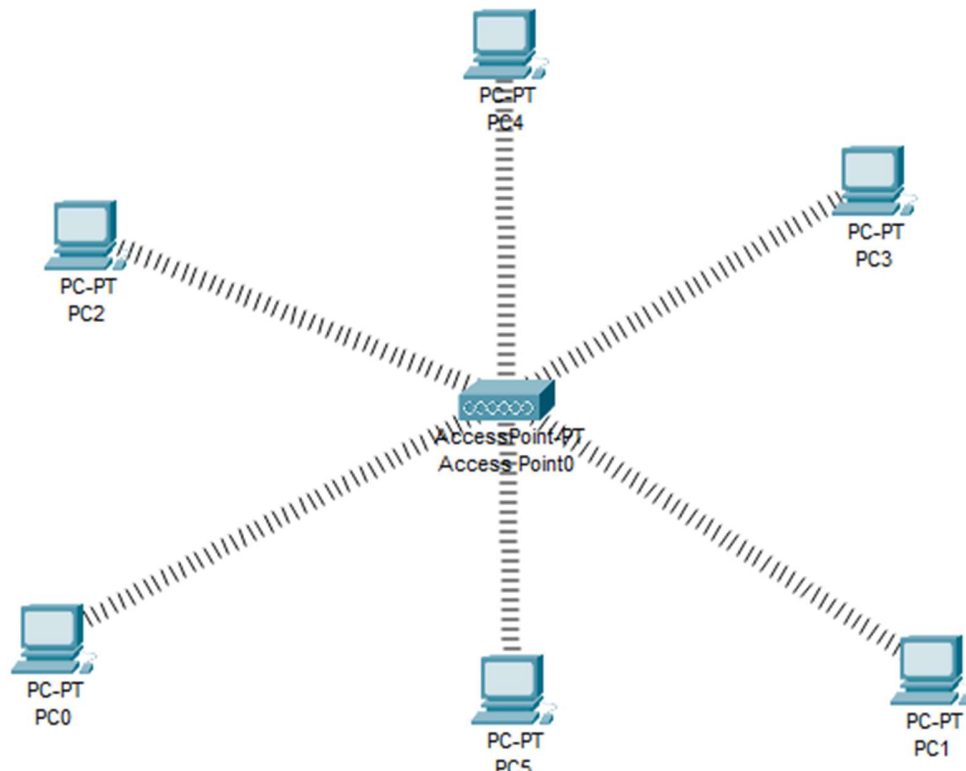
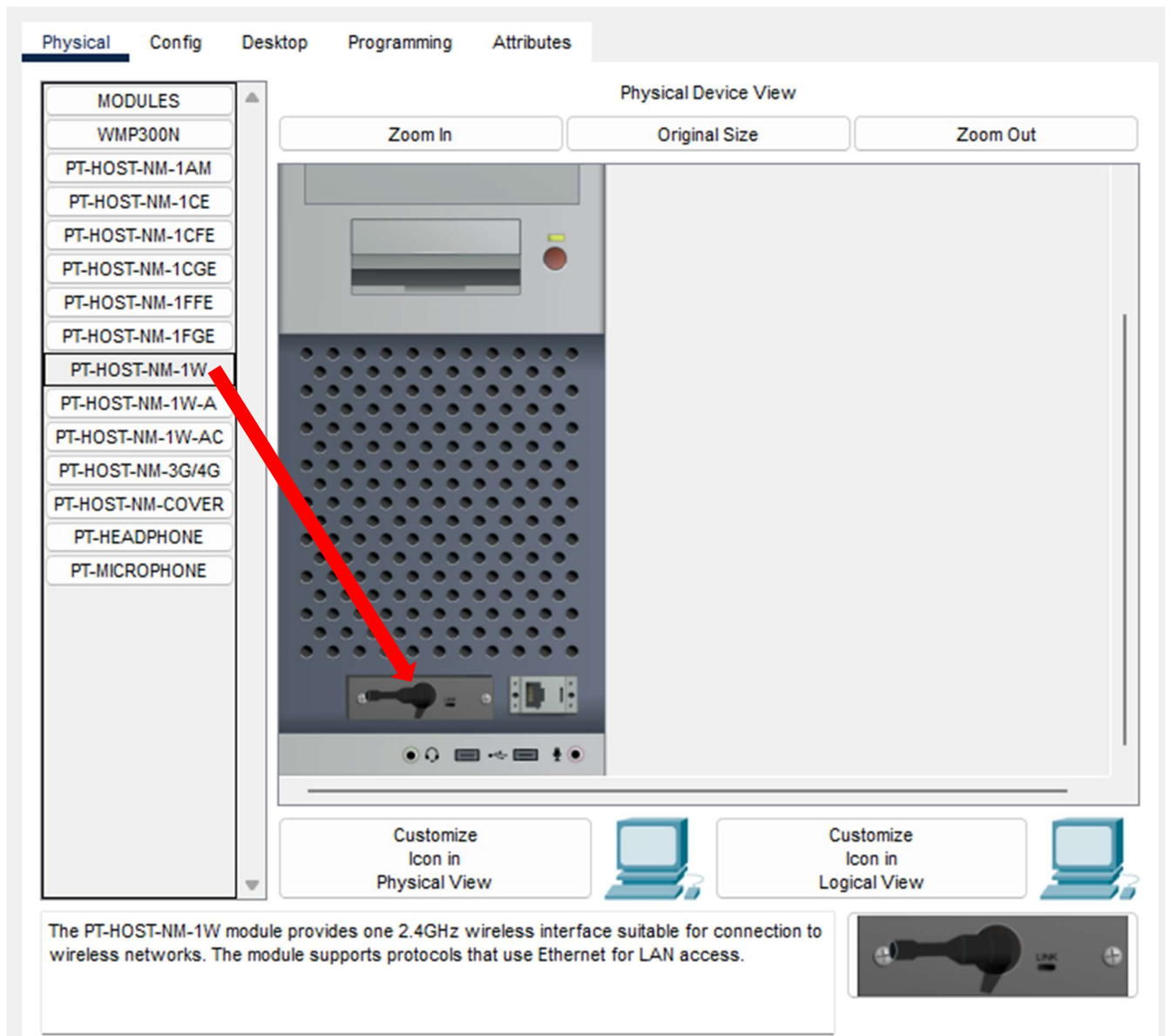


Implementation :-

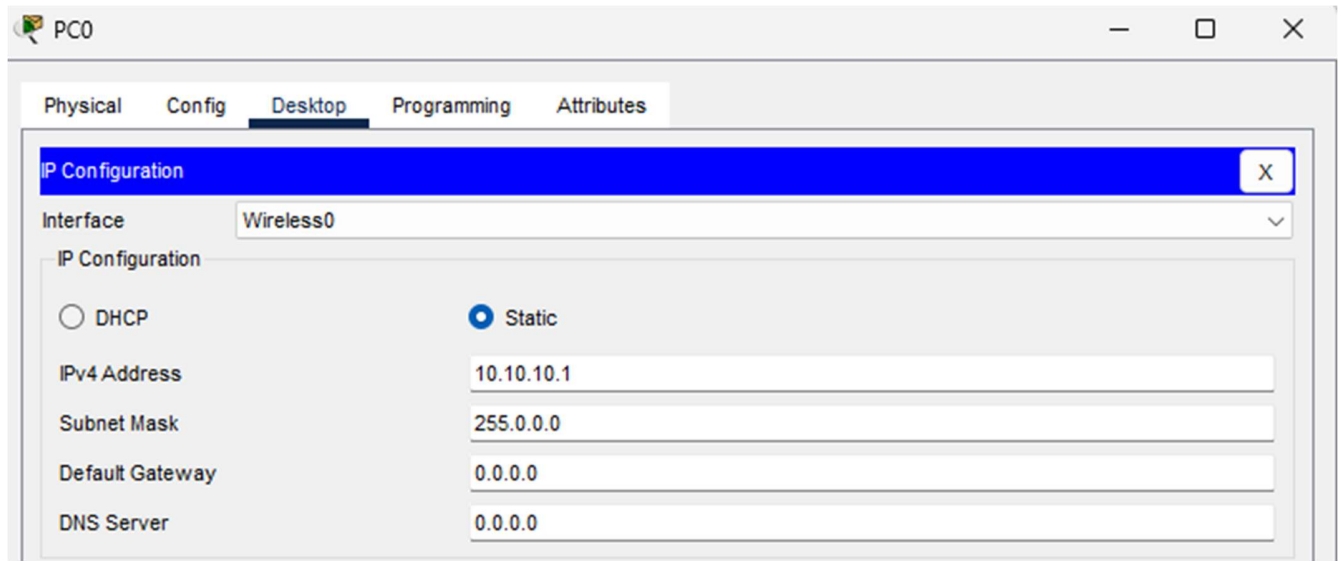
We use the following topology for the present case (5PCs and an Access Point) :-



