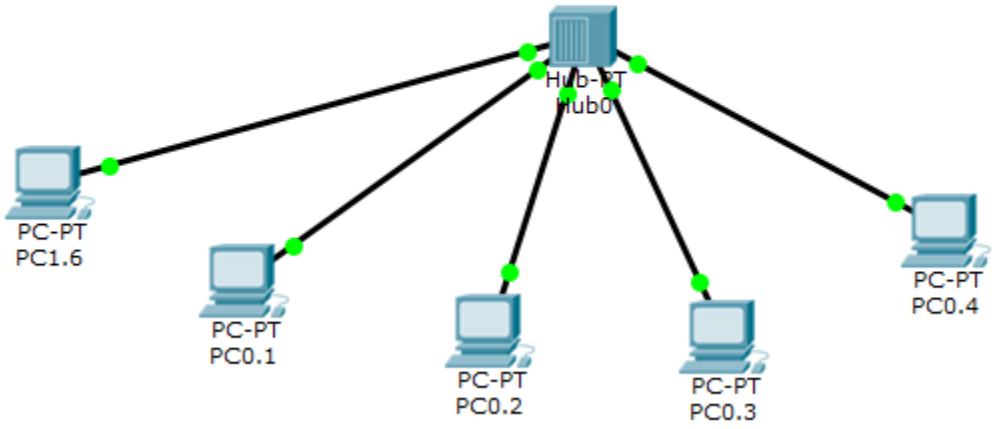
Experiment1-----Aim: Star topology using hub

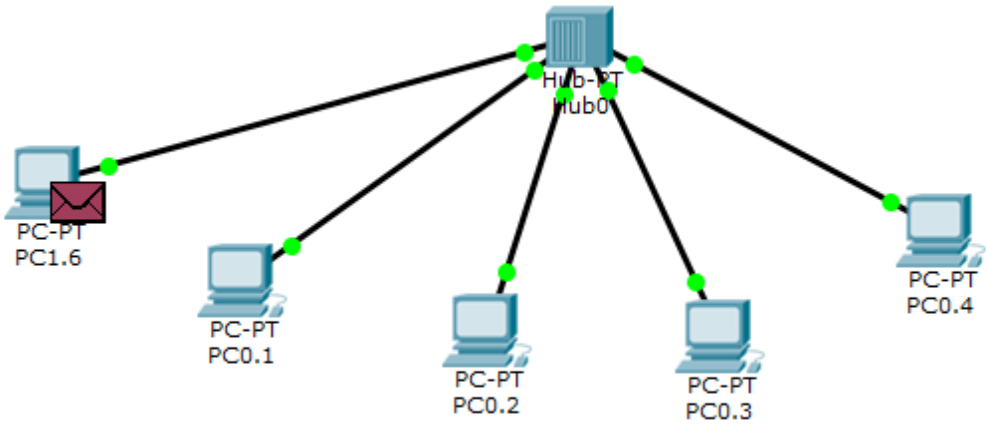
Topology:

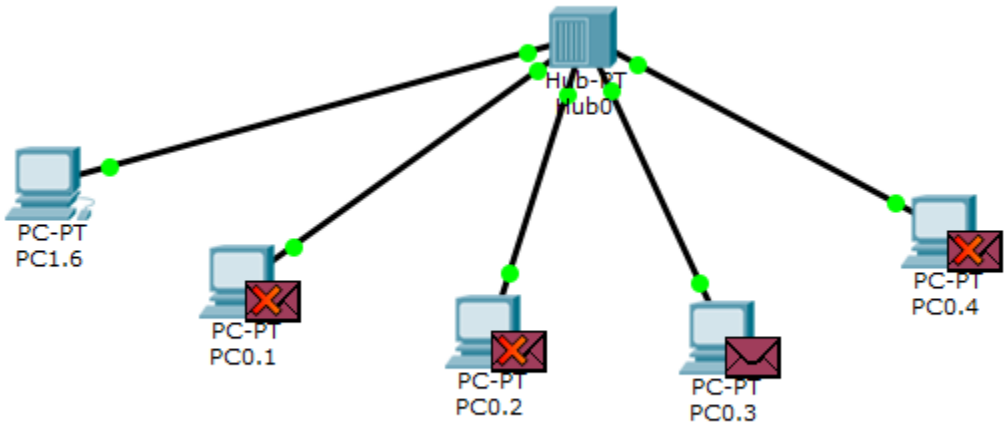


Ping results:

```
PC>ping 10.0.1.6

Pinging 10.0.1.6 with 32 bytes of data:

Reply from 10.0.1.6: bytes=32 time=10ms TTL=128
Reply from 10.0.1.6: bytes=32 time=0ms TTL=128
Reply from 10.0.1.6: bytes=32 time=3ms TTL=128
Reply from 10.0.1.6: bytes=32 time=0ms TTL=128

Ping statistics for 10.0.1.6:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 10ms, Average = 3ms

PC>ping 10.0.0.3

Pinging 10.0.0.3 with 32 bytes of data:

Reply from 10.0.0.3: bytes=32 time=6ms TTL=128
Reply from 10.0.0.3: bytes=32 time=0ms TTL=128
Reply from 10.0.0.3: bytes=32 time=0ms TTL=128
Reply from 10.0.0.3: bytes=32 time=1ms 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 = 6ms, Average = 1ms
```

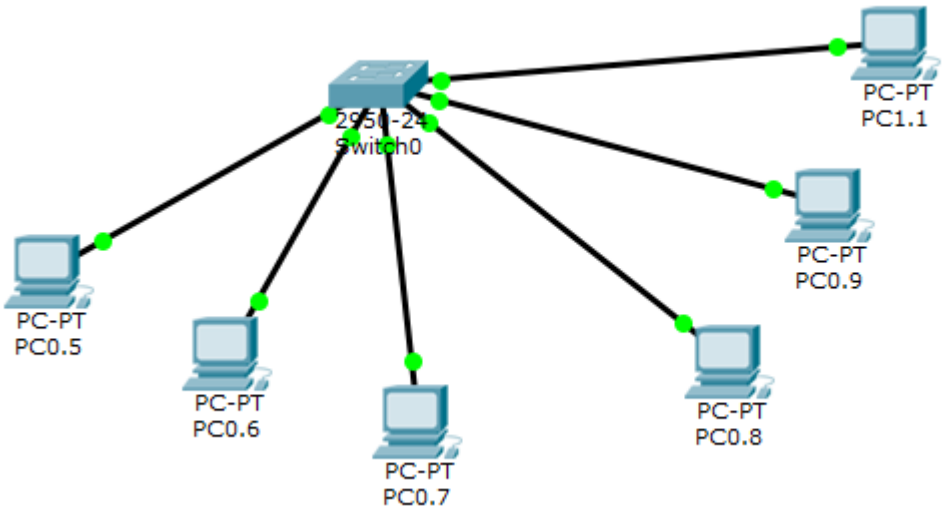
Simulation results:





Aim: Star topology using switch

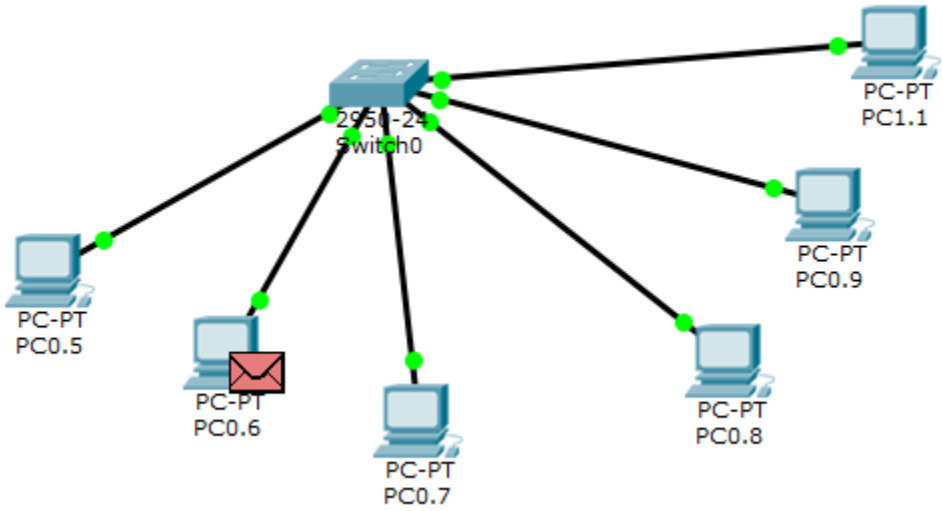
Topology:

