: bytes=32 time<1ms TTL=128
Reply from 22.42.21.58: bytes=32 time<1ms TTL=128
Reply from 22.42.21.58: bytes=32 time<1ms TTL=128
Reply from 22.42.21.58: bytes=32 time<1ms TTL=128

Ping statistics for 22.42.21.58:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```
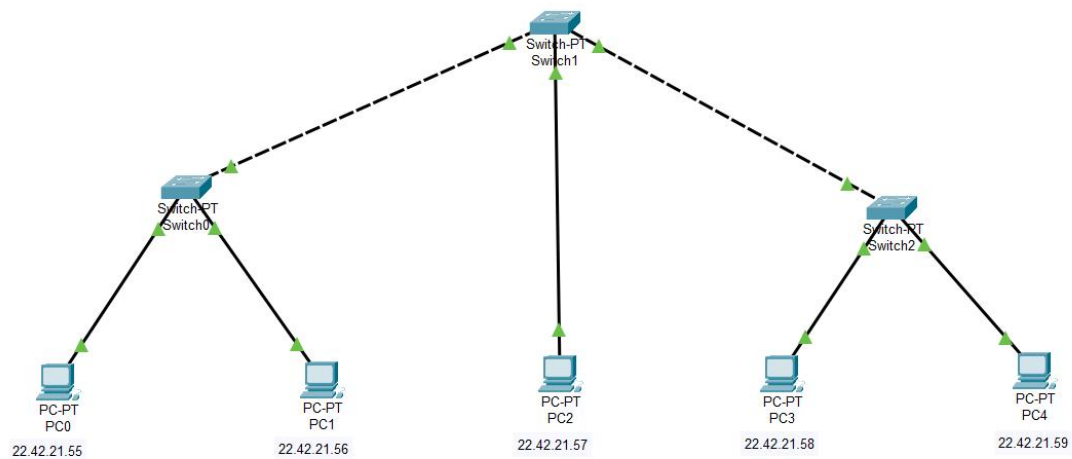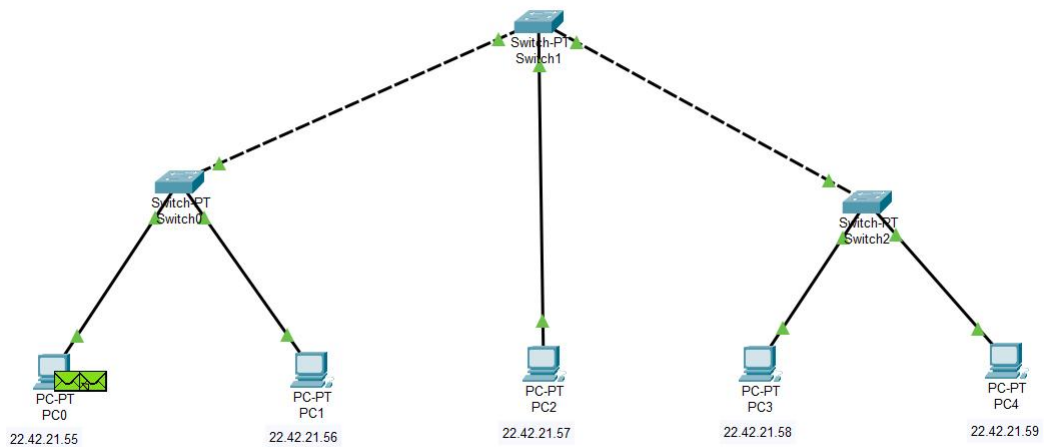
iv) Tree / Hierarchical Topology:


```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 22.42.21.55

Pinging 22.42.21.55 with 32 bytes of data:

Reply from 22.42.21.55: bytes=32 time=3ms TTL=128
Reply from 22.42.21.55: bytes=32 time=4ms TTL=128
Reply from 22.42.21.55: bytes=32 time=3ms TTL=128
Reply from 22.42.21.55: bytes=32 time=4ms TTL=128

Ping statistics for 22.42.21.55:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 3ms, Maximum = 4ms, Average = 3ms
```
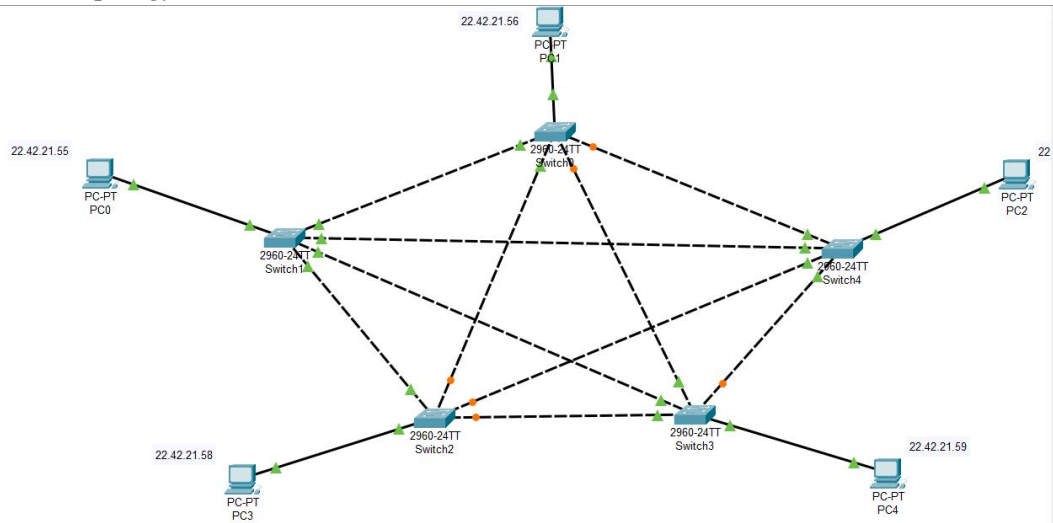
V) Mesh Topology:


```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 22.42.21.55

Pinging 22.42.21.55 with 32 bytes of data:

Reply from 22.42.21.55: bytes=32 time<lms TTL=128
Reply from 22.42.21.55: bytes=32 time=2ms TTL=128
Reply from 22.42.21.55: bytes=32 time=3ms TTL=128
Reply from 22.42.21.55: bytes=32 time<lms TTL=128

Ping statistics for 22.42.21.55:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 3ms, Average = 1ms

C:\>
```