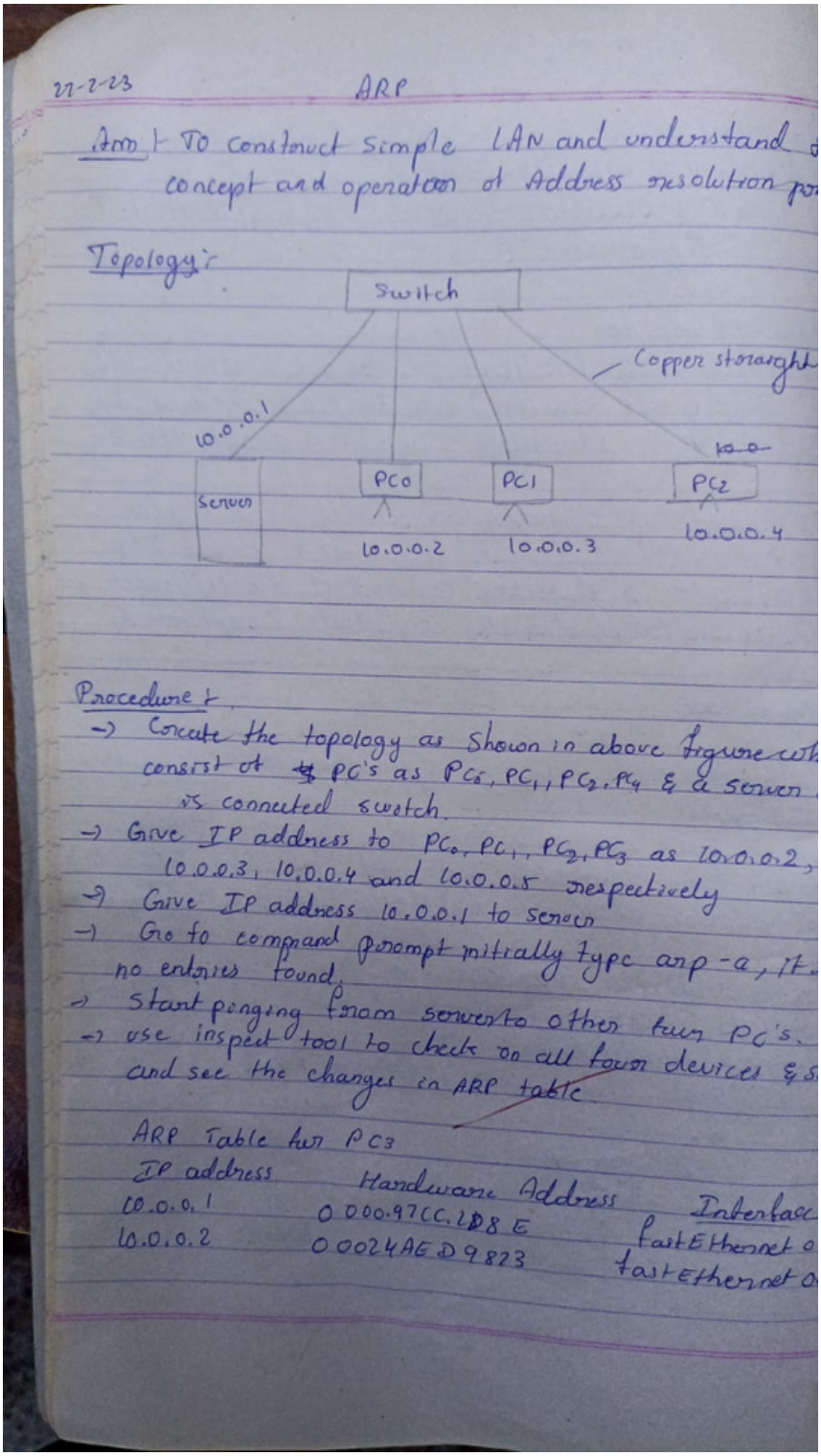
WEEK 8

To construct a simple LAN and understand the concept and operation of Address Resolution Protocol (ARP).

OBSERVATION:



ARP table for PC1

IP address	Hardware address	Interface
10.0.0.1	00D097CC2D8E	fastethernet c
10.0.0.2	00024AED9873	fastethernet 0.

ARP table for PC2

IP address	Hardware address	Interface
10.0.0.1	00D097CC2D8E	fastethernet 0
10.0.0.2	00024AED9873	fastethernet 0

ARP table for Server 0

IP address	Hardware address	Interface
10.0.0.2	0002.4AED.9873	fastethernet 0
10.0.0.3	00D0.BCB7.1401	fastethernet 0
10.0.0.4	00D0.BC4E.B0B7	fastethernet 0
10.0.0.5	0001.978C.3E35	fastethernet 0.

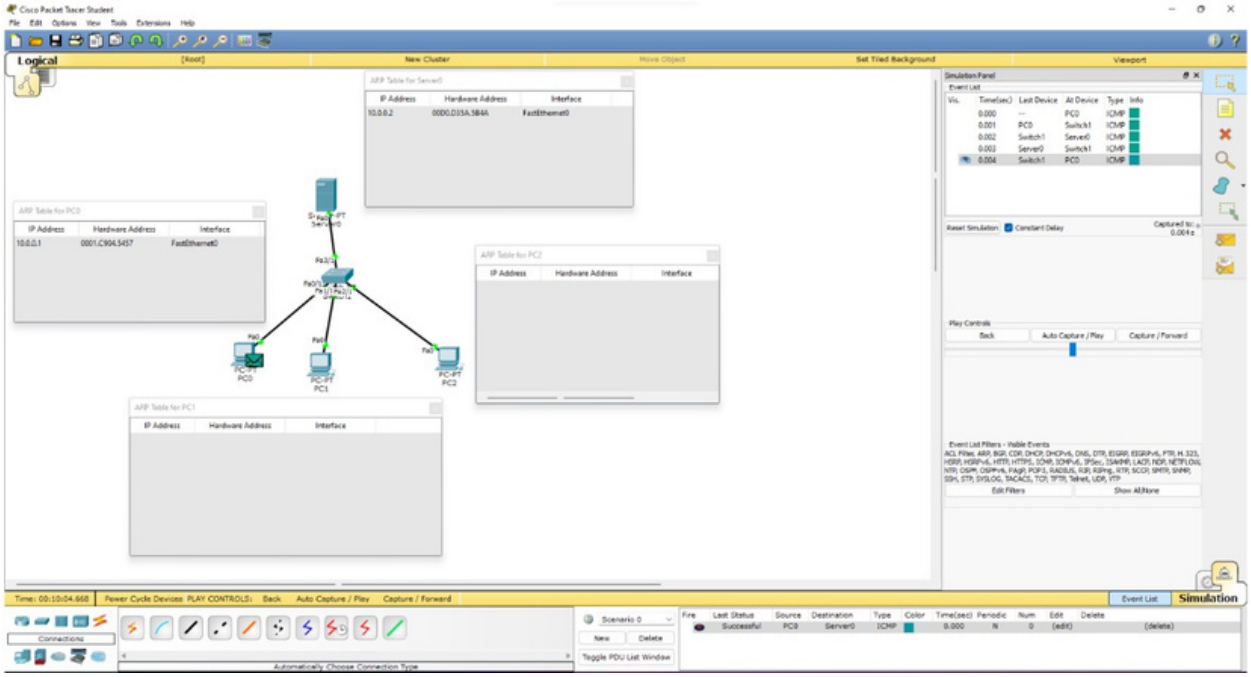
Then use the capture button in the simulation panel & see changes in ARP.

Observation

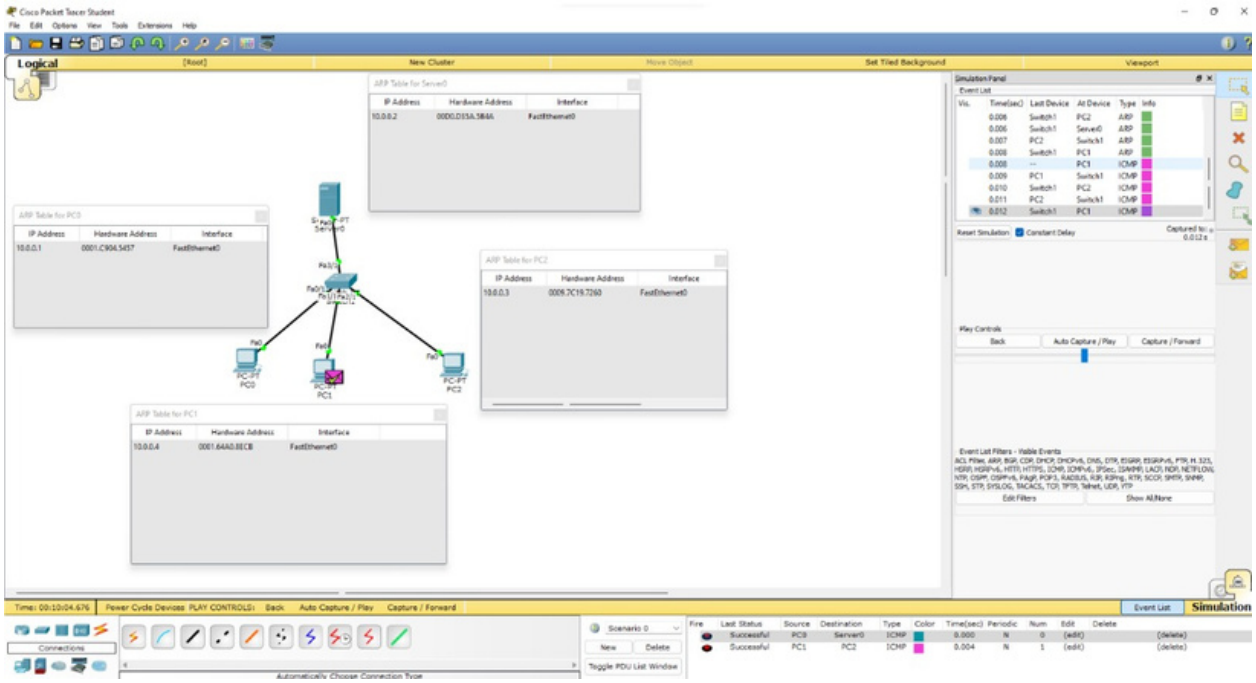
1) In the beginning no ARP entries will be found.
2) As we start pinging, the entries, gets added
3) ARP connects an ever changing internet protocol address to be fixed to physical machine address also known as mac address, in local area network.

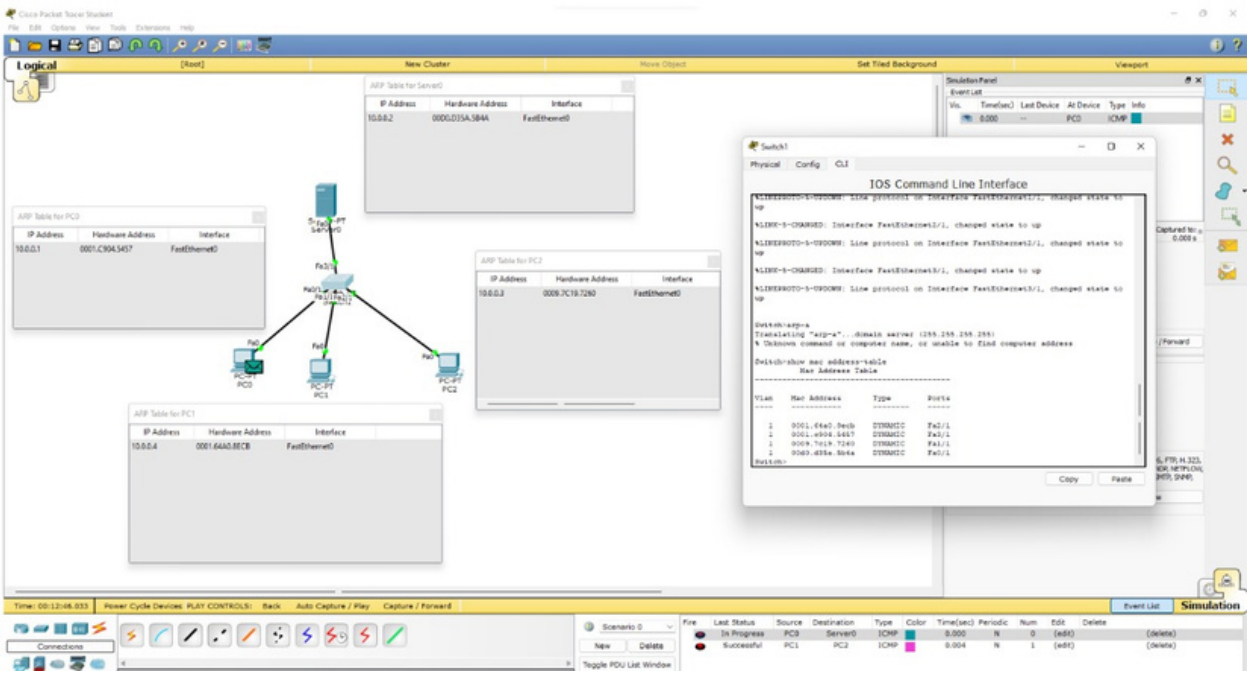
21/8/2023

TOPOLOGY:



OUTPUT:




Logical
IOS Command Line Interface
Switch>arp-a
Translating "arp-a"...domain server (255.255.255.255)
% Unknown command or computer name, or unable to find computer address
Switch>show mac address-table
Mac Address Table
Vlan Mac Address Type Ports
1 0001.64a0.9ecb DYNAMIC Fa2/1
1 0001.e904.b447 DYNAMIC Fa3/1
1 0009.7c19.7260 DYNAMIC Fa1/1
1 0060.d58a.8b4a DYNAMIC Fa0/1
Switch>
Copy
Paste
Simulation