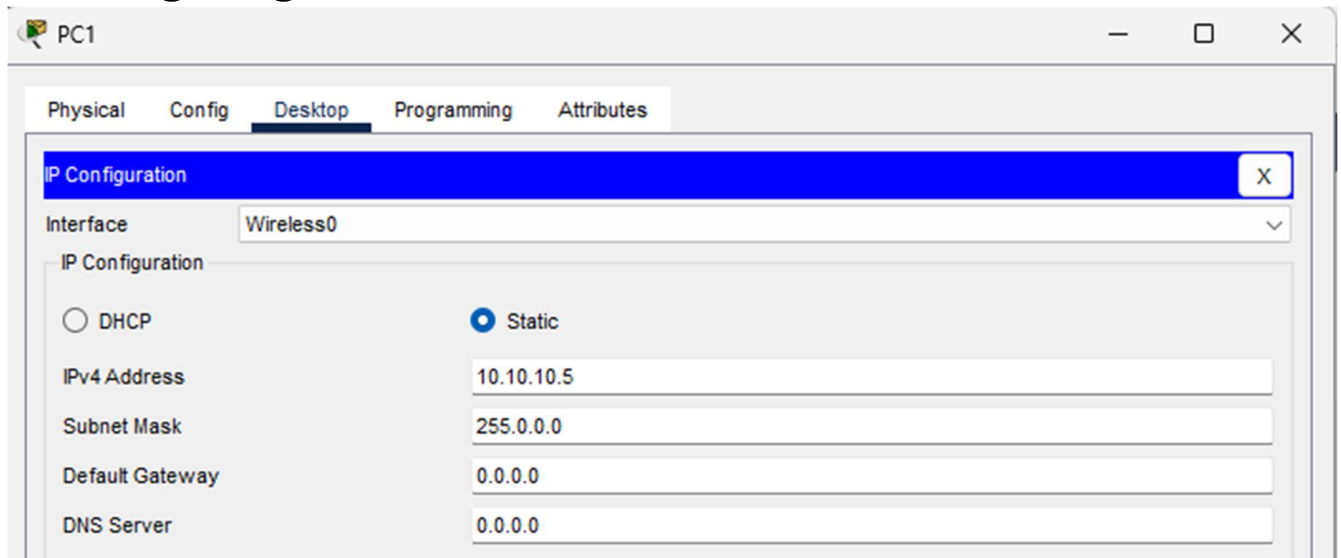
Add a Wireless interface (**PT-HOST-NM-1W**) to each PC as follows :-



