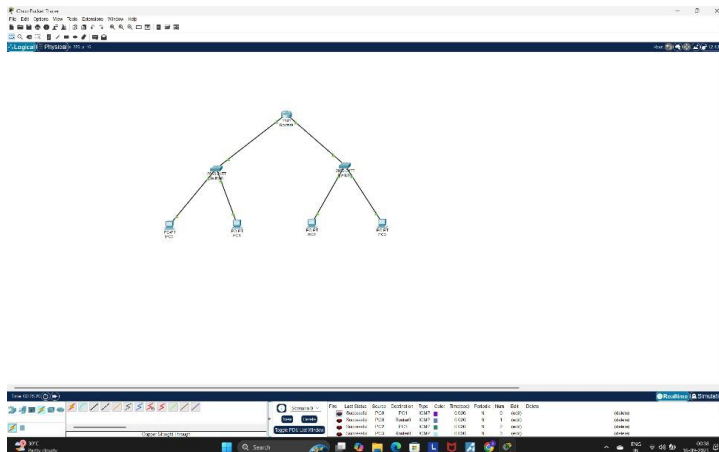| EXP:03	Experiments on CISCO PACKET TRACER

Aim

To understand the environment of CISCO PACKET TRACER, design a simple network, and analyze the behavior of network devices (HUB and SWITCH).

Algorithm / Procedure

1. **Launch** Cisco Packet Tracer and familiarize with the workspace and device library.
2. **Design** a small network (4-6 hosts) using only a **HUB** and observe packet transmission behavior (broadcast).
3. **Design** a small network (4-6 hosts) using only a **SWITCH** and observe packet transmission behavior (unicast/multicast after learning MAC addresses).
4. **Design** a network using both a **HUB and a SWITCH** to find out the functional difference between the two devices.
5. **Simulate** and trace communication between nodes in all three scenarios.

Output Images

Result

Simple networks were successfully designed and simulated in Cisco Packet Tracer. The difference in communication behavior between a HUB (Layer 1) and a SWITCH (Layer 2) was analyzed and observed.