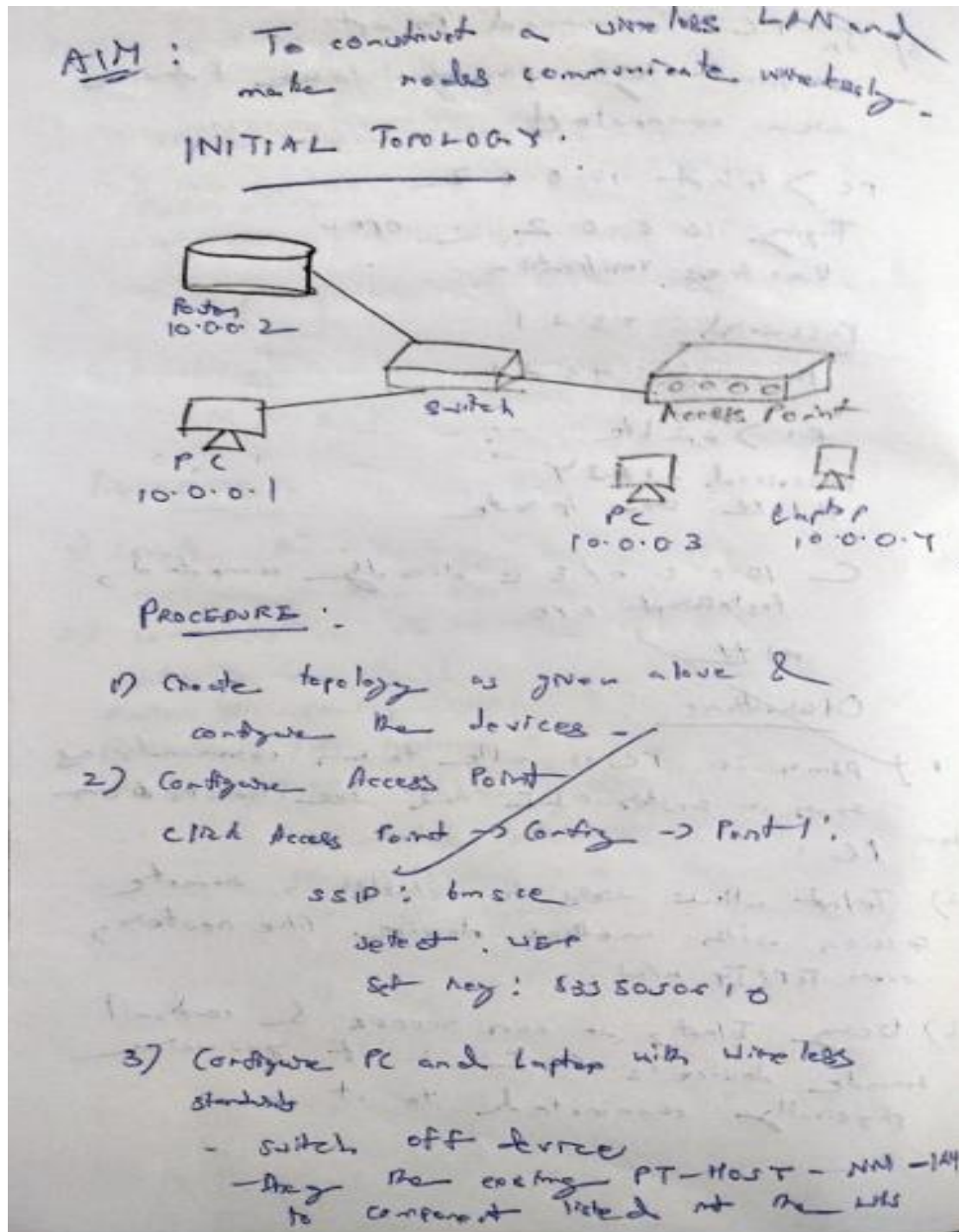


Program 13

Aim: To construct a WLAN and make the nodes communicate wirelessly.

Topology , Procedure and Observation:



at Physical.

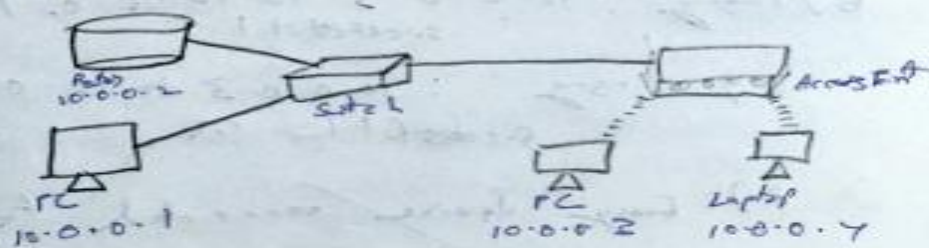
- Drag WMP 300N wireless interface to the empty port.

