

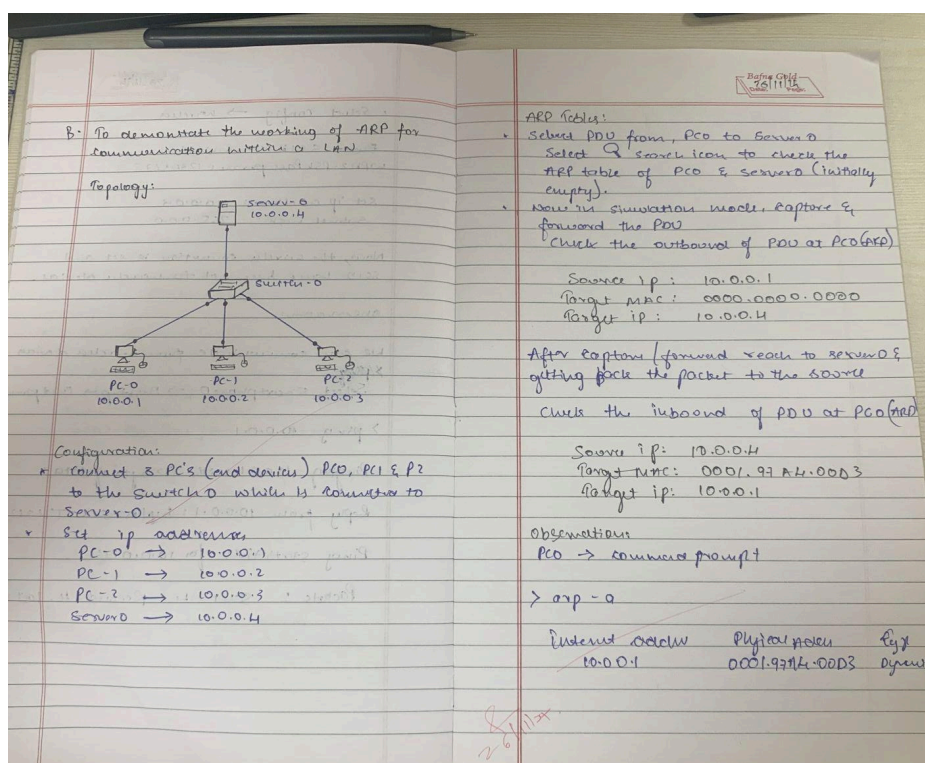
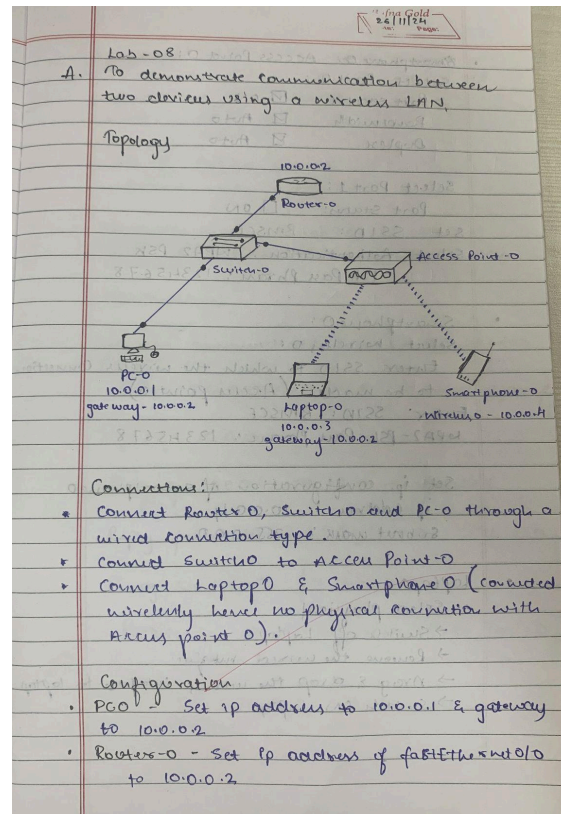
NAME : Mohith Jain