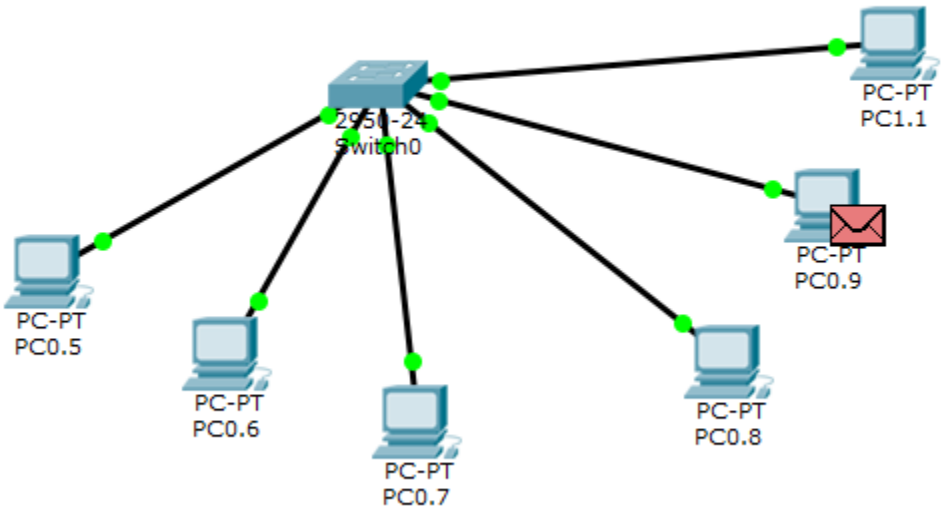


Ping results:

```
PC>ping 10.0.0.6

Pinging 10.0.0.6 with 32 bytes of data:

Reply from 10.0.0.6: bytes=32 time=8ms TTL=128
Reply from 10.0.0.6: bytes=32 time=0ms TTL=128
Reply from 10.0.0.6: bytes=32 time=0ms TTL=128
Reply from 10.0.0.6: bytes=32 time=1ms TTL=128

Ping statistics for 10.0.0.6:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 8ms, Average = 2ms

PC>ping 10.0.0.9

Pinging 10.0.0.9 with 32 bytes of data:

Reply from 10.0.0.9: bytes=32 time=0ms TTL=128
Reply from 10.0.0.9: bytes=32 time=0ms TTL=128
Reply from 10.0.0.9: bytes=32 time=1ms TTL=128
Reply from 10.0.0.9: bytes=32 time=0ms TTL=128

Ping statistics for 10.0.0.9:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

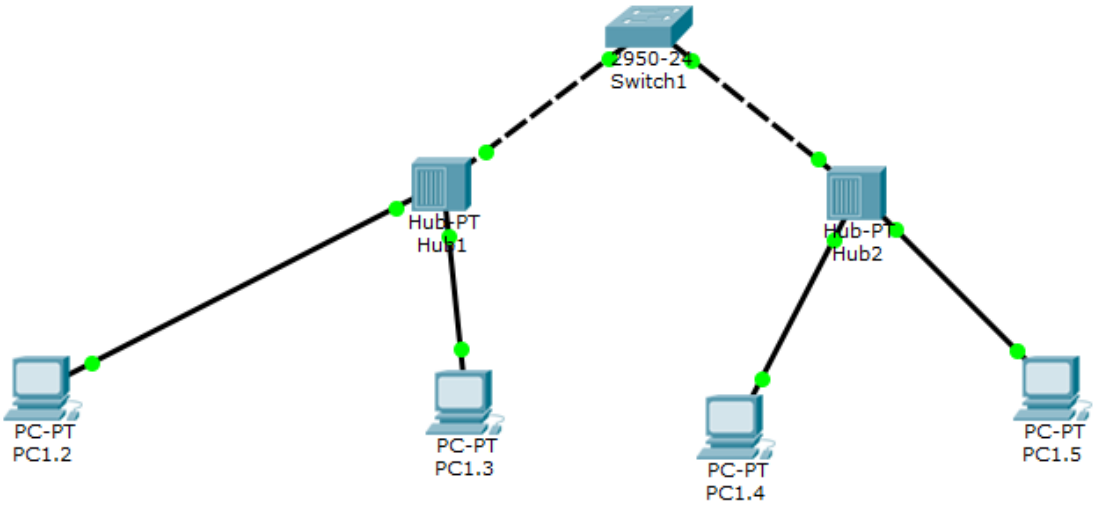
Simulation results:





Aim: Hybrid topology using switch and hub

Topology:



Ping results:

```
PC>ping 10.0.1.3

Pinging 10.0.1.3 with 32 bytes of data:

Reply from 10.0.1.3: bytes=32 time=2ms TTL=128
Reply from 10.0.1.3: bytes=32 time=6ms TTL=128
Reply from 10.0.1.3: bytes=32 time=11ms TTL=128
Reply from 10.0.1.3: bytes=32 time=15ms TTL=128

Ping statistics for 10.0.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 2ms, Maximum = 15ms, Average = 8ms

PC>ping 10.0.1.4

Pinging 10.0.1.4 with 32 bytes of data:

Reply from 10.0.1.4: bytes=32 time=0ms TTL=128
Reply from 10.0.1.4: bytes=32 time=0ms TTL=128
Reply from 10.0.1.4: bytes=32 time=1ms TTL=128
Reply from 10.0.1.4: bytes=32 time=0ms TTL=128

Ping statistics for 10.0.1.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 1ms, Average = 0ms
```

Simulation results: