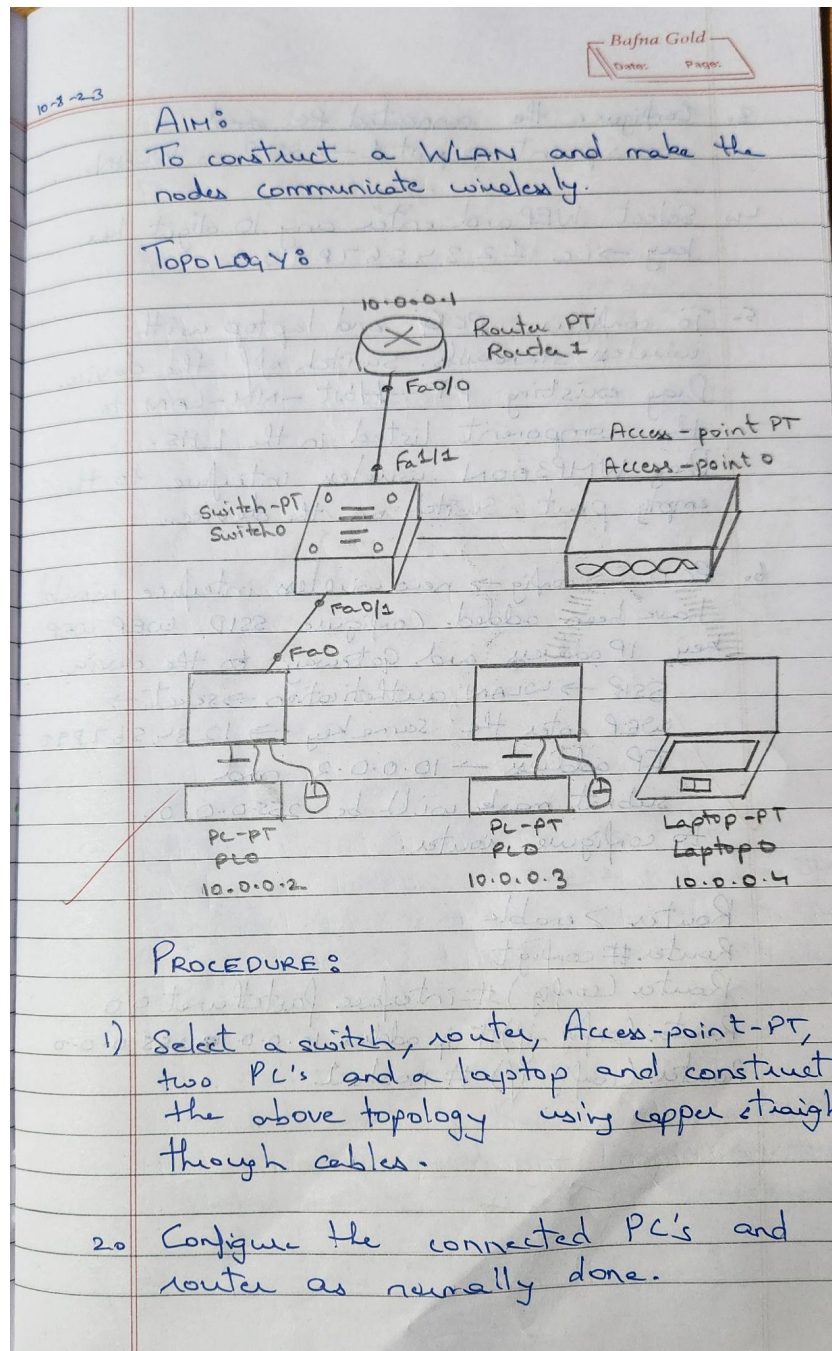# EXPERIMENT 12

AIM:

To construct a WLAN and make the nodes communicate wirelessly.

OBSERVATION:

3. Configure the connected PC and access point → port 1 → SSID as WLAN.

4. Select WEP and enter any 10 digit hex key → i.e 1 2 3 4 5 6 7 8 9 0.

5. To configure PCQ and laptop with wireless standards. Switch off the device. Drag existing PT→Host –NM–LAN to the component listed in the LHS. Drag WMP300N wireless interface to the empty port. Switch on the device.