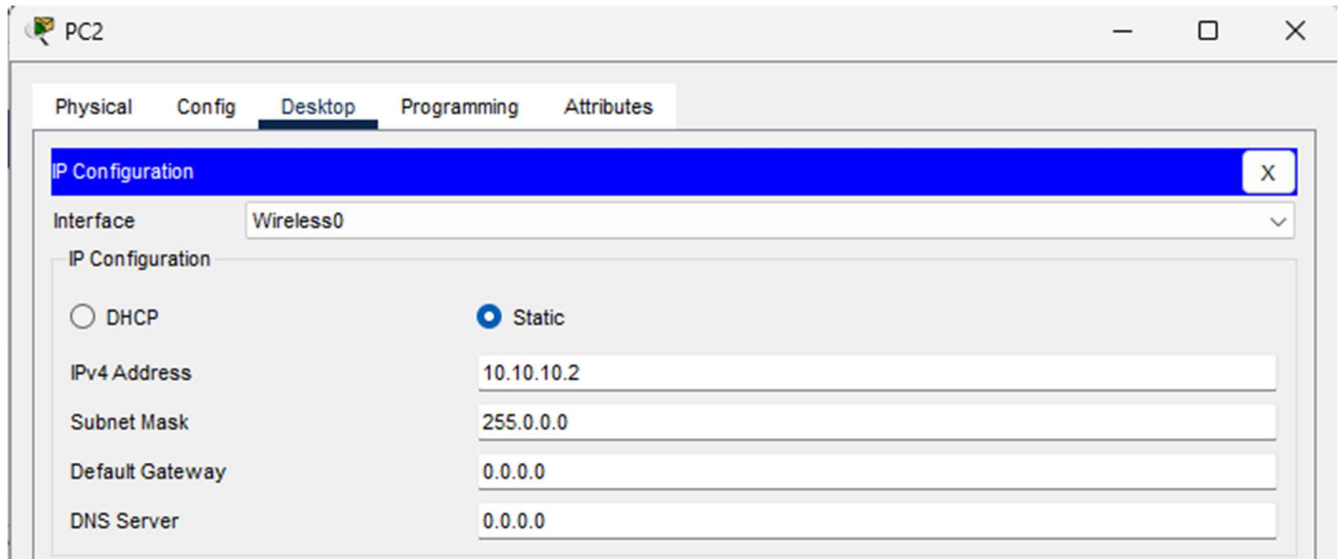
- **Configuring PC0:**



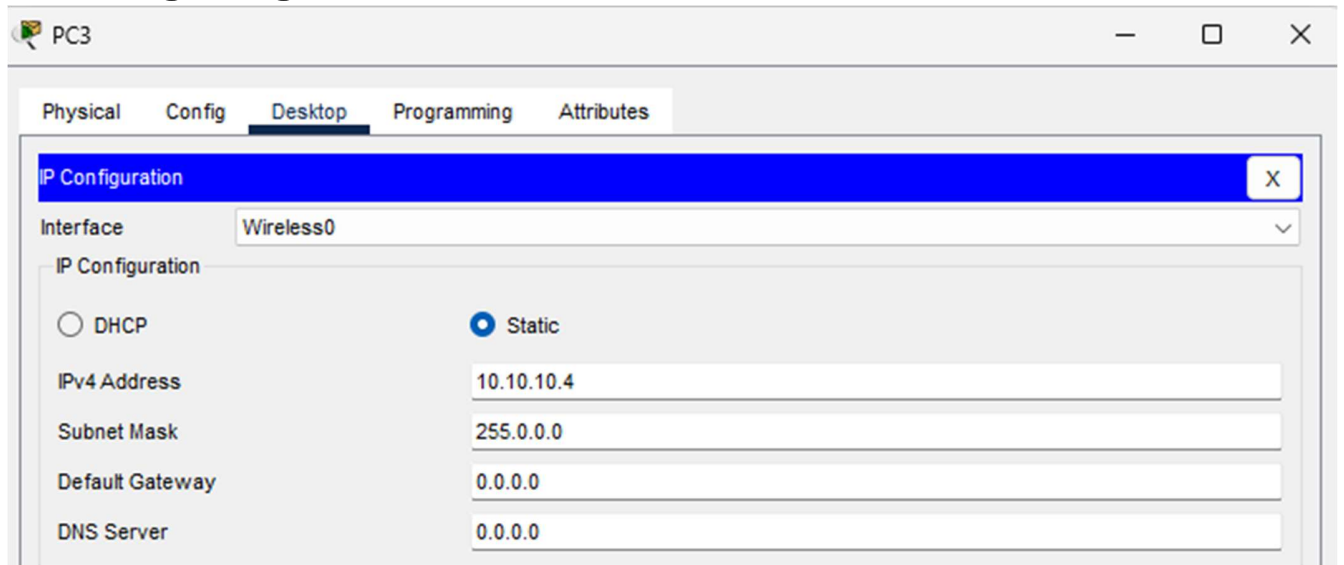
- **Configuring PC1:**



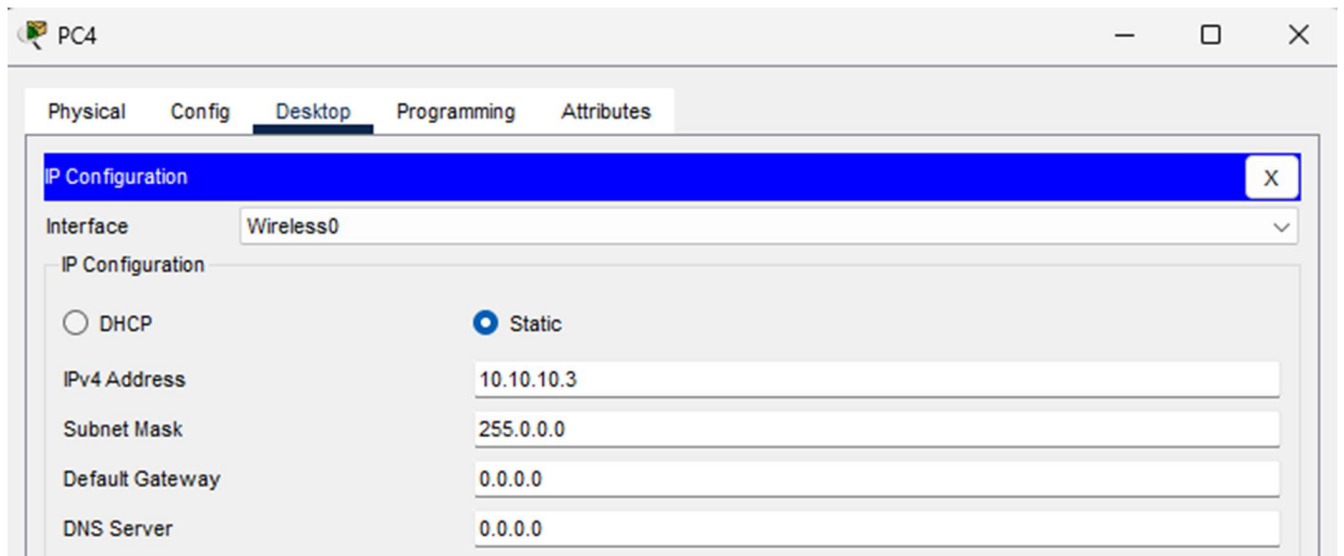
- **Configuring PC2:**



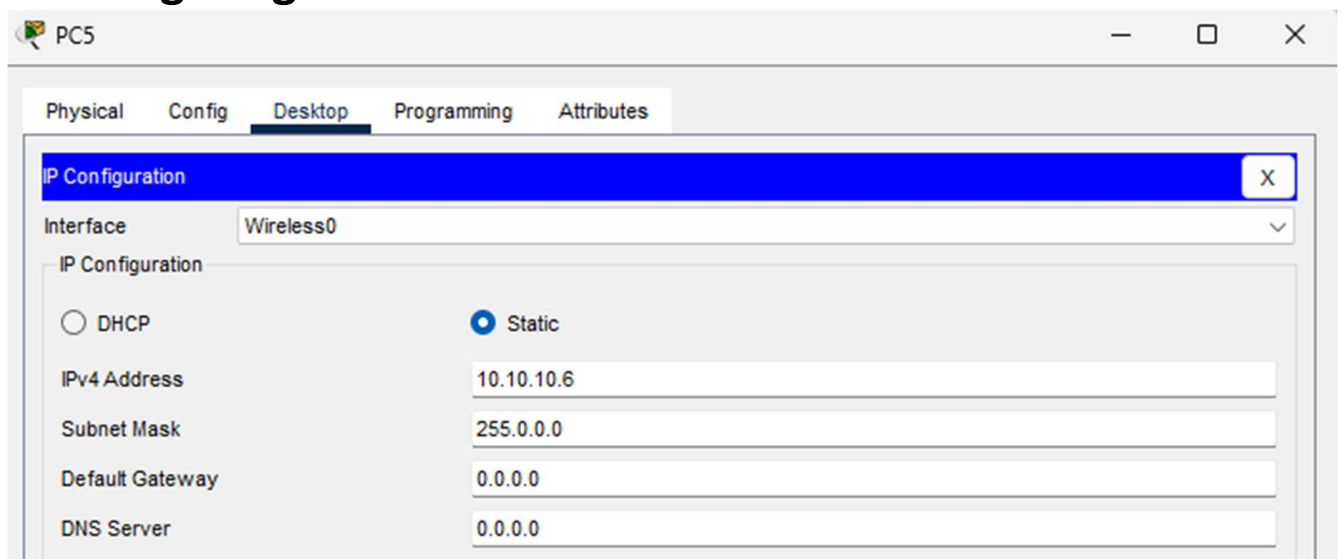
- **Configuring PC3:**



- **Configuring PC4:**



- **Configuring PC5:**

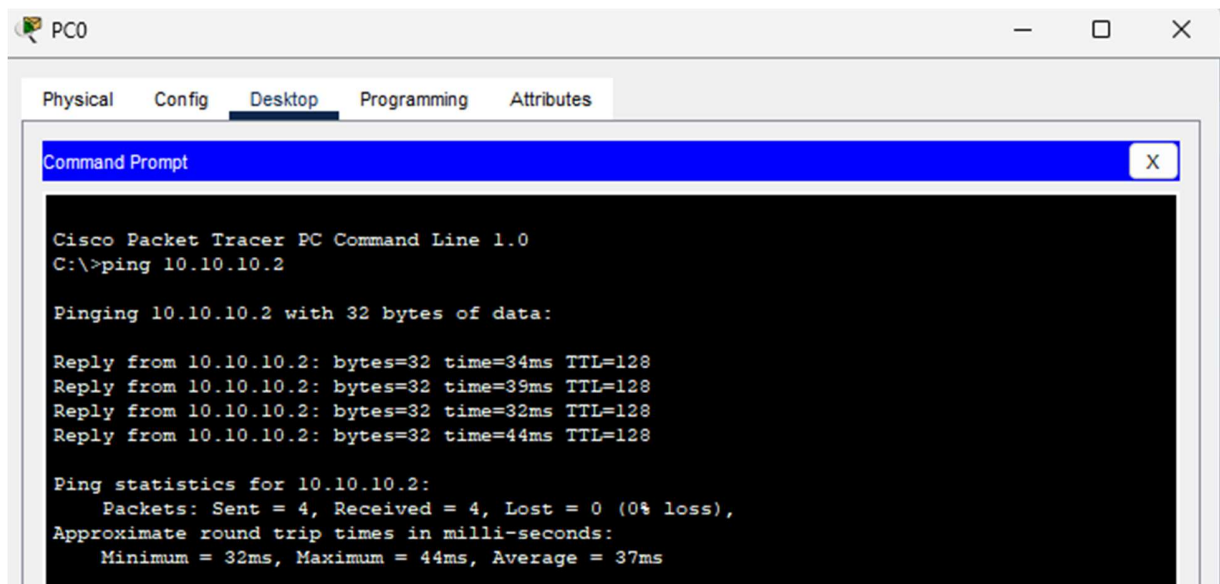


The IP addresses assigned are :-

Host	IP address
PC0	10.10.10.1
PC1	10.10.10.5
PC2	10.10.10.2
PC3	10.10.10.4
PC4	10.10.10.3
PC5	10.10.10.6

We verify the connectivity by sending ping message from any PC to any other PC :-

- Pinging PC2 (10.10.10.2) from PC0 (10.10.10.1):-



```

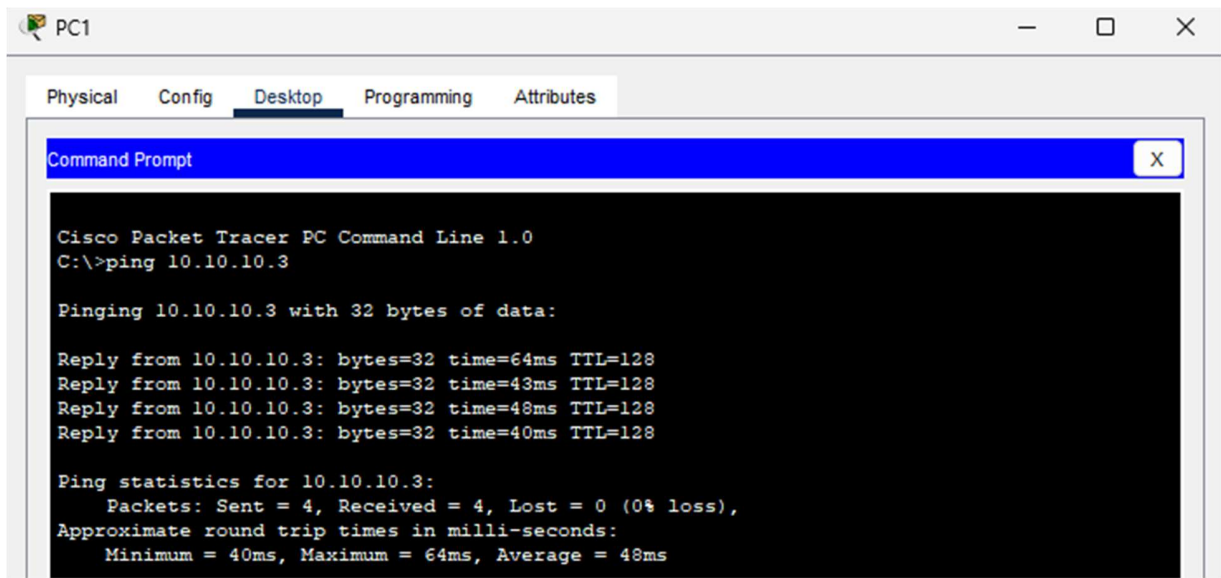
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 10.10.10.2

Pinging 10.10.10.2 with 32 bytes of data:

Reply from 10.10.10.2: bytes=32 time=34ms TTL=128
Reply from 10.10.10.2: bytes=32 time=39ms TTL=128
Reply from 10.10.10.2: bytes=32 time=32ms TTL=128
Reply from 10.10.10.2: bytes=32 time=44ms TTL=128

Ping statistics for 10.10.10.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 32ms, Maximum = 44ms, Average = 37ms
  
```

- Pinging PC4 (10.10.10.3) from PC1 (10.10.10.5) :-



```
PC1
Physical Config Desktop Programming Attributes
Command Prompt
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 10.10.10.3

Pinging 10.10.10.3 with 32 bytes of data:

Reply from 10.10.10.3: bytes=32 time=64ms TTL=128
Reply from 10.10.10.3: bytes=32 time=43ms TTL=128
Reply from 10.10.10.3: bytes=32 time=48ms TTL=128
Reply from 10.10.10.3: bytes=32 time=40ms TTL=128

Ping statistics for 10.10.10.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 40ms, Maximum = 64ms, Average = 48ms
```

Result:

Hence the Wireless Access Point (WAP) has been studied and verified through the given network.