Program 12

To demonstrate communication between two devices using a witeless LAN.

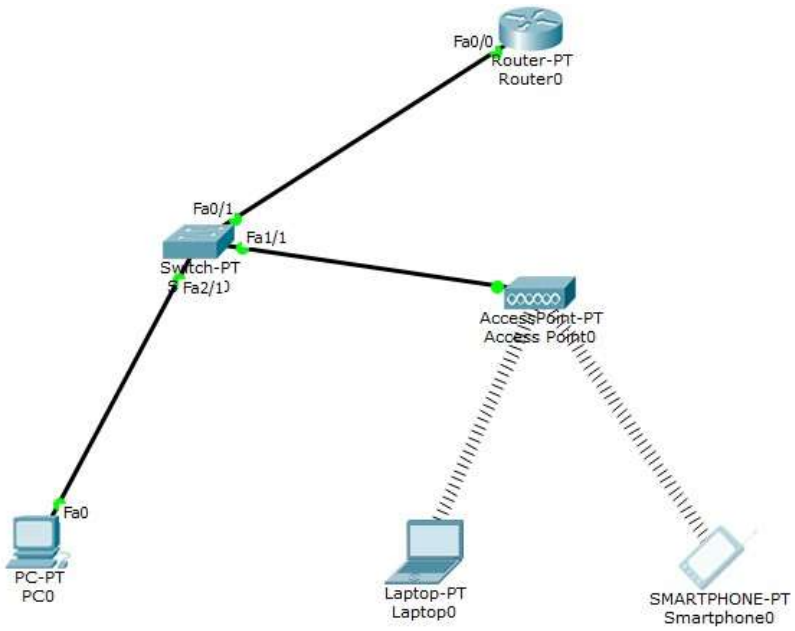


Figure 73: Topology

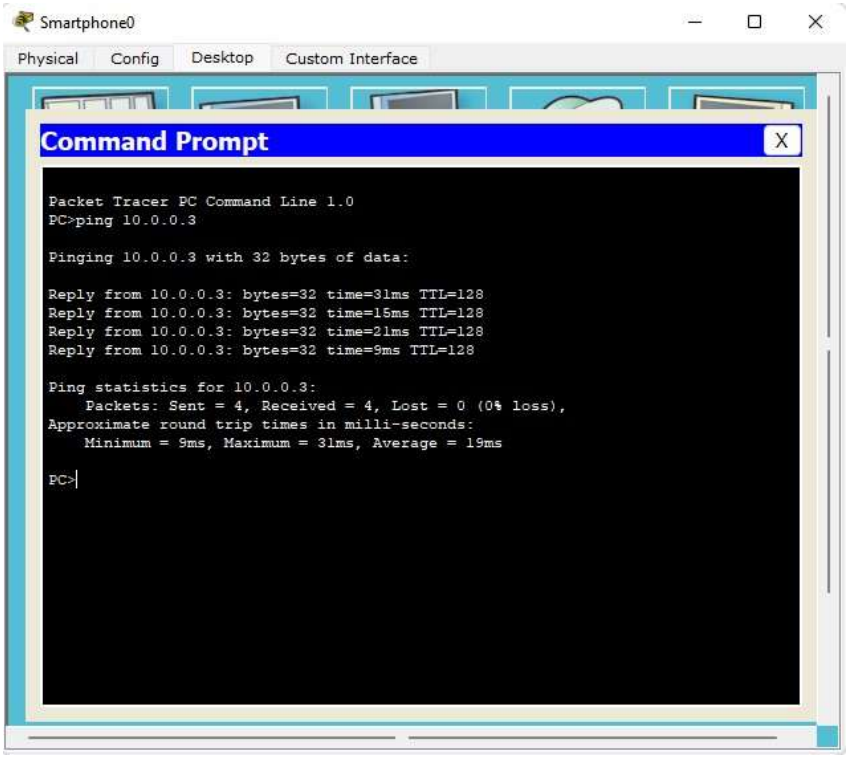


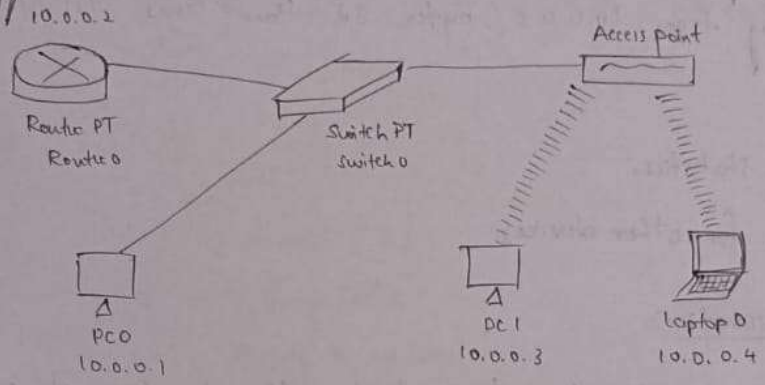
Figure 74: Output

Experiment no 12:

To construct a WLAN and make the nodes communicate wirelessly.

Aim: To show WLAN is effective for wireless communications.

Topology:



Procedure:

1) Open Cisco Packet Tracer.
2) Construct the above topology.
3) Configure access point: Port 1 → SSID name - any non SSID → code select WEP : 10 digits (0 1 2 3 4 5 6 7 8 9)
4) Configure PC1 and Laptop with wireless standards.
5) Switch off the device, drag the existing PT-host NM1-IAH to the component listed in LHS. Drag the WMP 200 wireless interface to the empty port switch on the device.
6) In config tab a new wireless interface would have been added. Now configure SSID → code. select WEP → 10 digit WEP key. IP address and gateway to the device.

Figure 75: Observation book 1

7) Ping from either devices

8) Setup PC0, router as normally done.

Result:

PC0:

C:\ping 10.0.0.3

pinging 10.0.0.3 with 32 bytes of data

Reply from 10.0.0.3, bytes = 32 time = 19ms TTL = 128

:

:

ping statistics.

Same for other devices.

Observation:

The experiment dimonstrates the creation of a wireless network using an access point configured with an SSID, WEP encryption and a 10 digit key. Devices like PCs and laptops were configured with wireless adapter, IP addresses and gateways to enable communication. The success of ping tests between devices verify the setup; highlighting the simplicity and efficiency of WLAN connections for wireless communications.

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Figure 76: Observation book 2