USN: 1BM22CS162

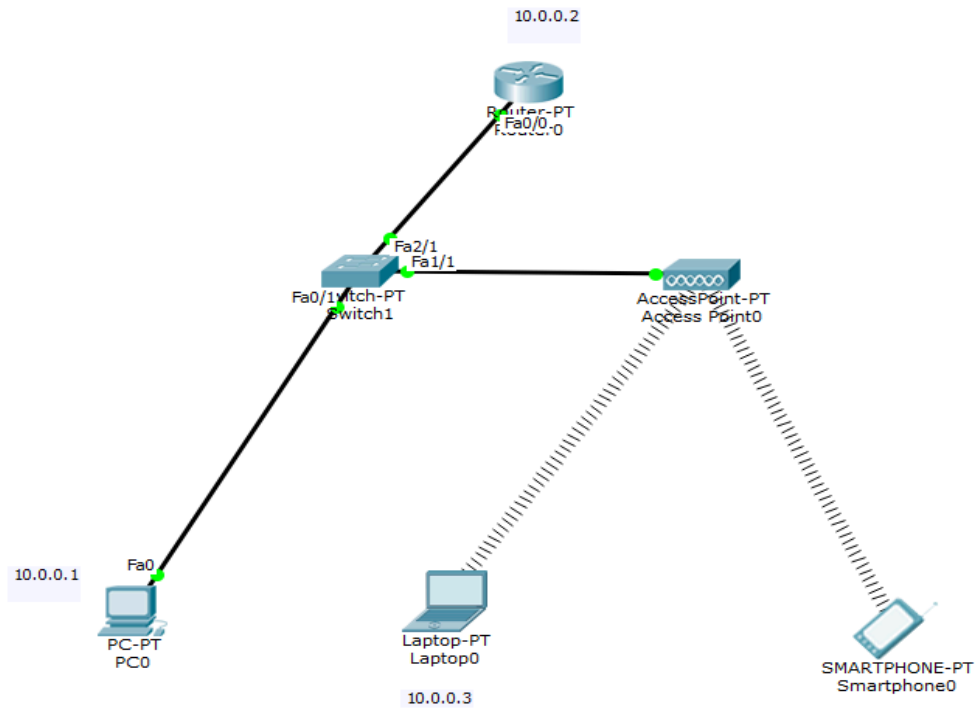
## CN LAB 8

**AIM:** TO DEMONSTRATE COMMUNICATION B/W TWO DEVICES USING A WIRELESS LAN

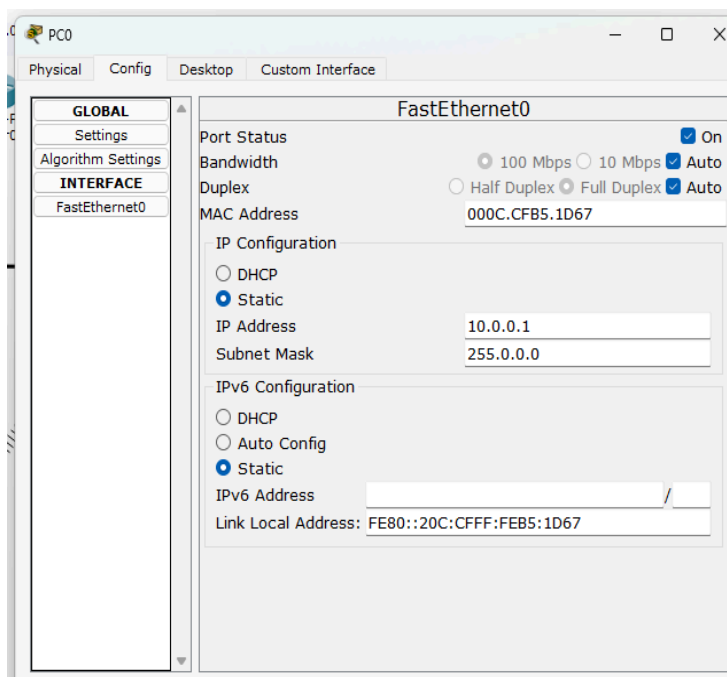
OBSERVATION:



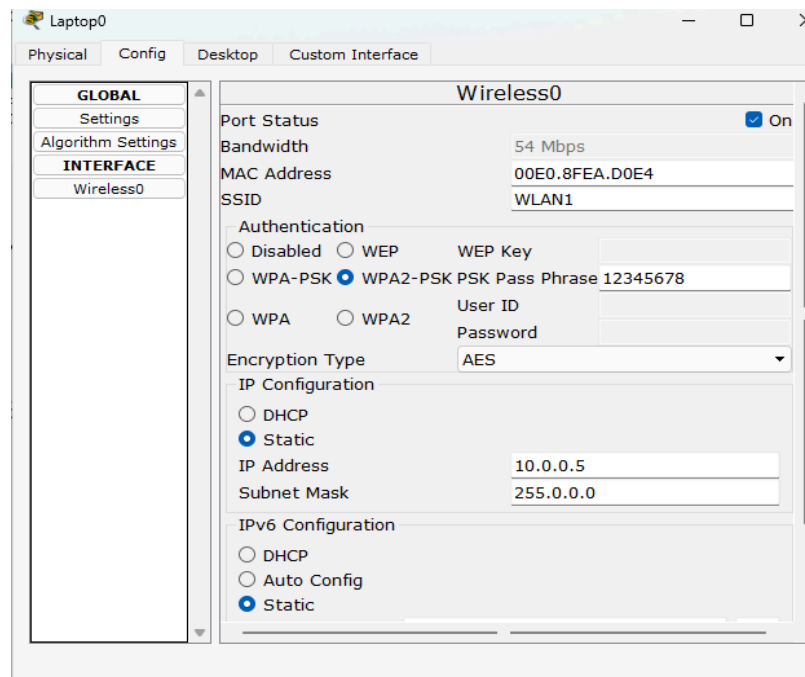
## TOPOLOGY:



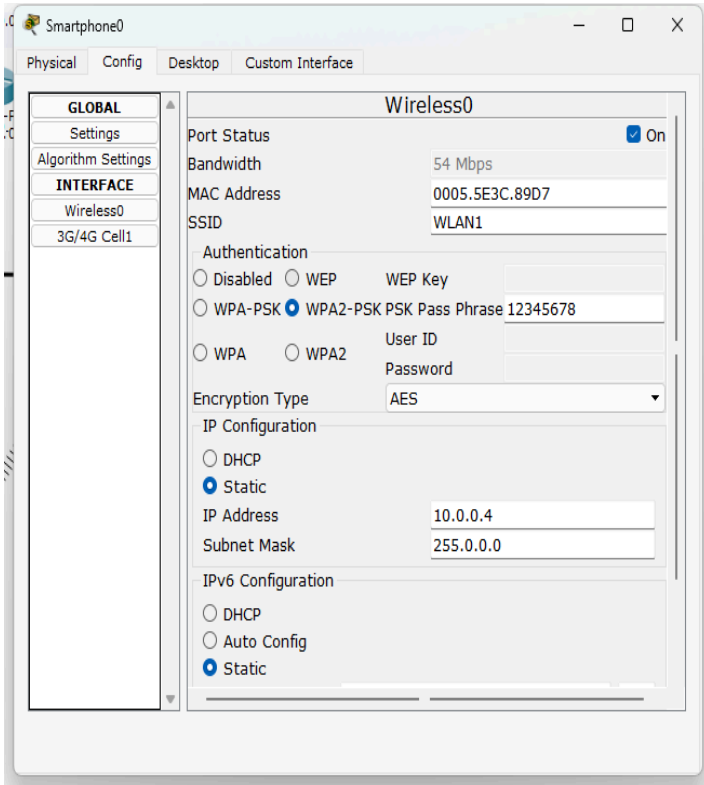
## PC0 CONFIGURATION:



## LAPTOP CONFIGURATION:



## SMART-PHONE CONFIGURATION:



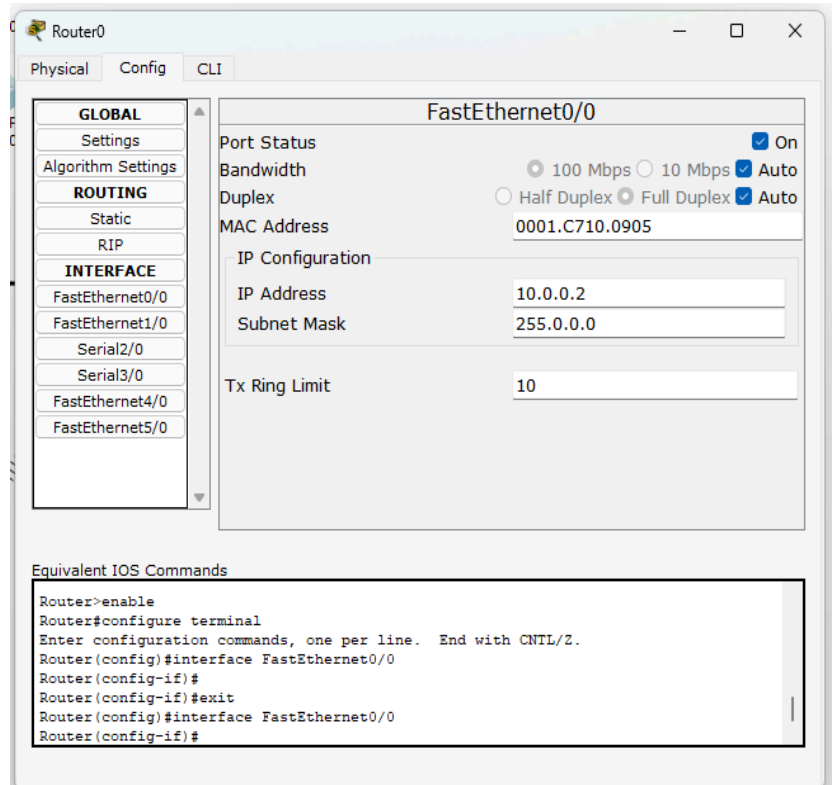
Smartphone0 Configuration Window (Config tab):

- GLOBAL**
  - Settings
  - Algorithm Settings
  - INTERFACE**
    - Wireless0
    - 3G/4G Cell1

**Wireless0**

- Port Status: ☒ On
- Bandwidth: 54 Mbps
- MAC Address: 0005.5E3C.89D7
- SSID: WLAN1
- Authentication:
  - ☐ Disabled
  - ☐ WEP
  - ☒ WPA-PSK
    - WEP Key:
    - PSK Pass Phrase: 12345678
  - ☐ WPA
    - WPA2
    - User ID:
    - Password:
- Encryption Type: AES
- IP Configuration:
  - ☐ DHCP
  - ☒ Static
    - IP Address: 10.0.0.4
    - Subnet Mask: 255.0.0.0
- IPv6 Configuration:
  - ☐ DHCP
  - ☐ Auto Config
  - ☒ Static

## ROUTER0 CONFIGURATION:



Router0 Configuration Window (Config tab):

- GLOBAL**
  - Settings
  - Algorithm Settings
  - ROUTING**
    - Static
    - RIP
  - INTERFACE**
    - FastEthernet0/0
    - FastEthernet1/0
    - Serial2/0
    - Serial3/0
    - FastEthernet4/0
    - FastEthernet5/0