6. PC0 → config → new wireless interface would have been added. Configure SSID, WEP, WEP key, IP address and Gateway to the device. SSIP → WLAN, authetication → select → WEP enter the same key → 1234567890 IP address → 10.0.0.3 and subnet mask will be 255.0.0.0. to configure router.
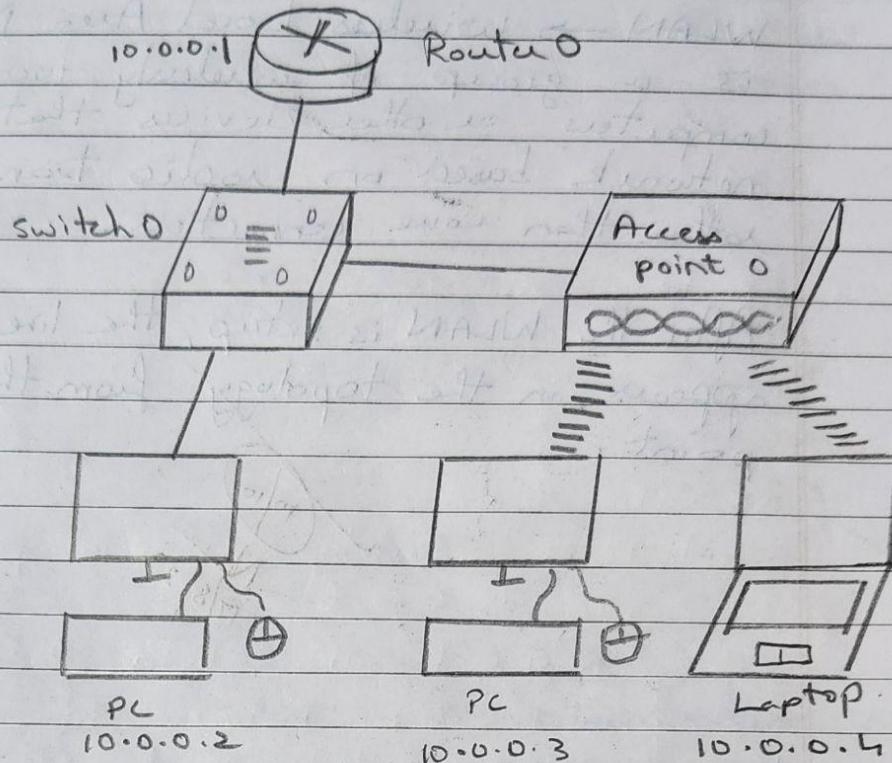
Router > enable
Router # configt
Router (config) # interface fastethernet 0/0
Router (config-if) # ip address 10.0.0.1 255.0.0.0
Router (config-if) # noshut

RESULT:


```
            ┌─X─┐
10.0.0.1    │   │   Router 0
            └───┘
              │
              │
switch 0  ┌──────┐      ┌─────────┐
   0 ═══ 0│      │      │ Access  │
   0    0 │      │──────│ point 0 │
          └──────┘      │ ∞∞∞∞∞   │
                        └─────────┘
```

PC   PC   Laptop
10.0.0.2   10.0.0.3   10.0.0.4

In PC 0 (10.0.0.2)

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=10ms TTL=128
Reply from 10.0.0.3: bytes=32 time=4ms TTL=128
Reply from 10.0.0.3: bytes=32 time=5ms TTL=128

Ping statistics for 10.0.0.3:
   Packets: Sent=4, Received=4, Lost=0
Approximate round trip times in milli-seconds:
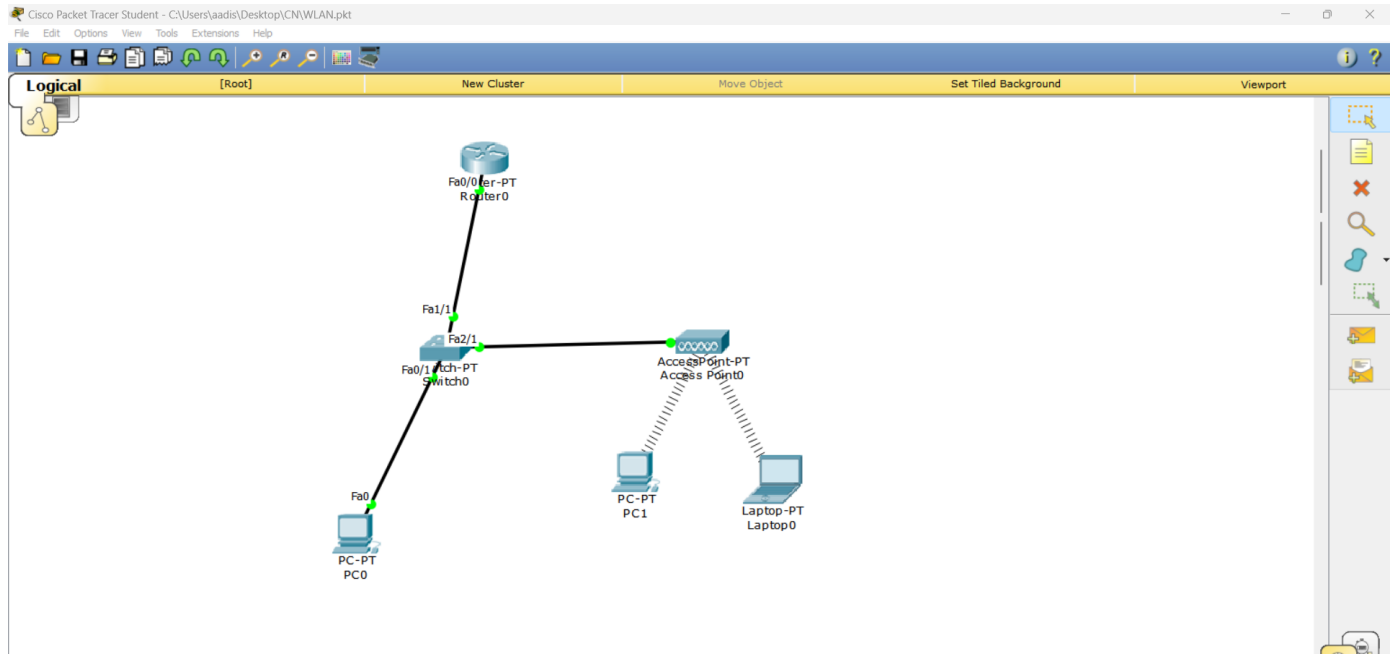   Minimum=4ms, Maximum=22ms, Average=10ms

OBSERVATION:

WLAN → Wireless Local Area Network is a group of wirelessly located computers or other devices that form a network based on radio transmissions rather than wire connections.

After the WLAN is setup, the lived connection appears in the topology from the access point.

10/10

N
17/8/23

Result: