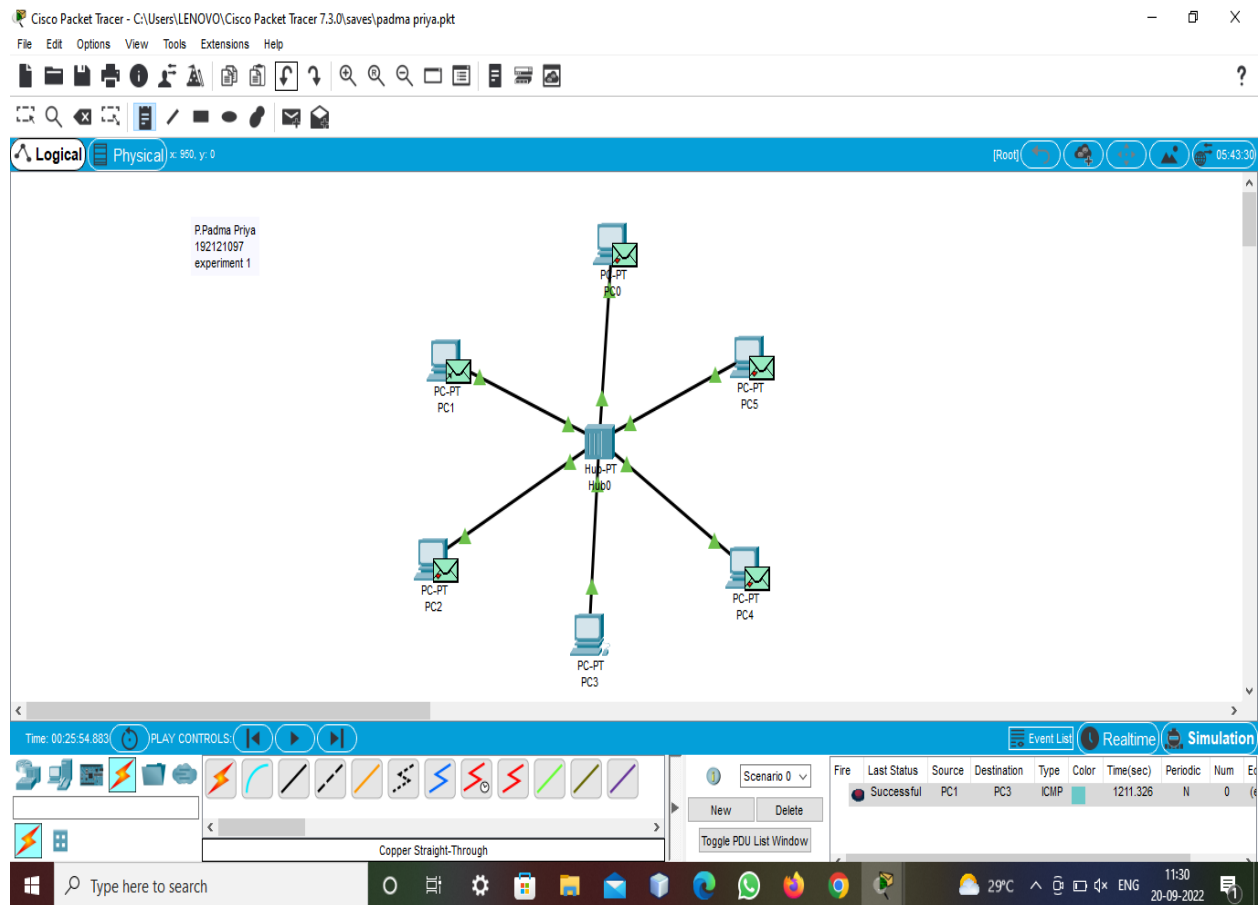
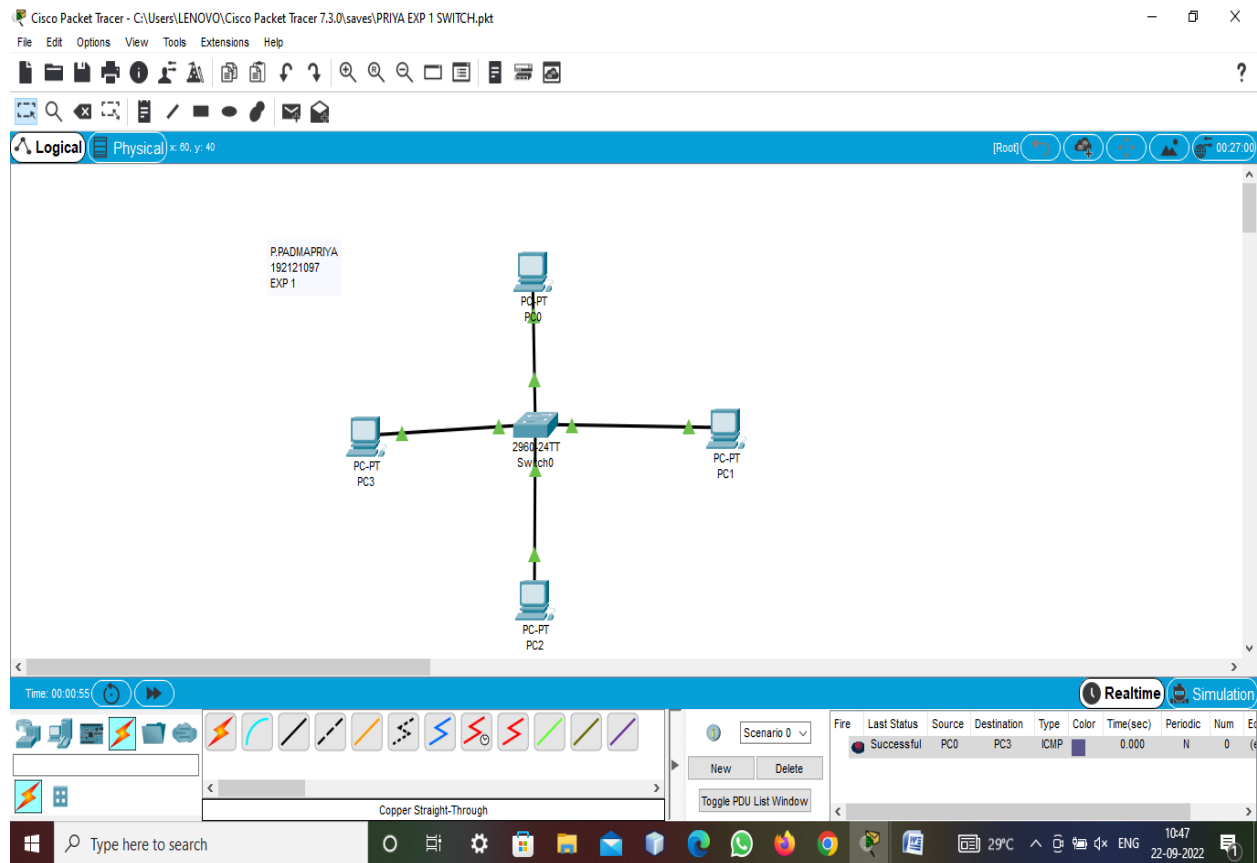


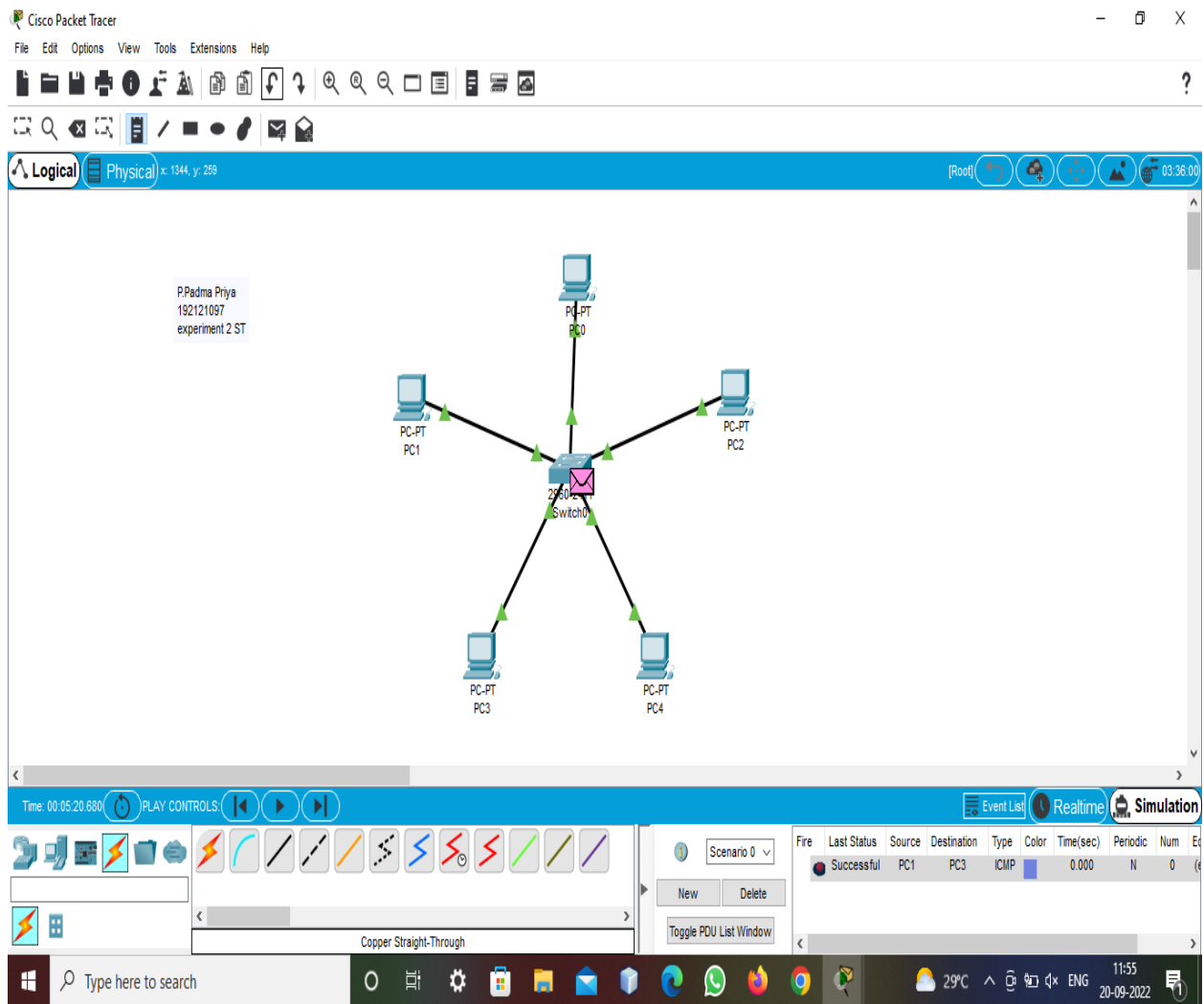
# EXPERIMENT-1(HUB)



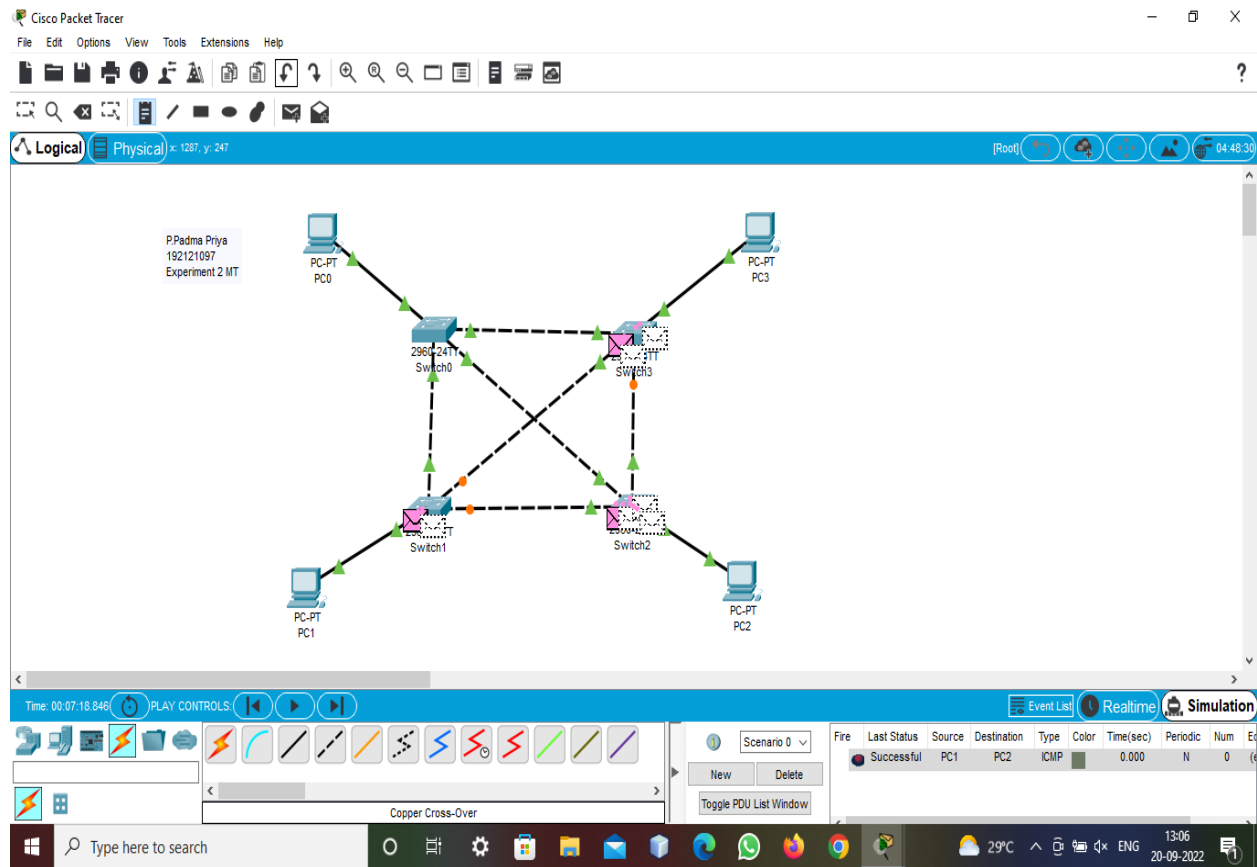
# EXPERIMENT-1(SWITCH)



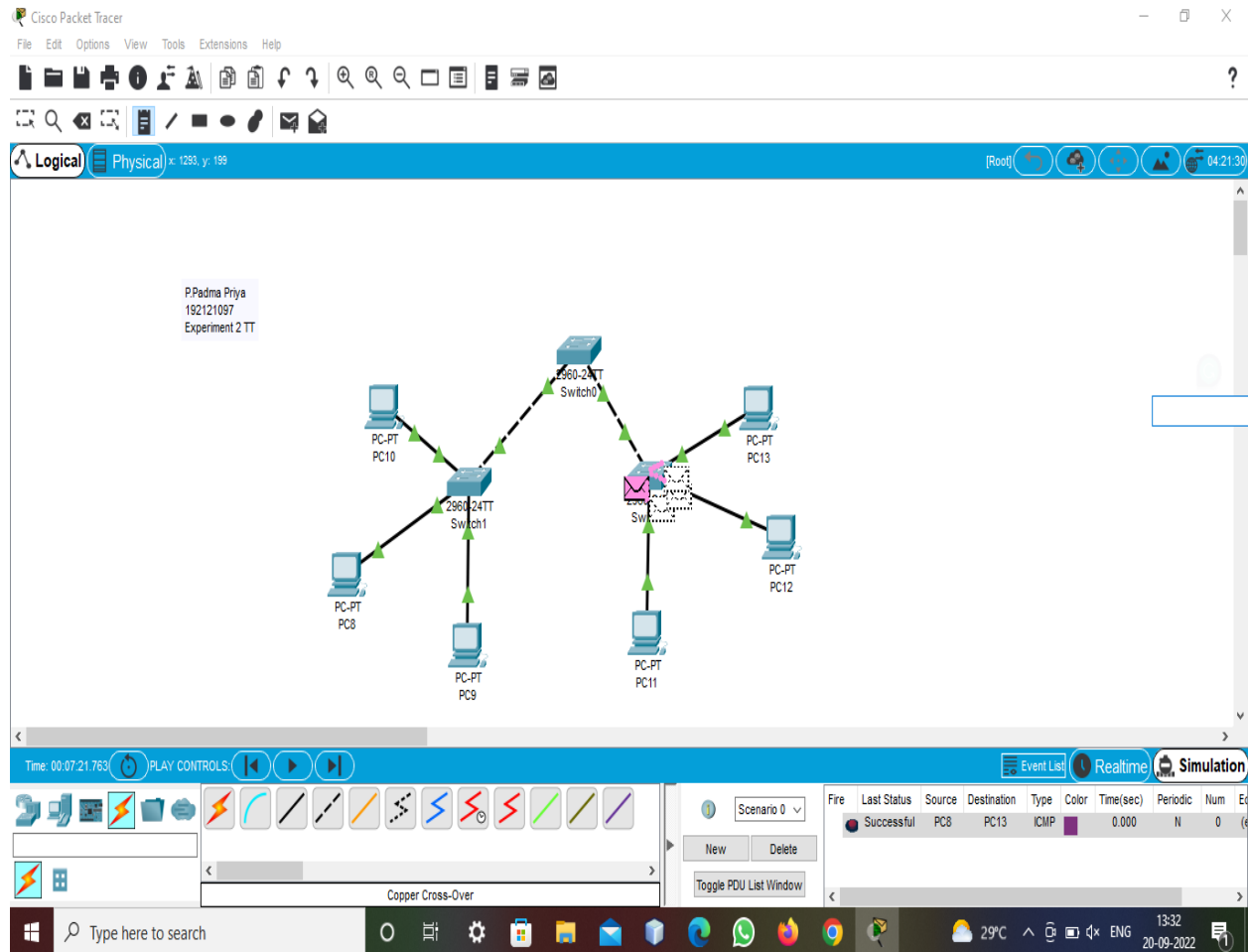
# EXPERIMENT-2(STAR)



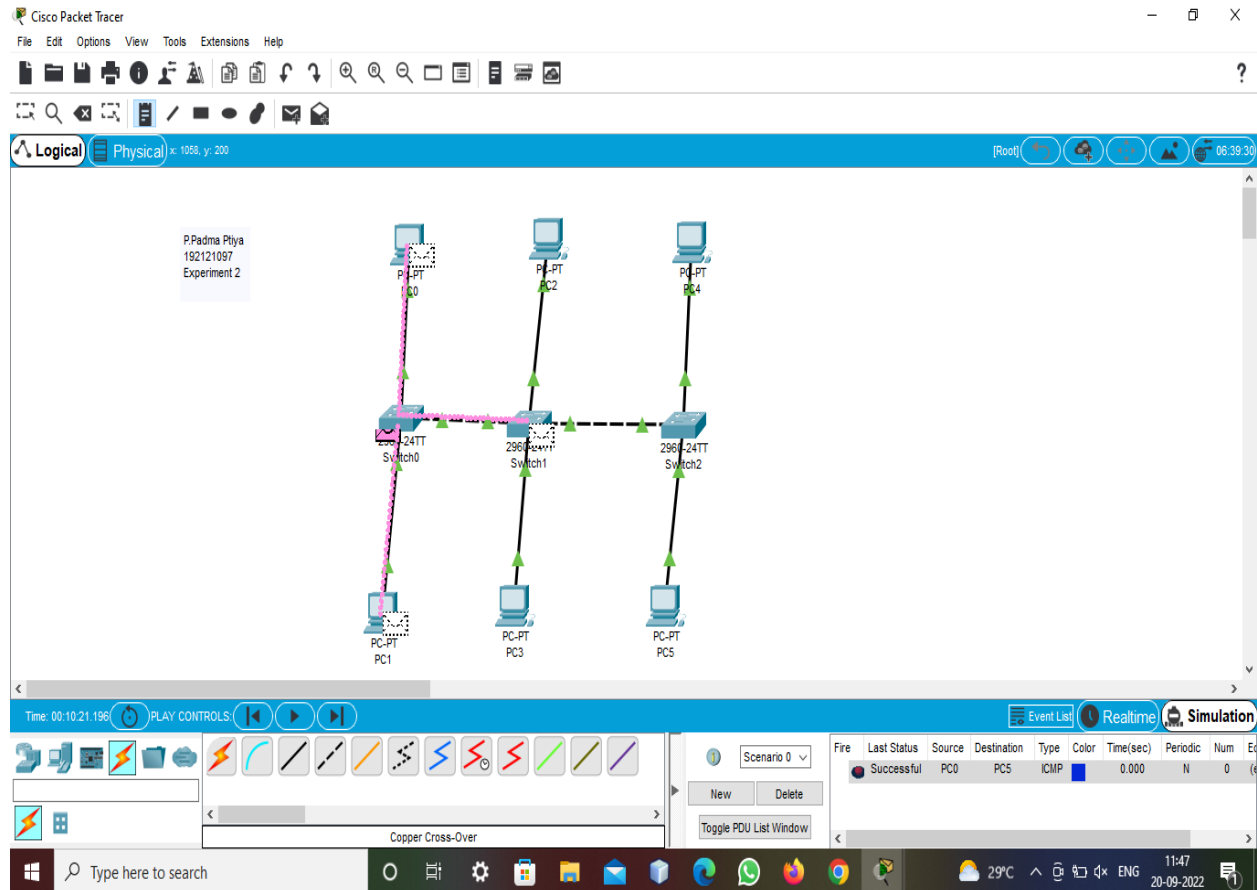
# EXPERIMENT-2(MESH)



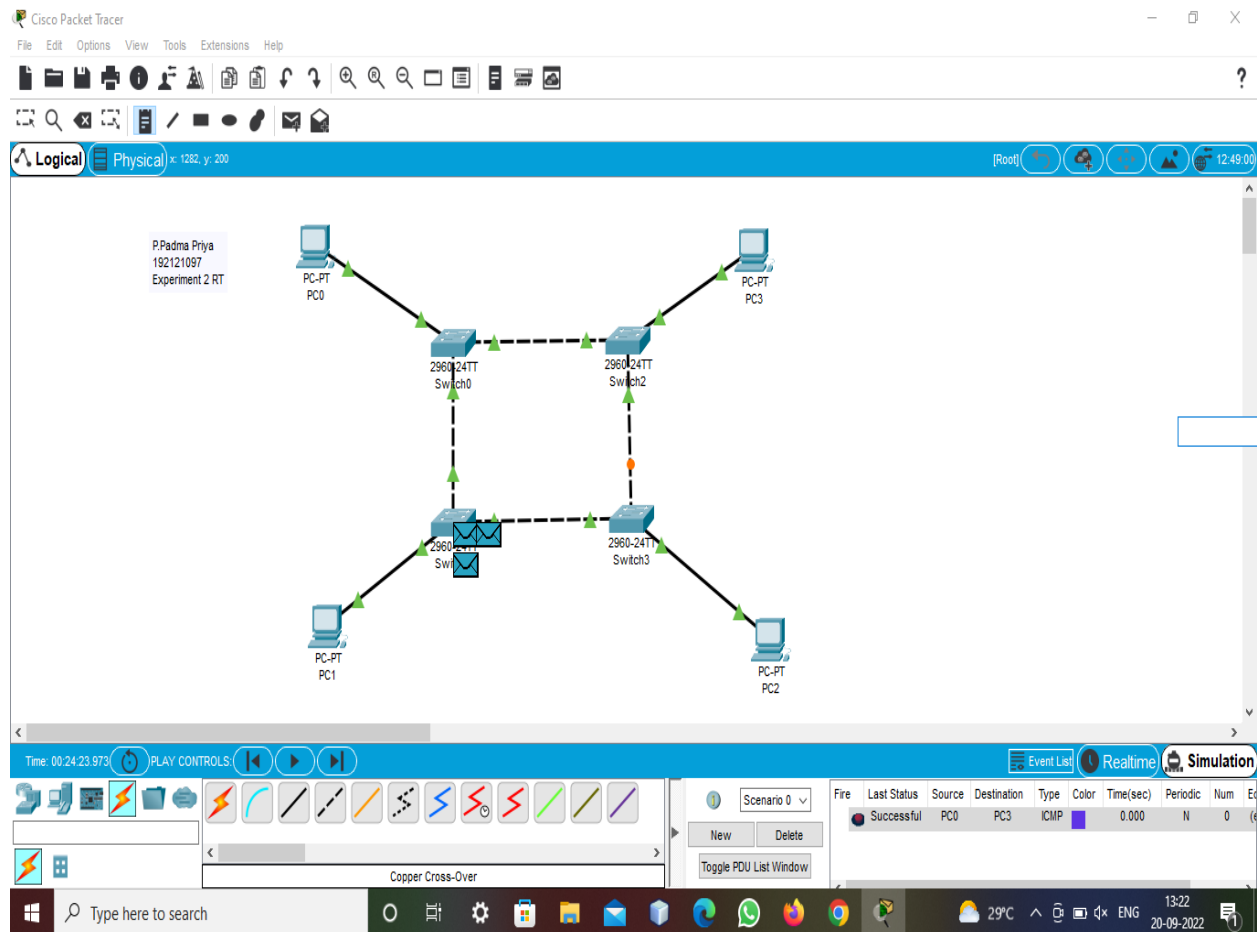
# EXPERIMENT-2(TREE)



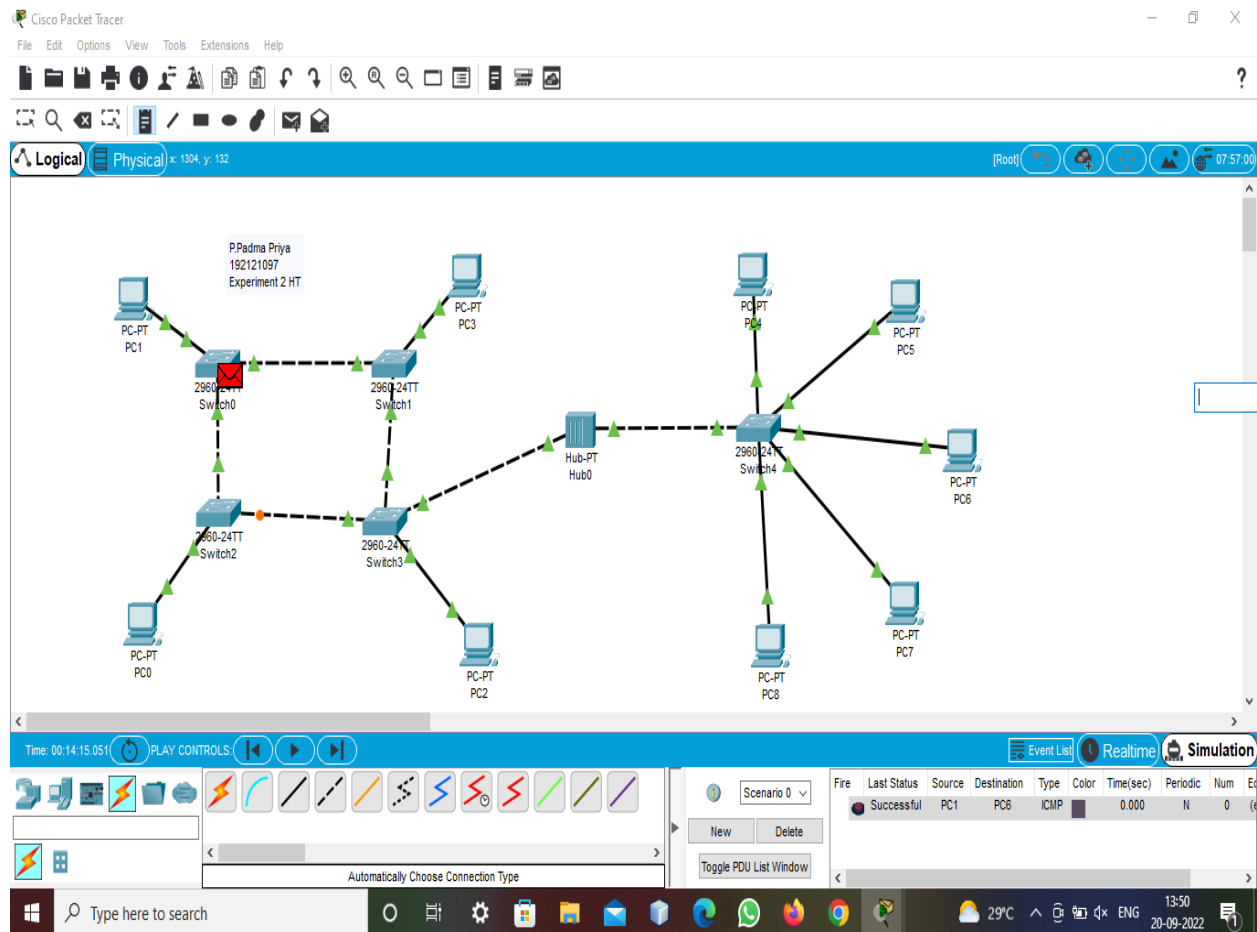
# EXPERIMENT-3(BUS)



# EXPERIMENT-3(RING)

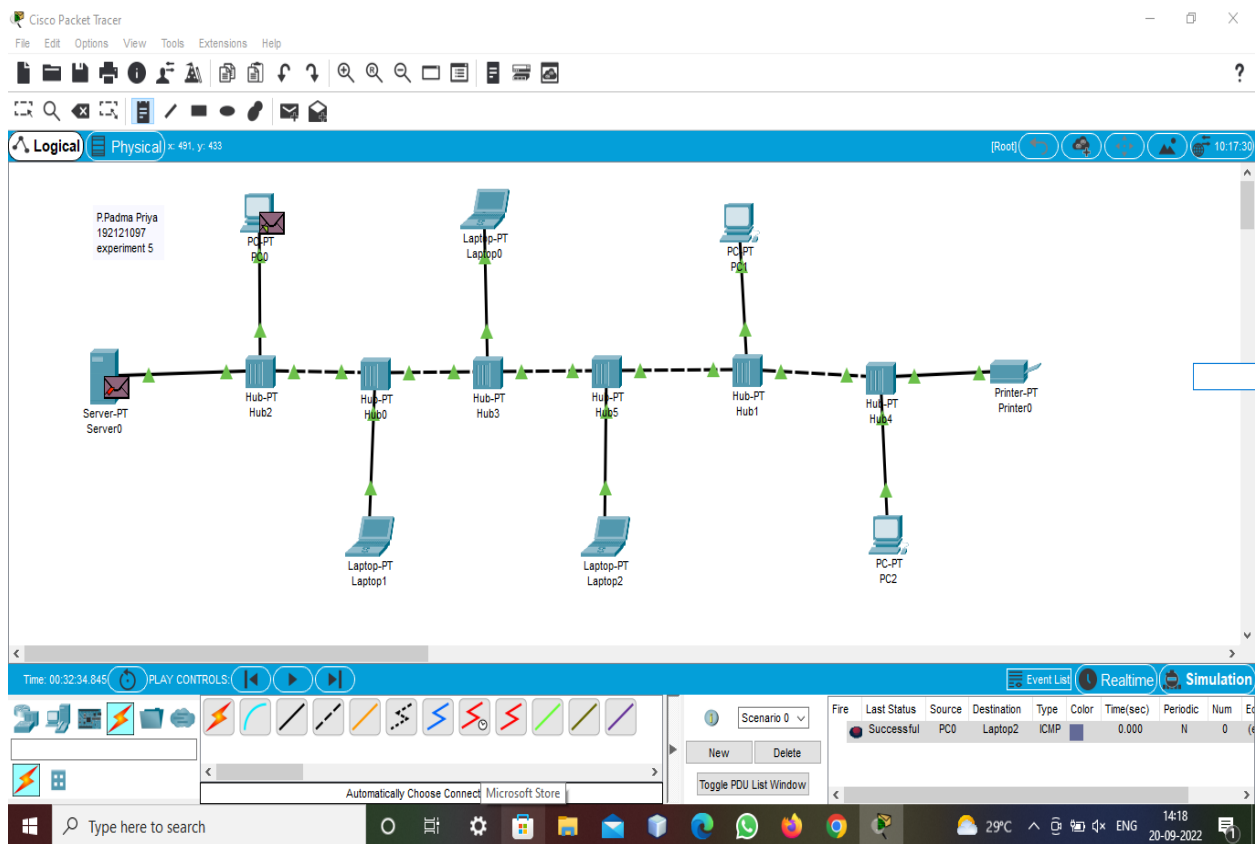


# EXPERIMENT-3(HYBRID)

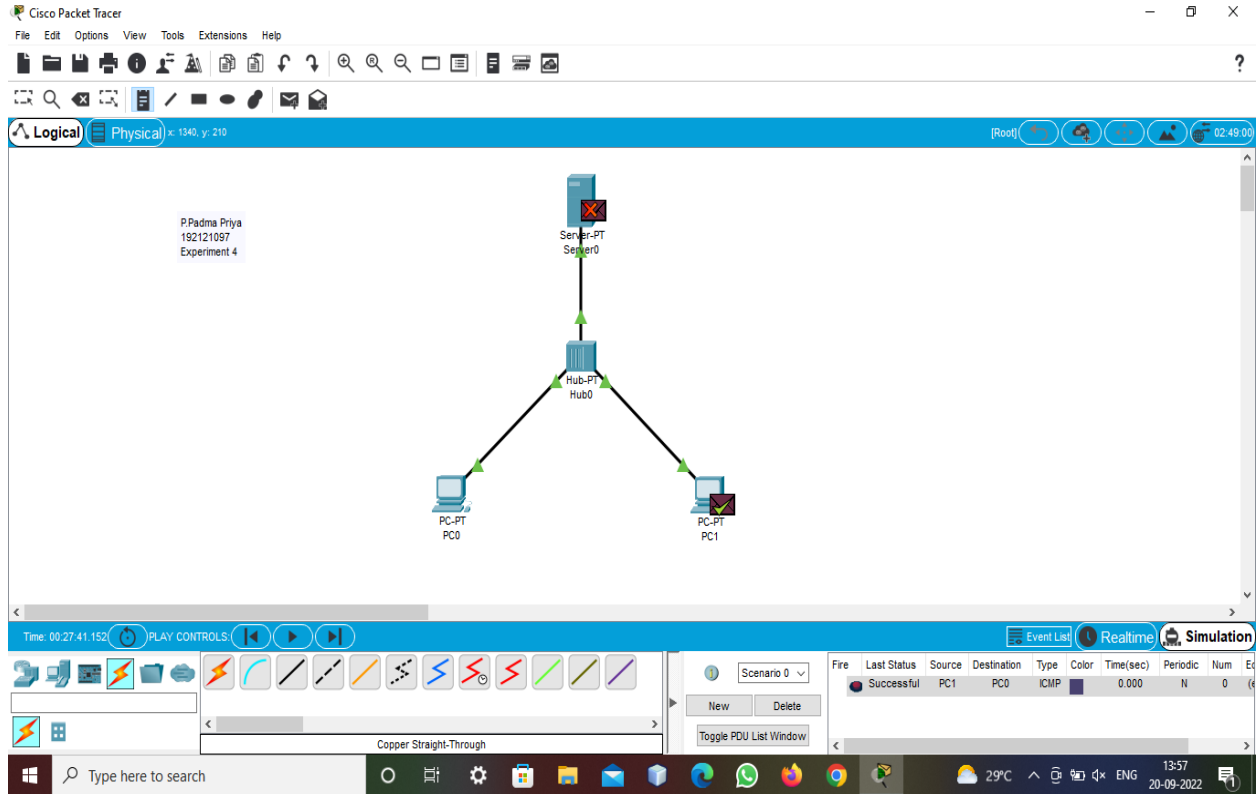




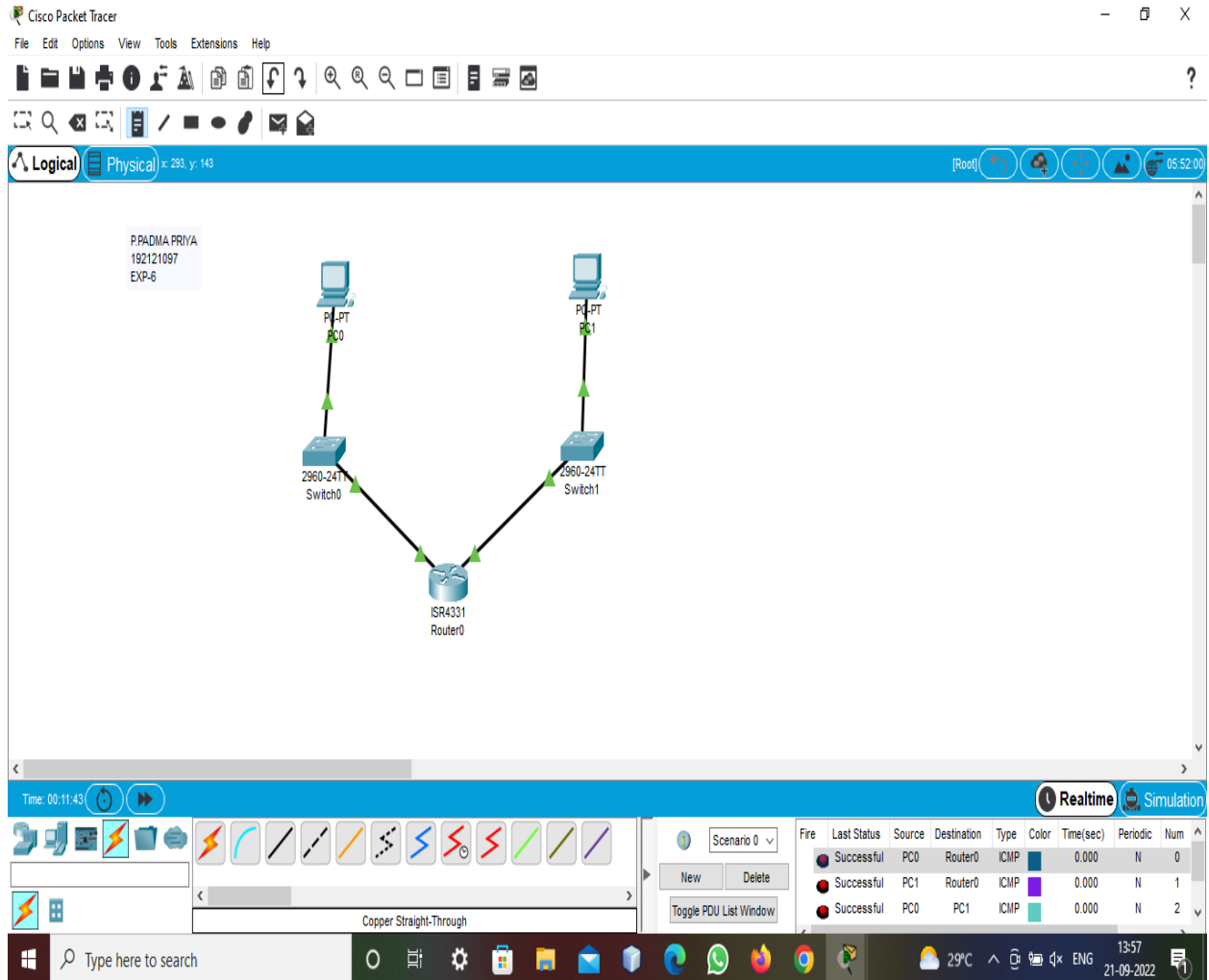
# EXPERIMENT-4



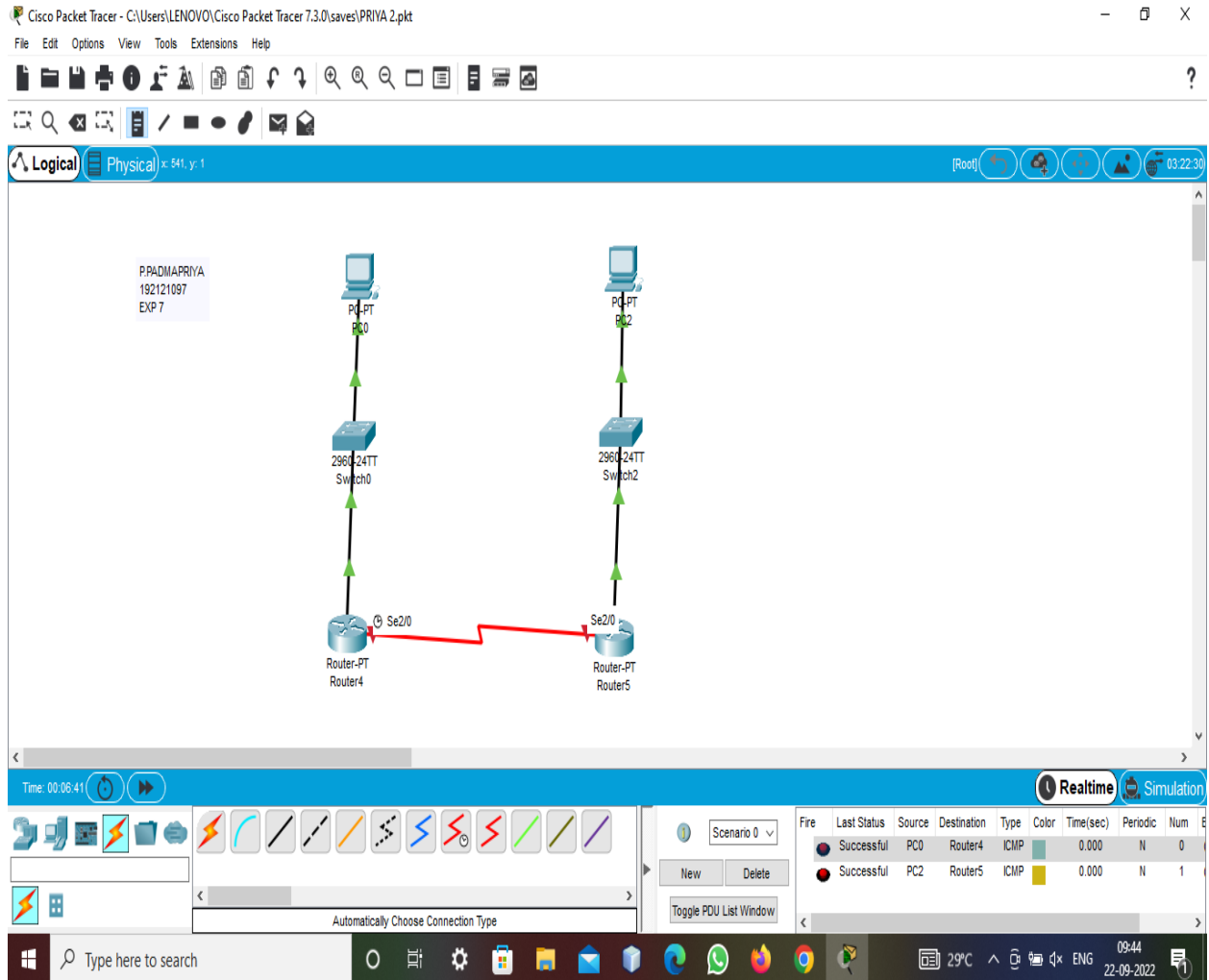
# EXPERIMENT-5



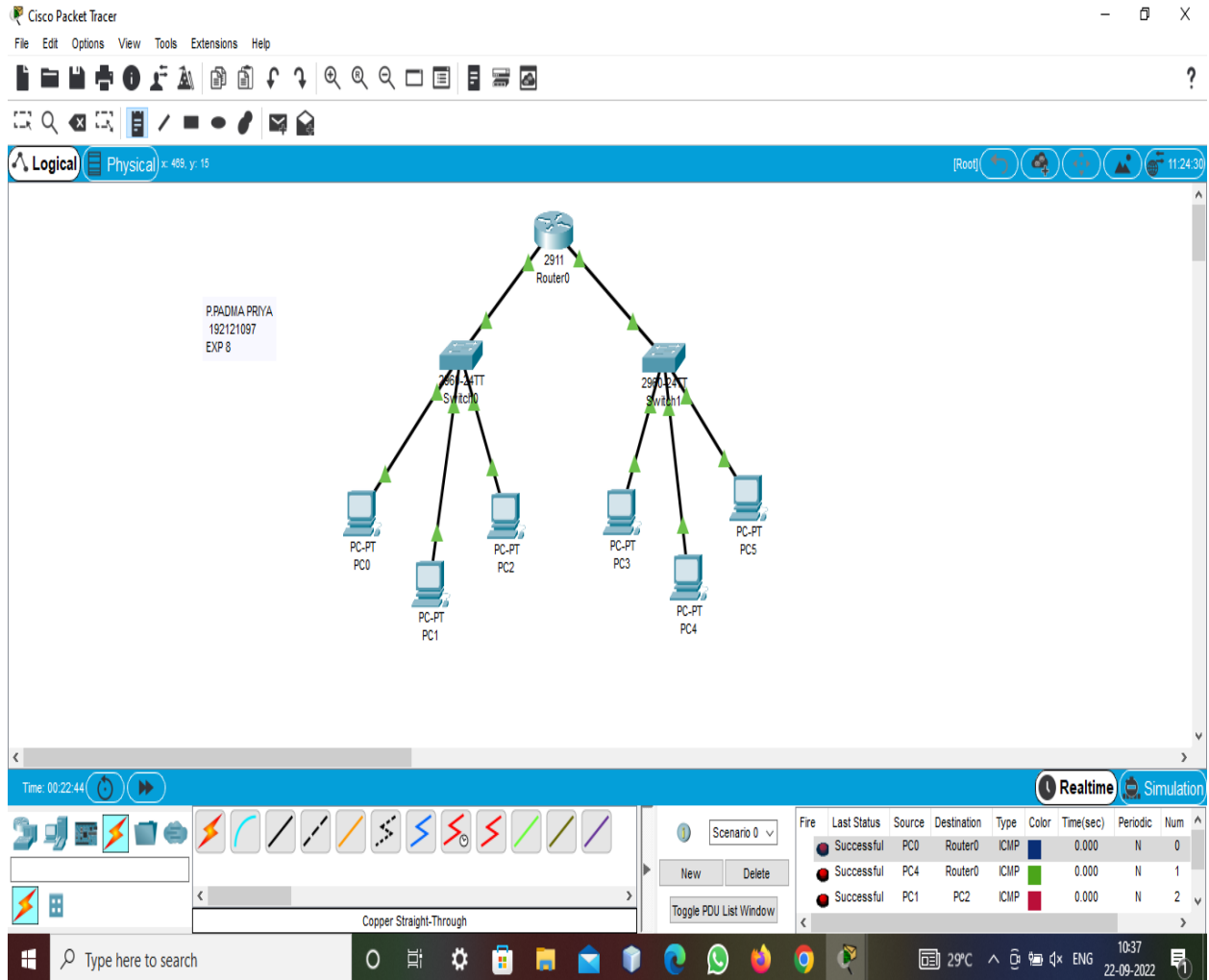
# EXPERIMENT-6



# EXPERIMENT-7

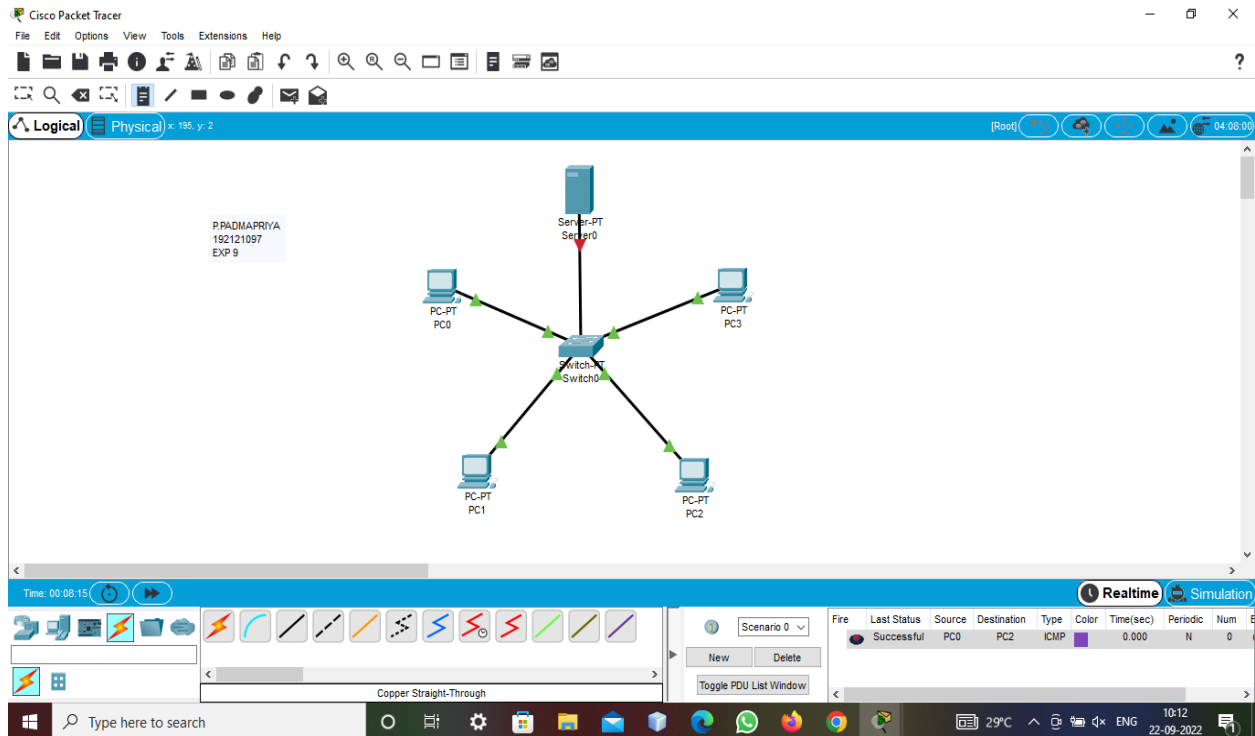


# EXPERIMENT-8



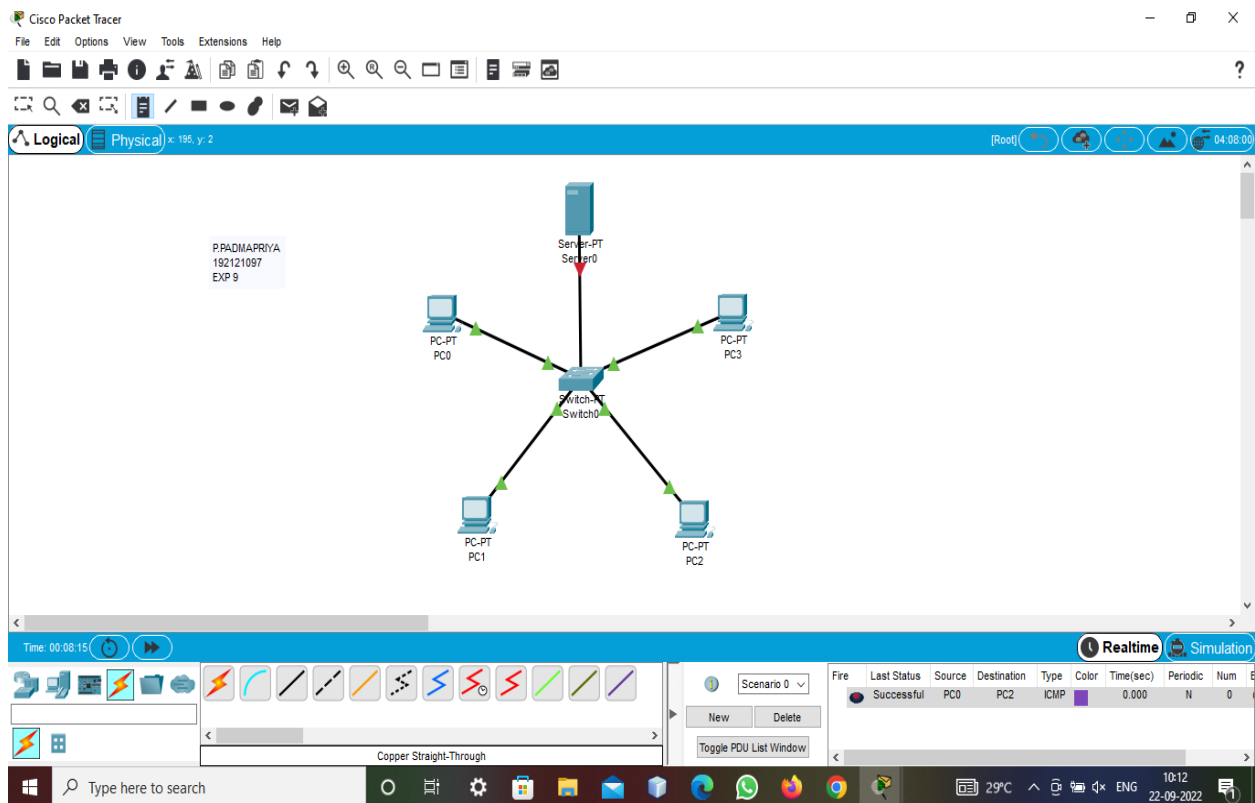
# EXPERIMENT-9

## Functionalities of UDP

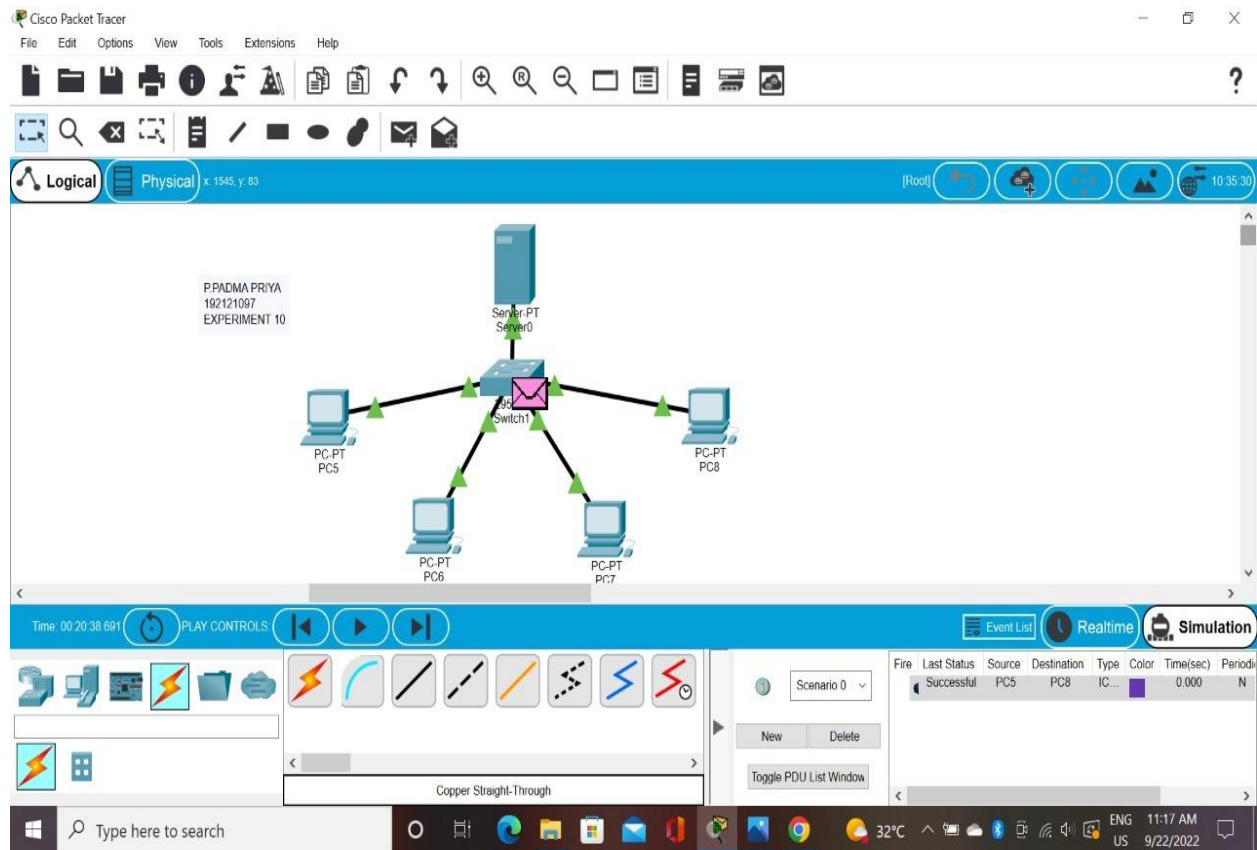


# EXPERIMENT-9

## Functionalities of TCP

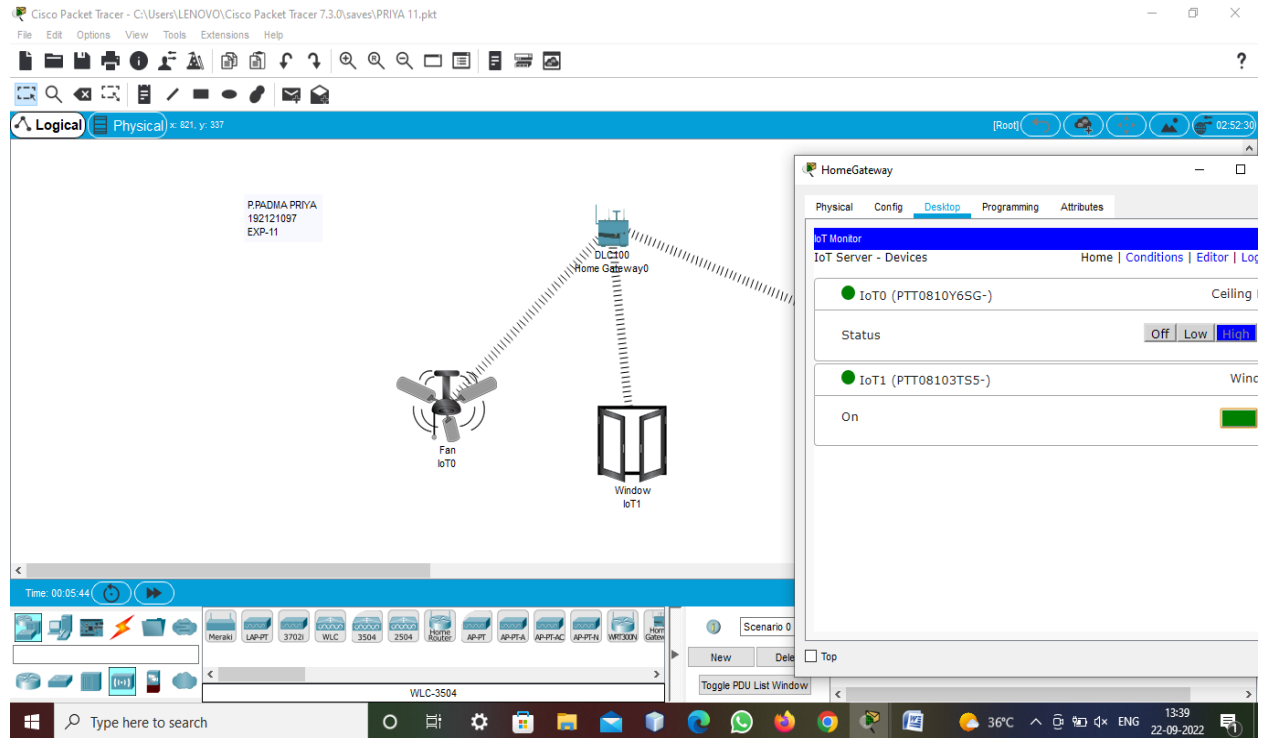


# EXPERIMENT-10

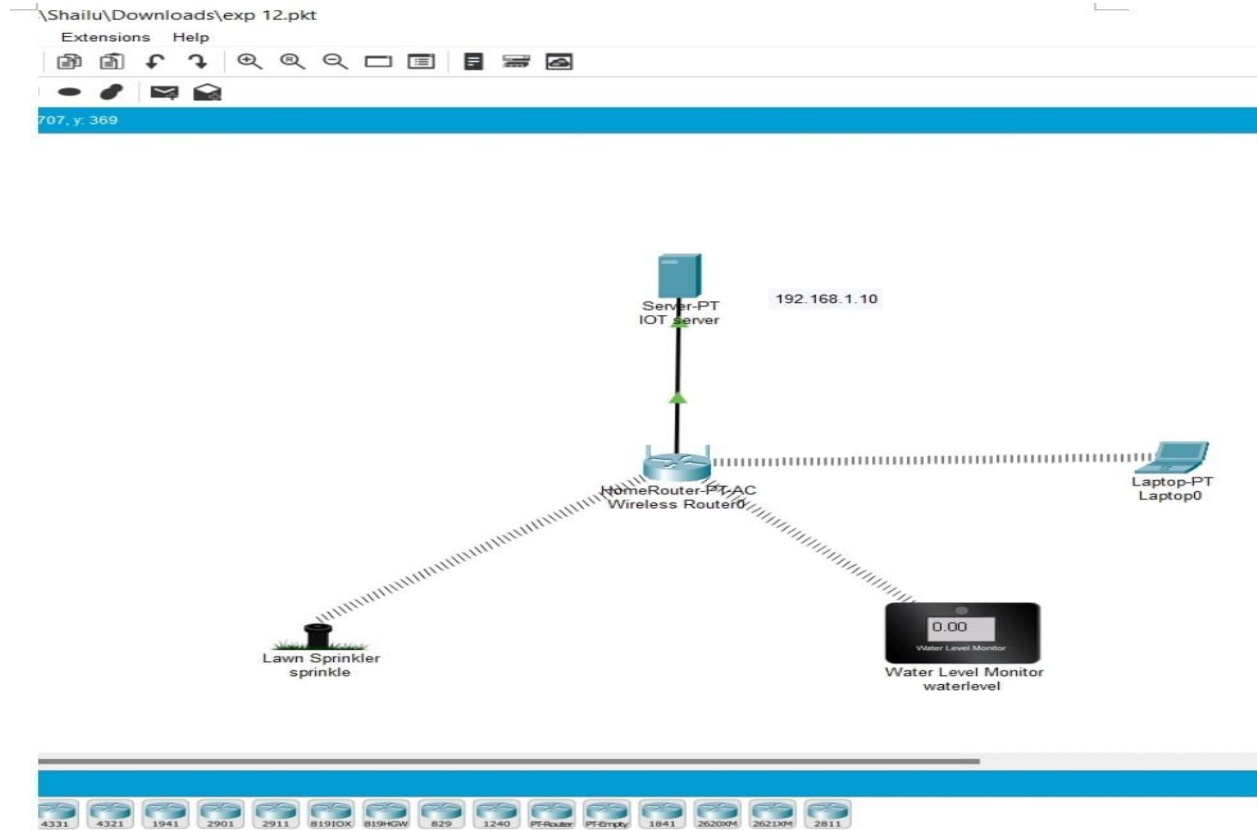




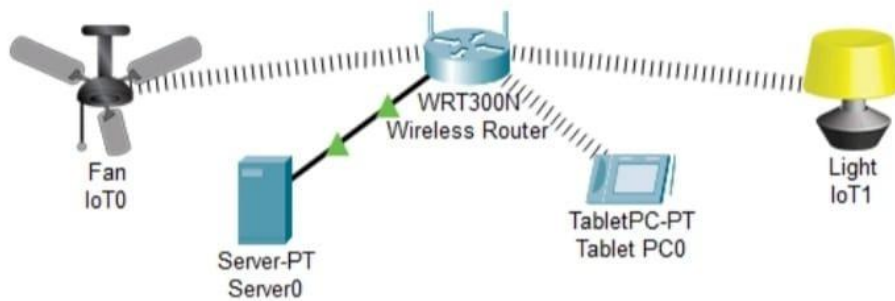
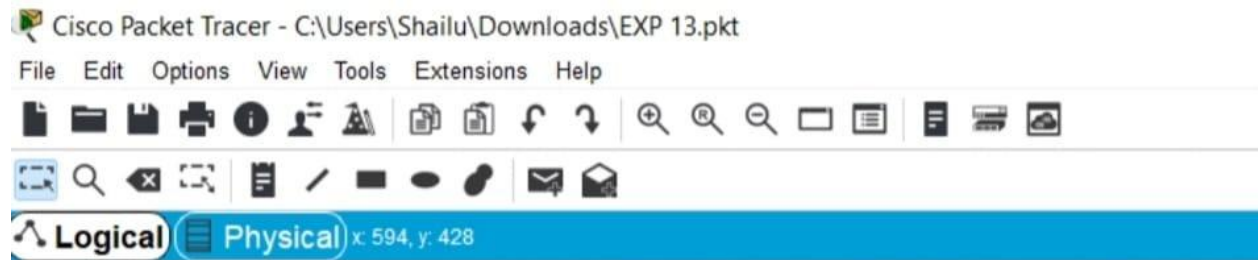
# EXPERIMENT-11



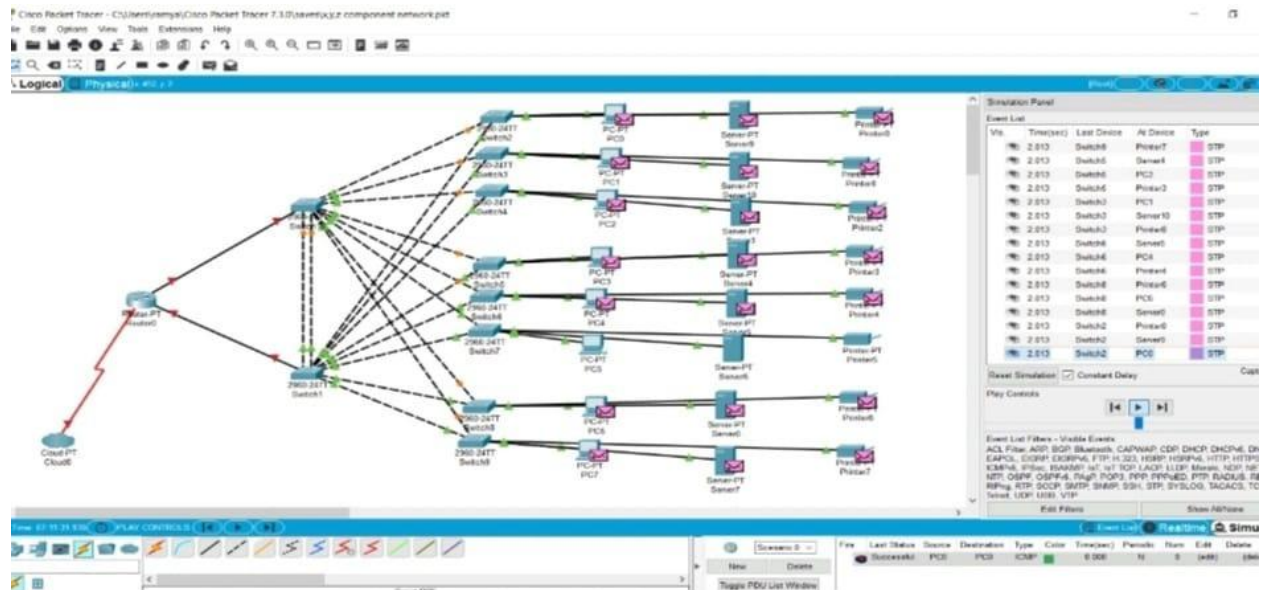
# EXPERIMENT-12



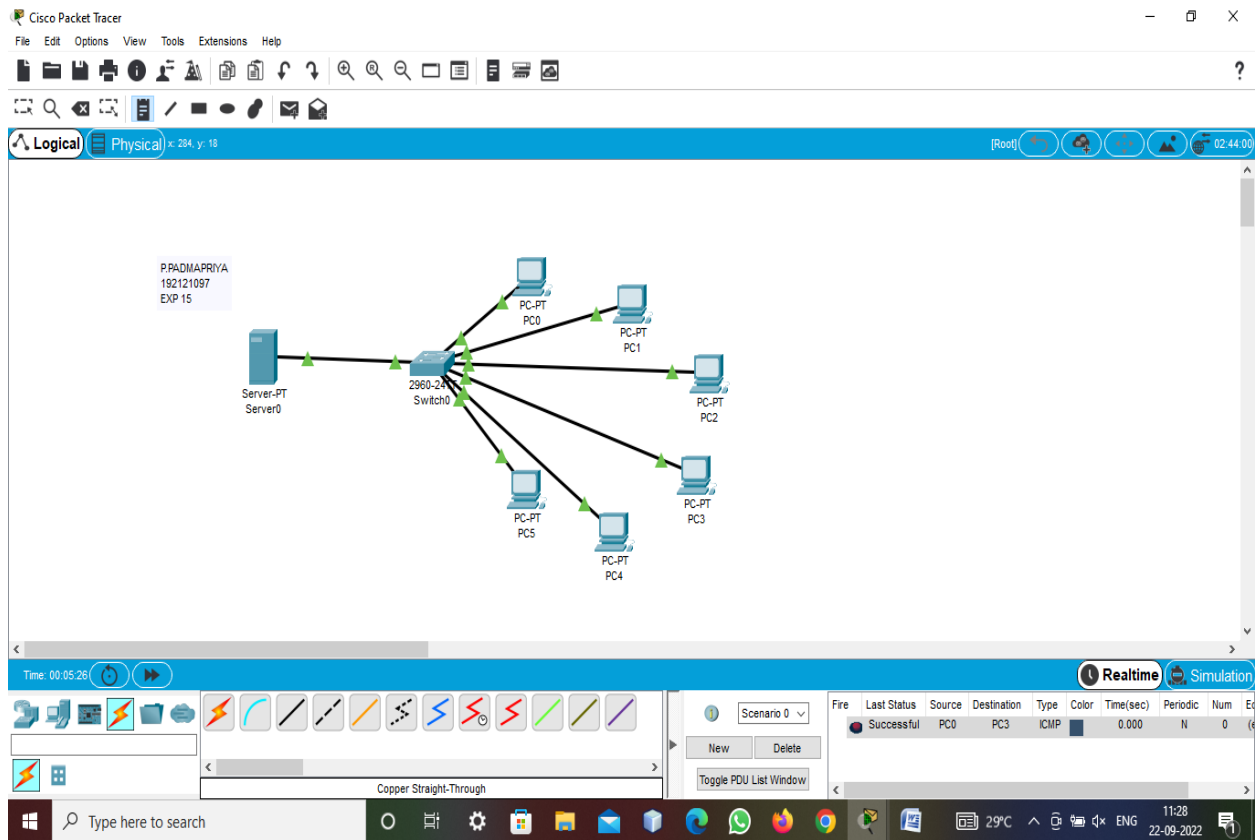
# EXPERIMENT-13



## EXPERIMENT-14



# EXPERIMENT-15



# EXPERIMENT-16

The image shows a network traffic capture window titled "Wi-Fi". The menu bar includes File, Edit, View, Go, Capture, Analyze, Statistics, Telephony, Wireless, Tools, and Help. The toolbar contains various icons for capture, analysis, and display. The main window displays a list of captured packets, with the filter "arp" applied. The packet list shows several ARP requests from source 8e:74:42:29:04:68 to destination CloudNet\_76:de:67. The selected packet (No. 461) is expanded, showing details: Frame 461: 42 bytes on wire (336 bits), 42 bytes captured (336 bits) on interface \Device\NPF\_{D56A0B48-A990-4A67-8A0C-CDDF8F91B1F}. Ethernet II, Src: CloudNet\_76:de:67 (10:6f:d9:76:de:67), Dst: Broadcast (ff:ff:ff:ff:ff:ff). Address Resolution Protocol (request). Below the packet details is a hex dump showing the raw data of the frame.

No.	Time	Source	Destination	Protocol	Length	Info
5813	156.212786	8e:74:42:29:04:68	CloudNet_76:de:67	ARP	42	Who has 192.168.43.19? Tell 192.168.43.1
12842	184.812725	8e:74:42:29:04:68	CloudNet_76:de:67	ARP	42	Who has 192.168.43.19? Tell 192.168.43.1
16490	213.464049	8e:74:42:29:04:68	CloudNet_76:de:67	ARP	42	Who has 192.168.43.19? Tell 192.168.43.1
19400	242.176838	8e:74:42:29:04:68	CloudNet_76:de:67	ARP	42	Who has 192.168.43.19? Tell 192.168.43.1
20751	276.277193	8e:74:42:29:04:68	CloudNet_76:de:67	ARP	42	Who has 192.168.43.19? Tell 192.168.43.1
461	3.836871	CloudNet_76:de:67	Broadcast	ARP	42	Who has 192.168.43.1? Tell 192.168.43.19
1966	16.999327	CloudNet_76:de:67	8e:74:42:29:04:68	ARP	42	192.168.43.19 is at 10:6f:d9:76:de:67

> Frame 461: 42 bytes on wire (336 bits), 42 bytes captured (336 bits) on interface \Device\NPF\_{D56A0B48-A990-4A67-8A0C-CDDF8F91B1F}

> Ethernet II, Src: CloudNet\_76:de:67 (10:6f:d9:76:de:67), Dst: Broadcast (ff:ff:ff:ff:ff:ff)

> Address Resolution Protocol (request)

```
0000  ff ff ff ff ff ff 10 6f d9 76 de 67 08 06 00 01  .....o -v-g-...
0010  08 00 06 04 00 01 10 6f d9 76 de 67 c0 a8 2b 13  .....o -V-g-..+
0020  00 00 00 00 00 00 c0 a8 2b 01  .....+..
```

# EXPERIMENT-17

The image shows a Wireshark network traffic capture window. The filter bar at the top is set to 'ipv6'. The packet list shows several TCP retransmissions (No. 594, 725, 859, 1153, 1650) and a successful SYN packet (No. 445) from 2401:4900:6271:914::... to 2001:4de0:ac10::1:1... on port 80. The packet details pane shows the structure of the selected packet (No. 445): Ethernet II, Internet Protocol Version 6, and Transmission Control Protocol (SYN, Seq=0, Win=64800, Len=0, MSS=1440, WS=...). The packet bytes pane shows the raw data in hexadecimal and ASCII.

No.	Time	Source	Destination	Protocol	Length	Info
594	5.018124	2001:4de0:ac10::1:1...	2401:4900:6271:914:...	TCP	86	[TCP Retransmission] 80 → 50303 [SYN, ACK] Seq=0 Ac...
725	5.356184	2001:4de0:ac10::1:1...	2401:4900:6271:914:...	TCP	86	[TCP Retransmission] 80 → 50303 [SYN, ACK] Seq=0 Ac...
859	5.738943	2001:4de0:ac10::1:1...	2401:4900:6271:914:...	TCP	86	[TCP Retransmission] 80 → 50300 [SYN, ACK] Seq=0 Ac...
1153	7.349519	2001:4de0:ac10::1:1...	2401:4900:6271:914:...	TCP	86	[TCP Retransmission] 80 → 50303 [SYN, ACK] Seq=0 Ac...
1650	10.493245	2001:4de0:ac10::1:1...	2401:4900:6271:914:...	TCP	86	[TCP Retransmission] 80 → 50303 [SYN, ACK] Seq=0 Ac...
445	3.771310	2401:4900:6271:914:...	2001:4de0:ac10::1:1...	TCP	86	50303 → 80 [SYN] Seq=0 Win=64800 Len=0 MSS=1440 WS=...
699	5.228112	2401:4900:6271:914:...	2600:1417:78::6856:...	TCP	74	50297 → 443 [ACK] Seq=1 Ack=65 Win=252 Len=0

Frame 445: 86 bytes on wire (688 bits), 86 bytes captured (688 bits) on interface \Device\NPF\_{D56A0B48-A990-4A67-8A0C-CDDF8F91B1F}

Ethernet II, Src: CloudNet\_76:de:67 (10:6f:d9:76:de:67), Dst: 8e:74:42:29:04:68 (8e:74:42:29:04:68)

Internet Protocol Version 6, Src: 2401:4900:6271:914:a8b3:84b4:fc69:7da9, Dst: 2001:4de0:ac10::1:1:18

Transmission Control Protocol, Src Port: 50303, Dst Port: 80, Seq: 0, Len: 0

0000 8e 74 42 29 04 68 10 6f d9 76 de 67 86 dd 60 08 .tB).h.o.v.g...  
0010 06 33 00 20 06 41 24 01 49 00 62 71 09 14 a8 b3 .3. .A\$. I.bq...  
0020 84 b4 fc 69 7d a9 20 01 4d e0 ac 10 00 00 00 00 ...i}. .M.....  
0030 00 01 00 01 00 18 c4 7f 00 50 ee 59 d9 33 00 00 .....P.Y.3...  
0040 00 00 80 02 fd 20 4b 98 00 00 02 04 05 a0 01 03 .....K.....  
0050 03 08 01 01 04 02 .....K.....