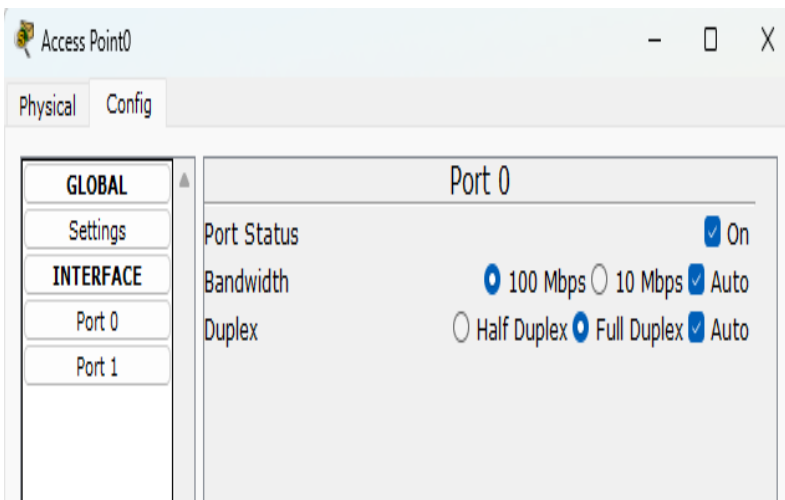
**FastEthernet0/0**

- Port Status: ☒ On
- Bandwidth: ☒ 100 Mbps ☐ 10 Mbps ☒ Auto
- Duplex: ☐ Half Duplex ☒ Full Duplex ☒ Auto
- MAC Address: 0001.C710.0905
- IP Configuration:
  - IP Address: 10.0.0.2
  - Subnet Mask: 255.0.0.0
- Tx Ring Limit: 10

**Equivalent IOS Commands**

```
Router>enable
Router#configure terminal
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#interface FastEthernet0/0
Router(config-if)#
Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#
```

## ACCESS-POINT PORT0



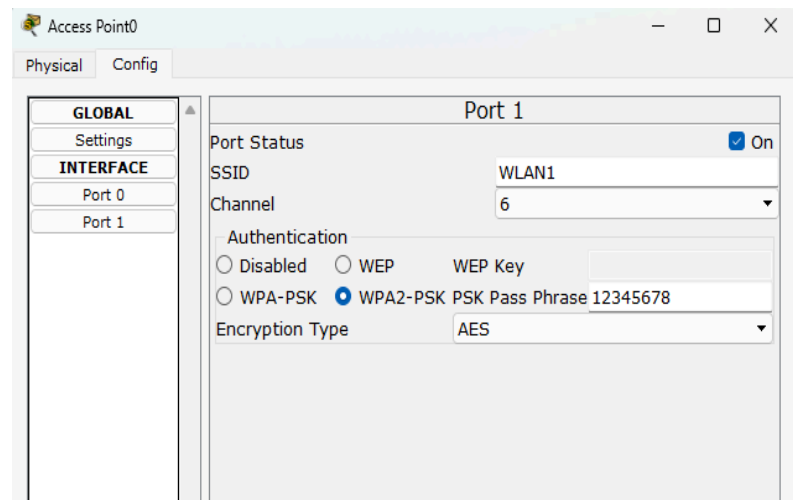
Access Point0 Configuration Window (Config tab):

- GLOBAL**
  - Settings
  - INTERFACE**
    - Port 0
    - Port 1

**Port 0**

- Port Status: ☒ On
- Bandwidth: ☒ 100 Mbps ☐ 10 Mbps ☒ Auto
- Duplex: ☐ Half Duplex ☒ Full Duplex ☒ Auto

## ACCESS-POINT PORT1



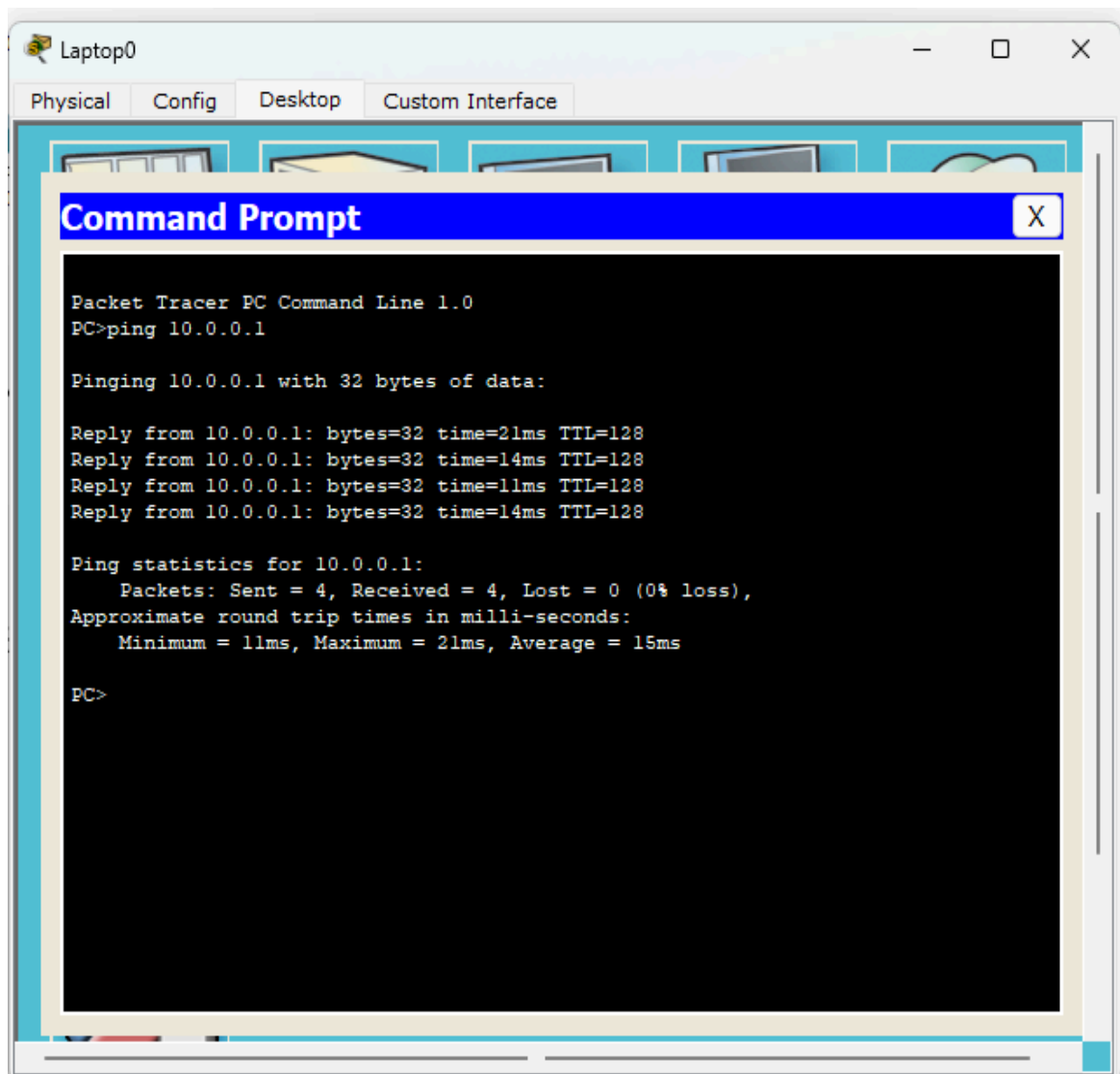
Access Point0 Configuration Window (Config tab):

- GLOBAL**
  - Settings
  - INTERFACE**
    - Port 0
    - Port 1

**Port 1**

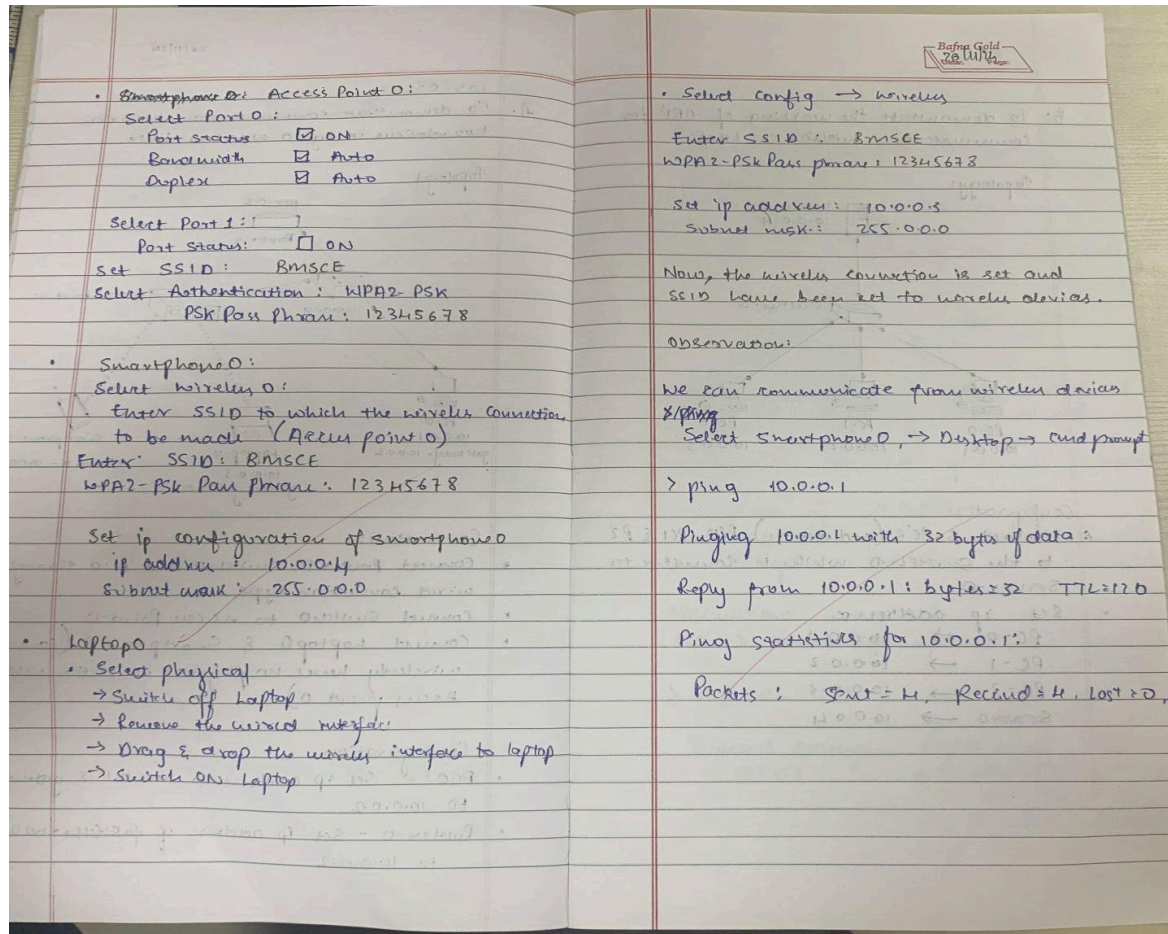
- Port Status: ☒ On
- SSID: WLAN1
- Channel: 6
- Authentication:
  - ☐ Disabled
  - ☐ WEP
  - ☒ WPA-PSK
    - WEP Key:
    - PSK Pass Phrase: 12345678
  - ☐ WPA
- Encryption Type: AES

## PING FROM LAPTOP TO PC

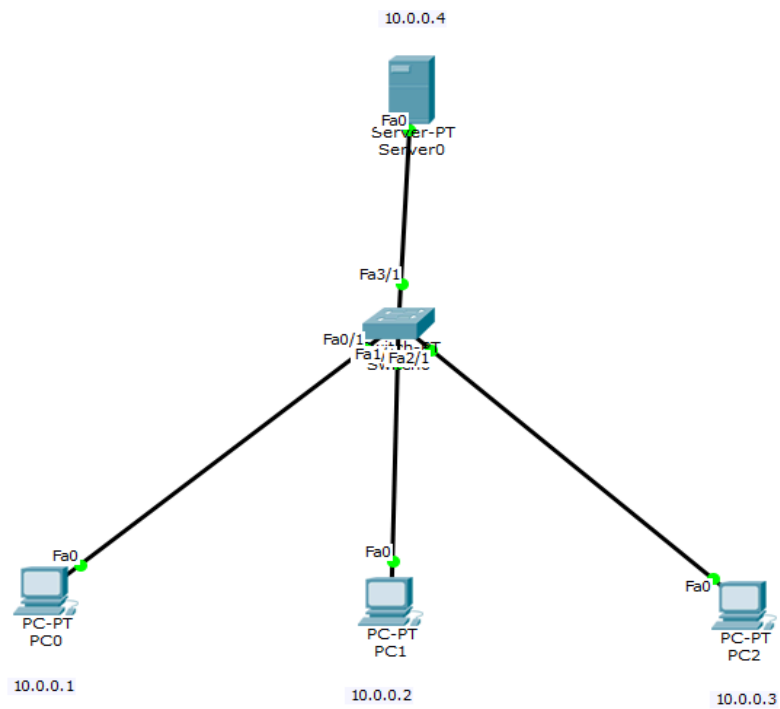


**AIM:** TO DEMONSTRATE THE WORKING OF ARP FOR COMMUNICATION WITHIN A LAN

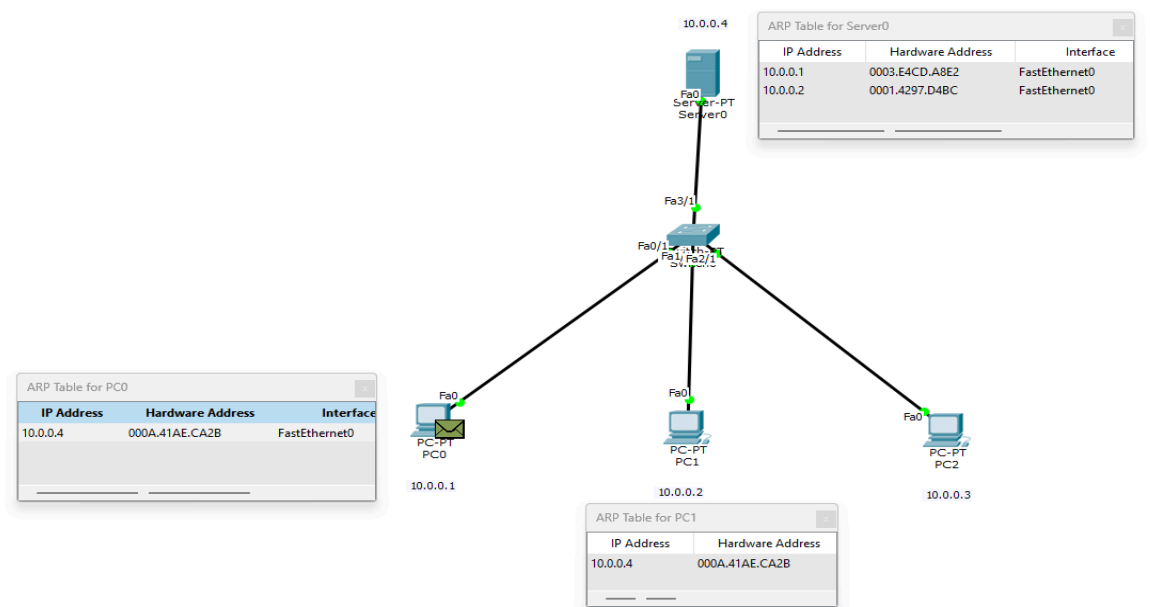
**OBSERVATION:**



## TOPOLOGY:

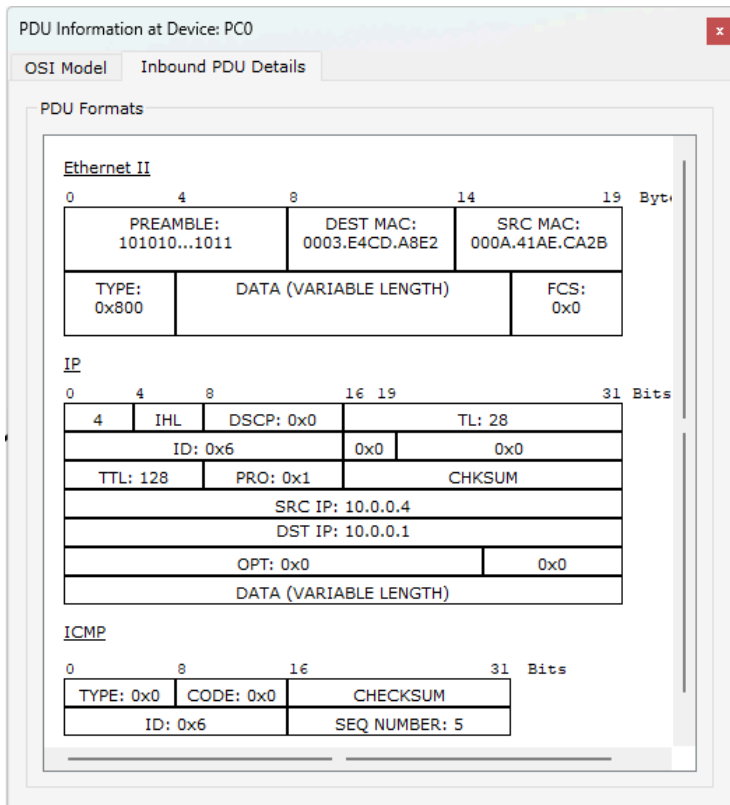


## ARP TABLES:

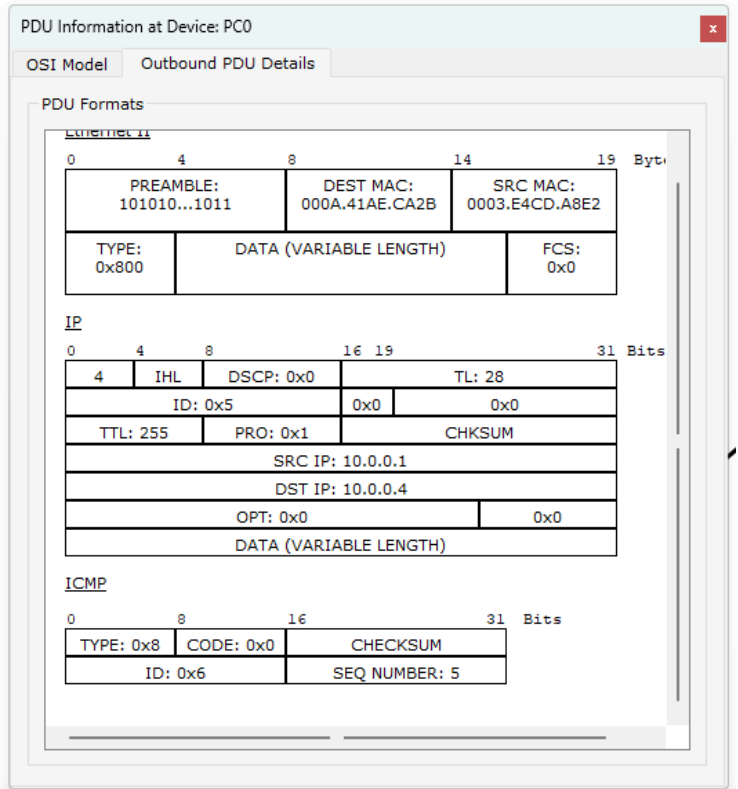




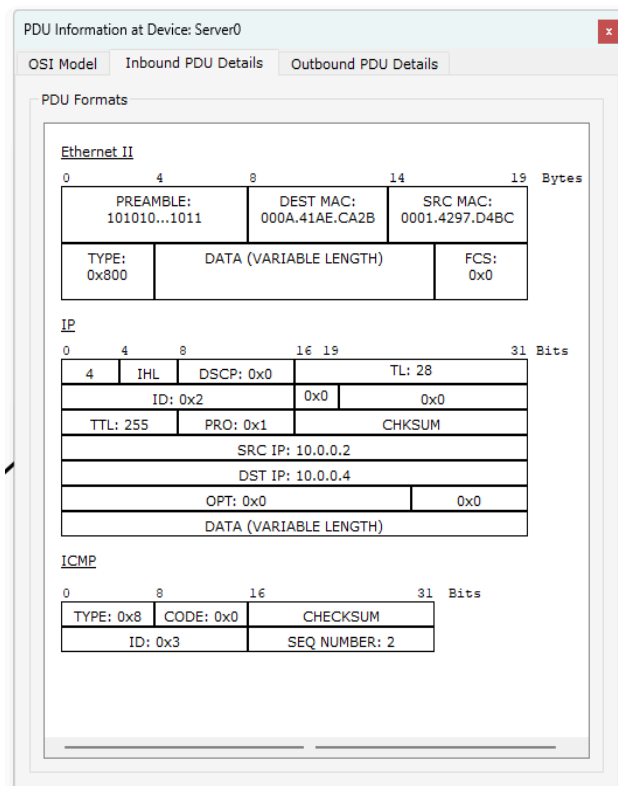
## PC0 INBOUND



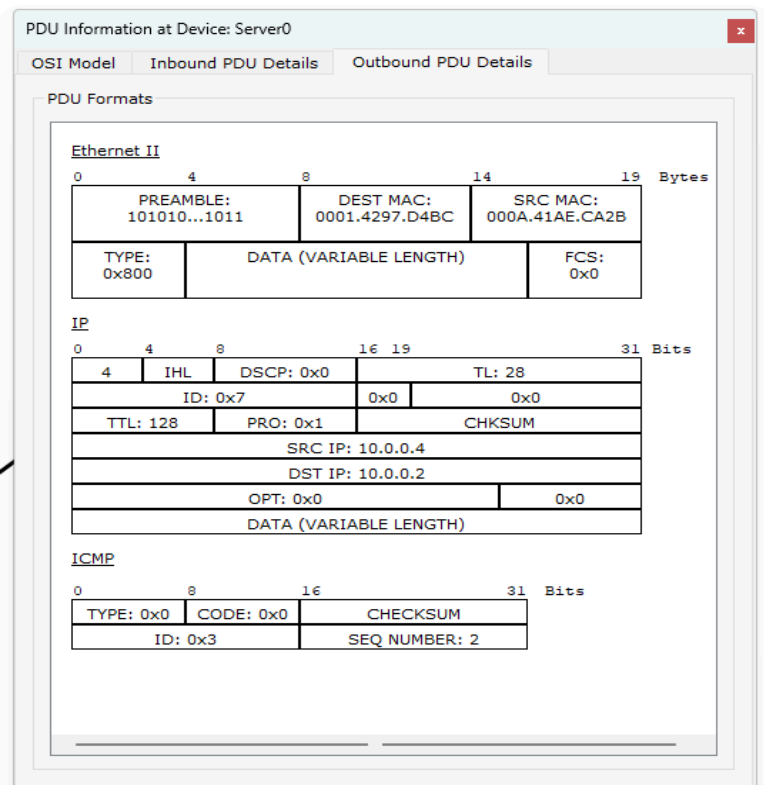
## PC0 OUTBOUND



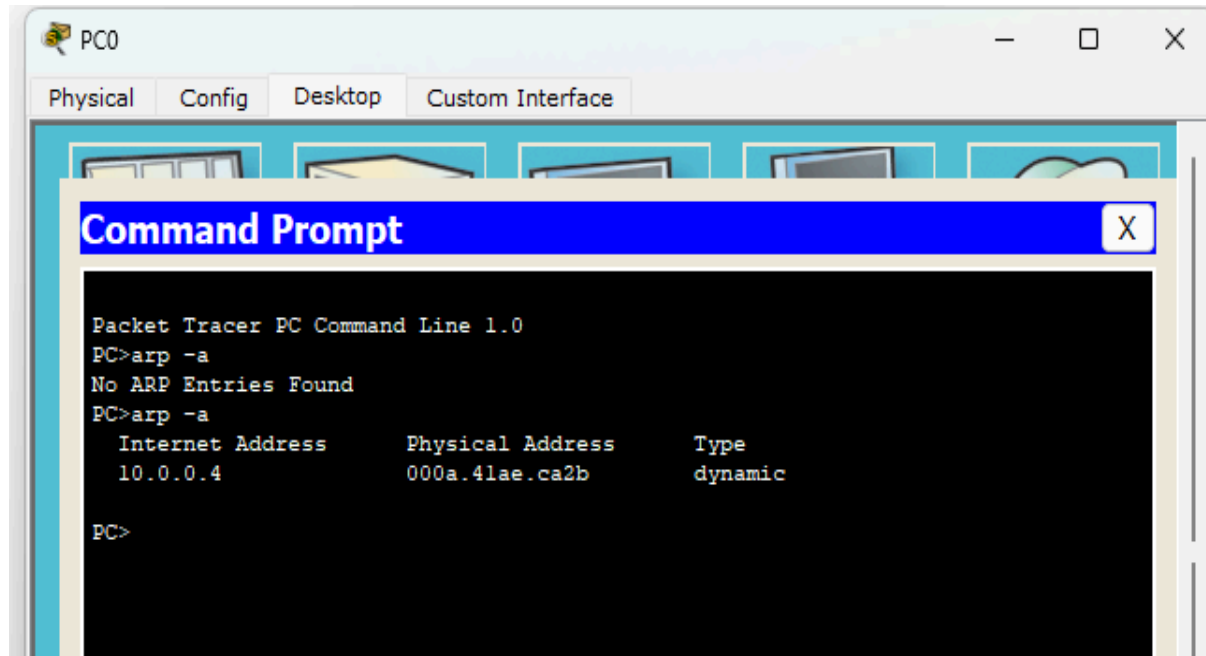
## PC1 INBOUND



## PC1 OUTBOUND



## PING FROM PC0



## PING FROM SERVER0

