

19ECE311 – Computer Networks

ASSIGNMENT-2

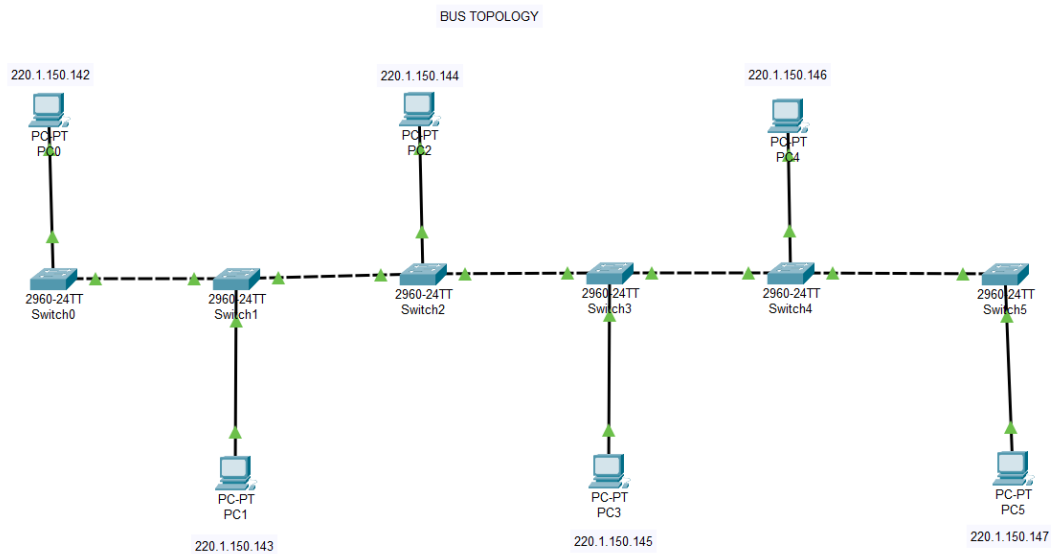
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Submission Date: 28/04/2025

1. Create all the topologies discussed in class in Cisco Packet Tracer (CPT).

BUS TOPOLOGY



```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 220.1.150.147

Pinging 220.1.150.147 with 32 bytes of data:

Reply from 220.1.150.147: bytes=32 time<1ms TTL=128
Reply from 220.1.150.147: bytes=32 time=1ms TTL=128
Reply from 220.1.150.147: bytes=32 time<1ms TTL=128
Reply from 220.1.150.147: bytes=32 time<1ms TTL=128

Ping statistics for 220.1.150.147:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 1ms, Average = 0ms

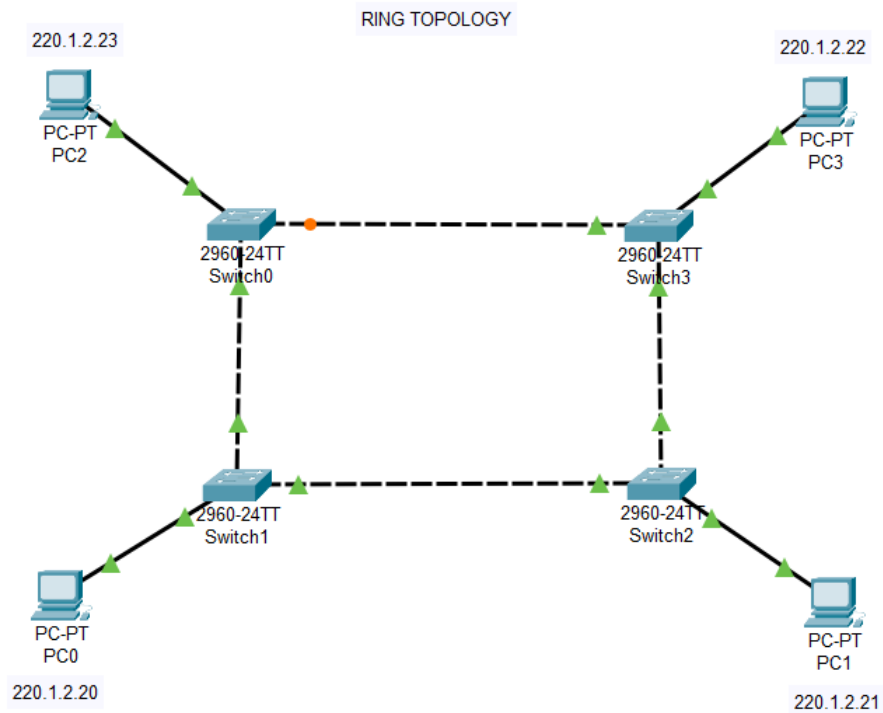
C:\>ping 220.1.150.144

Pinging 220.1.150.144 with 32 bytes of data:

Reply from 220.1.150.144: bytes=32 time<1ms TTL=128
Reply from 220.1.150.144: bytes=32 time<1ms TTL=128
Reply from 220.1.150.144: bytes=32 time<1ms TTL=128
Reply from 220.1.150.144: bytes=32 time<1ms TTL=128

Ping statistics for 220.1.150.144:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

RING TOPOLOGY