- Switch on the device.

4) In the config tab, a new wireless interface was added.

5) Configure the device by entering SSID, WEP, WEP key, IP address and gateway.

After wireless connection:



6) Ping from every device to every other device to check for connection.

Observations:

1) We were able to ping from every device to every other device.

2) Access Point:

Creates bridge between wired & wireless devices.

- SSID broadcasting: announced the wireless network's name (SSID) to allow devices to connect using WEP, WPA or WPA2.

3) WRT 300N wireless interface:

- Wireless network adapter that enables devices to communicate with access point using wireless signals.

4) Pinging: ~~10.0.0.1~~ to 10.0.0.3:

10.0.0.1 → Switch → Access Point → 10.0.0.3

- This is after ARP table was updated.

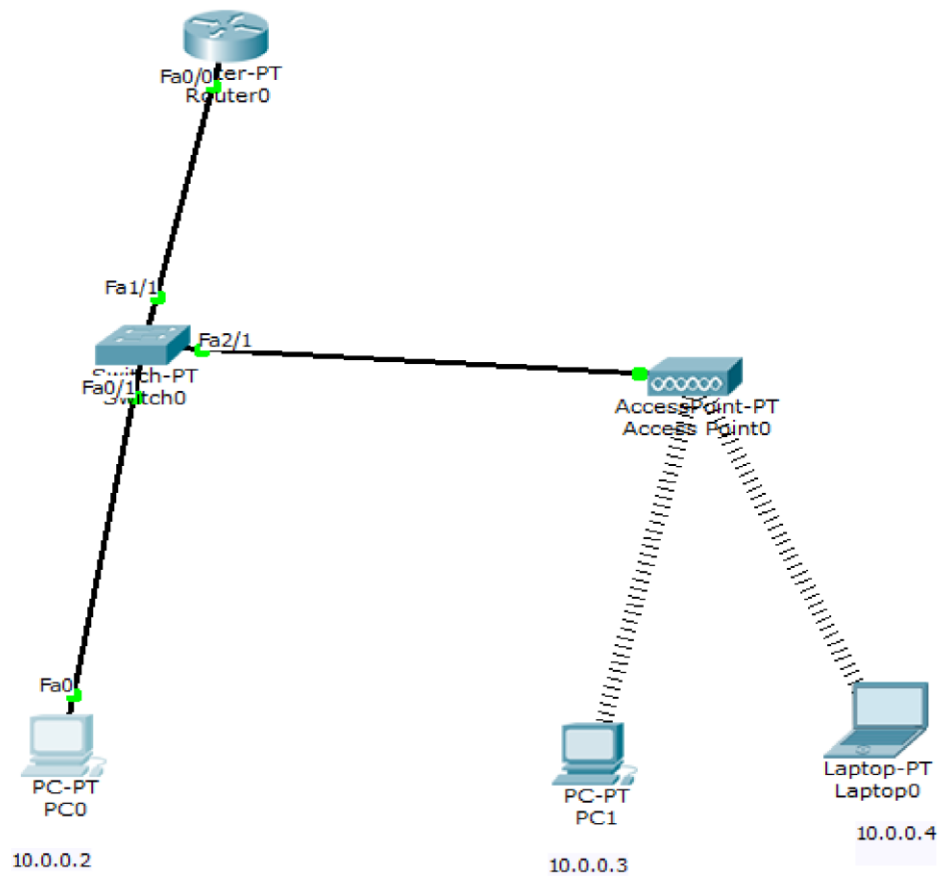
5) Pinging: 10.0.0.3 to 10.0.0.1
successful!

6) Pinging: 10.0.0.3 to 10.0.0.7!
successful!

7) Every device connected to
every other using WLAN



Screen Shots:



```
PC0
Physical Config Desktop Custom Interface
Command Prompt
Packet Tracer PC Command Line 1.0
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=22ms TTL=128
Reply from 10.0.0.3: bytes=32 time=6ms TTL=128
Reply from 10.0.0.3: bytes=32 time=3ms TTL=128
Reply from 10.0.0.3: bytes=32 time=7ms 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 = 3ms, Maximum = 22ms, Average = 9ms

PC>ping 10.0.0.4

Pinging 10.0.0.4 with 32 bytes of data:

Reply from 10.0.0.4: bytes=32 time=19ms TTL=128
Reply from 10.0.0.4: bytes=32 time=5ms TTL=128
Reply from 10.0.0.4: bytes=32 time=6ms TTL=128
Reply from 10.0.0.4: bytes=32 time=7ms TTL=128

Ping statistics for 10.0.0.4:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 5ms, Maximum = 19ms, Average = 9ms

PC>
```