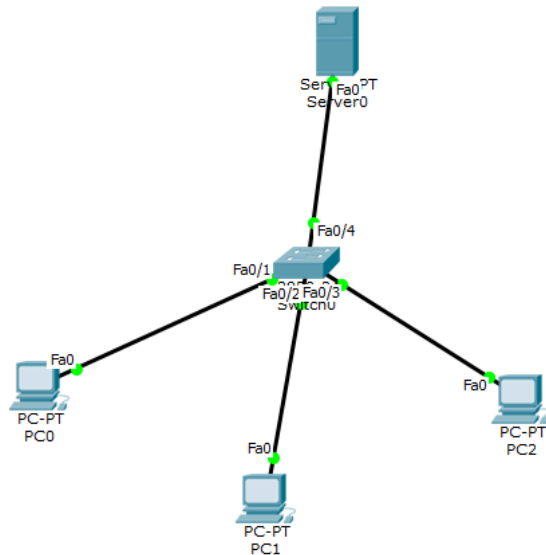## Program – 9:

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

Topology:

Procedure:

1. ARP Concept
- ARP is used to map an IP address to a MAC address.
- ARP works at the data-link layer to resolve MAC address of a destination IP.
- It updates ARP tables with IP–MAC mappings.

2. Topology
- Server0 connected to Switch.
- Switch connected to PC0, PC1, PC2.

3. IP Configuration
- **PC0** → IP: 192.168.1.1
- **PC1** → IP: 192.168.1.2
- **PC2** → IP: 192.168.1.3
- **Server0** → IP: 192.168.1.4

4. Steps
- Open **Simulation mode** from right side.
- Click on **PC0** or **Server0** → select **ARP Table**.
- Send a packet (simulation) from PC0.
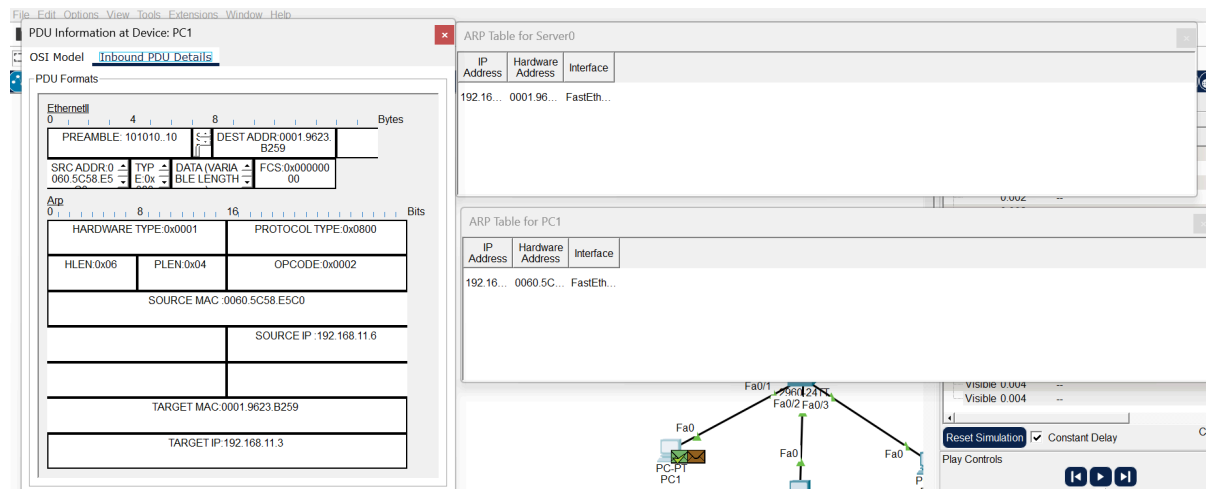- Click **Outbound PDU Details** → view MAC address.

Output:

Fig 9.1 PDU Information and ARP Table of server and PC0