```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 220.1.2.21

Pinging 220.1.2.21 with 32 bytes of data:

Reply from 220.1.2.21: bytes=32 time<1ms TTL=128
Reply from 220.1.2.21: bytes=32 time<1ms TTL=128
Reply from 220.1.2.21: bytes=32 time<1ms TTL=128
Reply from 220.1.2.21: bytes=32 time<1ms TTL=128

Ping statistics for 220.1.2.21:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

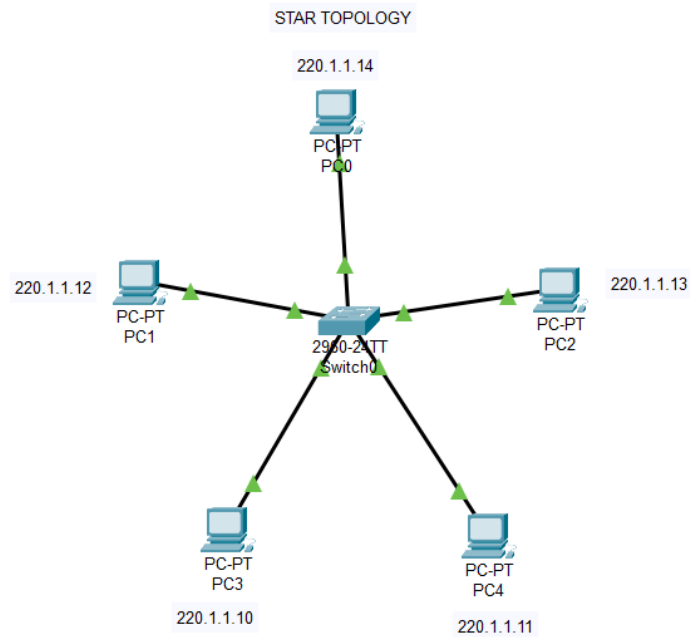
C:\>ping 220.1.2.22

Pinging 220.1.2.22 with 32 bytes of data:

Reply from 220.1.2.22: bytes=32 time<1ms TTL=128
Reply from 220.1.2.22: bytes=32 time<1ms TTL=128
Reply from 220.1.2.22: bytes=32 time<1ms TTL=128
Reply from 220.1.2.22: bytes=32 time<1ms TTL=128

Ping statistics for 220.1.2.22:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

STAR TOPOLOGY



```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 220.1.1.13

Pinging 220.1.1.13 with 32 bytes of data:

Reply from 220.1.1.13: bytes=32 time<1ms TTL=128
Reply from 220.1.1.13: bytes=32 time<1ms TTL=128
Reply from 220.1.1.13: bytes=32 time<1ms TTL=128
Reply from 220.1.1.13: bytes=32 time<1ms TTL=128

Ping statistics for 220.1.1.13:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms

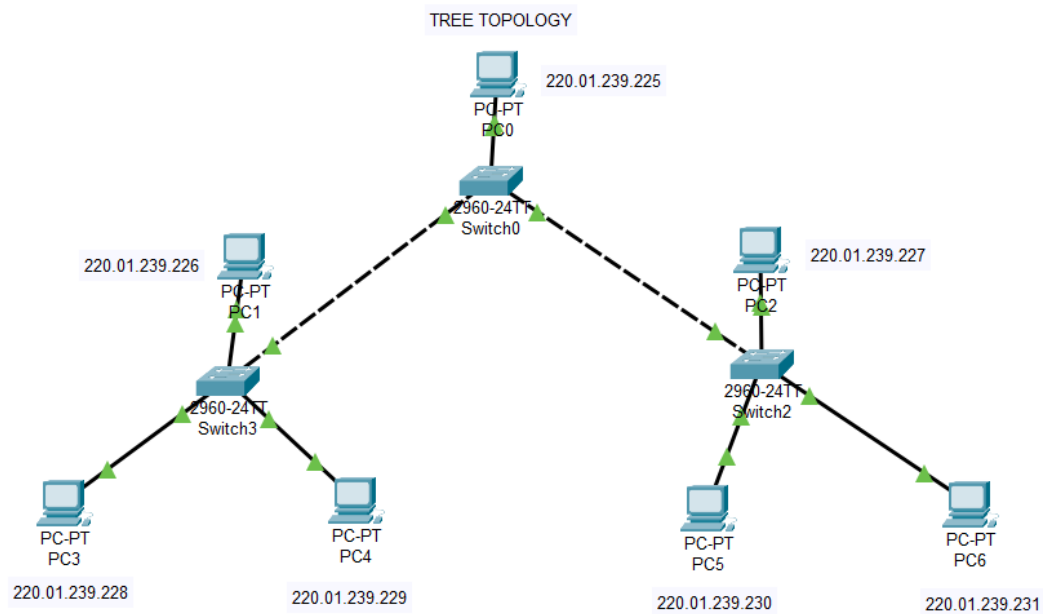
C:\>ping 220.1.1.14

Pinging 220.1.1.14 with 32 bytes of data:

Reply from 220.1.1.14: bytes=32 time=11ms TTL=128
Reply from 220.1.1.14: bytes=32 time<1ms TTL=128
Reply from 220.1.1.14: bytes=32 time<1ms TTL=128
Reply from 220.1.1.14: bytes=32 time=1ms TTL=128

Ping statistics for 220.1.1.14:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 11ms, Average = 3ms
```

TREE TOPOLOGY



Cisco Packet Tracer PC Command Line 1.0

```
C:\>ping 220.1.239.229
```

Pinging 220.1.239.229 with 32 bytes of data:

```
Reply from 220.1.239.229: bytes=32 time<1ms TTL=128
Reply from 220.1.239.229: bytes=32 time<1ms TTL=128
Reply from 220.1.239.229: bytes=32 time<1ms TTL=128
Reply from 220.1.239.229: bytes=32 time<1ms TTL=128
```

Ping statistics for 220.1.239.229:

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

```
C:\>ping 220.1.239.231
```

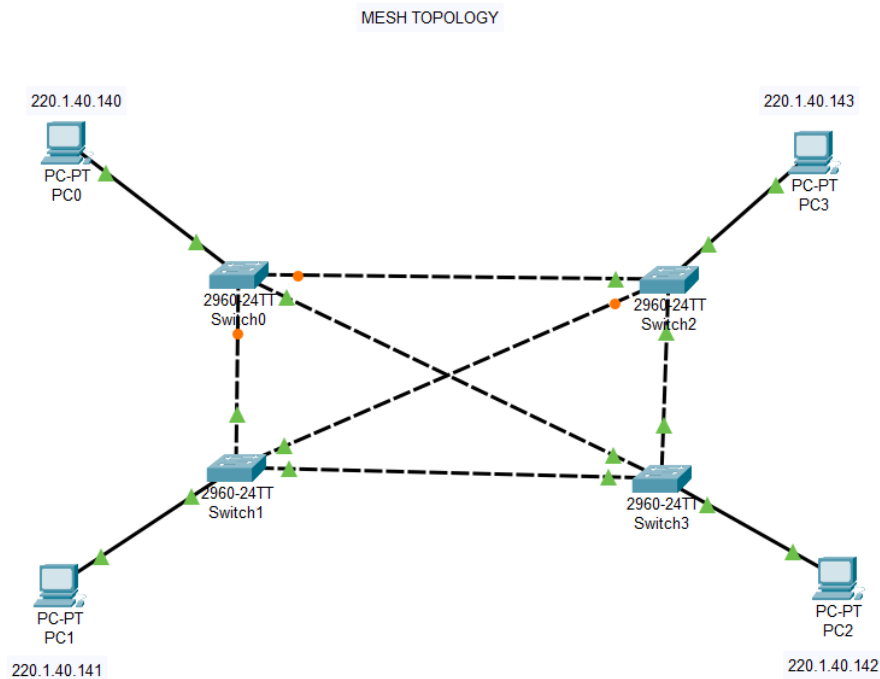
Pinging 220.1.239.231 with 32 bytes of data:

```
Reply from 220.1.239.231: bytes=32 time<1ms TTL=128
Reply from 220.1.239.231: bytes=32 time<1ms TTL=128
Reply from 220.1.239.231: bytes=32 time<1ms TTL=128
Reply from 220.1.239.231: bytes=32 time<1ms TTL=128
```

Ping statistics for 220.1.239.231:

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

MESH TOPOLOGY



```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 220.1.40.142

Pinging 220.1.40.142 with 32 bytes of data:

Request timed out.
Reply from 220.1.40.142: bytes=32 time<lms TTL=128
Reply from 220.1.40.142: bytes=32 time<lms TTL=128
Reply from 220.1.40.142: bytes=32 time<lms TTL=128

Ping statistics for 220.1.40.142:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

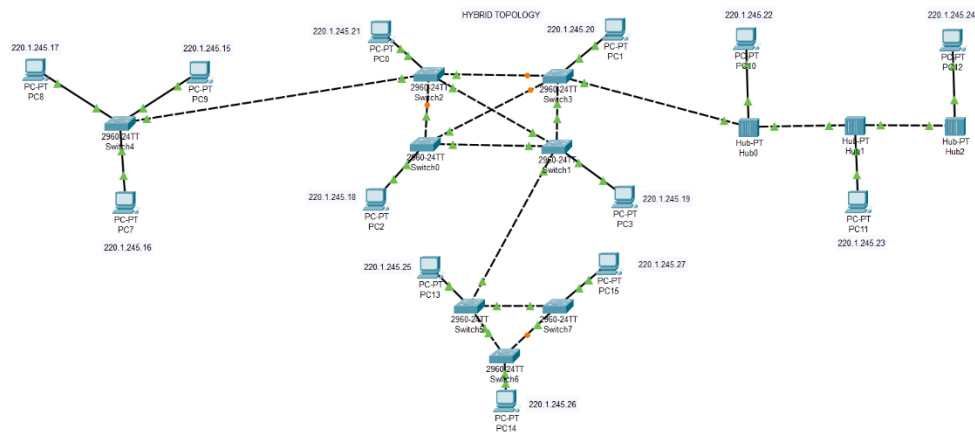
C:\>ping 220.1.40.143

Pinging 220.1.40.143 with 32 bytes of data:

Reply from 220.1.40.143: bytes=32 time<lms TTL=128
Reply from 220.1.40.143: bytes=32 time<lms TTL=128
Reply from 220.1.40.143: bytes=32 time<lms TTL=128
Reply from 220.1.40.143: bytes=32 time<lms TTL=128

Ping statistics for 220.1.40.143:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

HYBRID TOPOLOGY



Cisco Packet Tracer PC Command Line 1.0

```
C:\>ping 220.1.245.23
```

Pinging 220.1.245.23 with 32 bytes of data:

Request timed out.

Reply from 220.1.245.23: bytes=32 time=3ms TTL=128

Reply from 220.1.245.23: bytes=32 time=10ms TTL=128

Reply from 220.1.245.23: bytes=32 time<1ms TTL=128

Ping statistics for 220.1.245.23:

Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 10ms, Average = 4ms

```
C:\>ping 220.1.245.26
```

Pinging 220.1.245.26 with 32 bytes of data:

Reply from 220.1.245.26: bytes=32 time=8ms TTL=128

Reply from 220.1.245.26: bytes=32 time<1ms TTL=128

Reply from 220.1.245.26: bytes=32 time=6ms TTL=128

Reply from 220.1.245.26: bytes=32 time<1ms TTL=128

Ping statistics for 220.1.245.26:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 8ms, Average = 3ms

```
C:\>ping 220.1.245.20
```

Pinging 220.1.245.20 with 32 bytes of data:

Reply from 220.1.245.20: bytes=32 time=1ms TTL=128

Reply from 220.1.245.20: bytes=32 time<1ms TTL=128

Reply from 220.1.245.20: bytes=32 time=6ms TTL=128

Reply from 220.1.245.20: bytes=32 time<1ms TTL=128

Ping statistics for 220.1.245.20:

Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),

Approximate round trip times in milli-seconds:

Minimum = 0ms, Maximum = 6ms, Average = 1ms