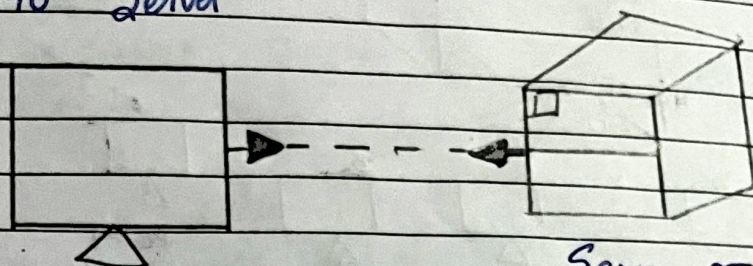## Experiment 1

1) PC to Server

PC-PT
PC-0
10.0.0.1

Serva - PT
Server 0
10.0.0.2

Aim :- To set up a point to point network b/w a PC and a server, facilitating direct communication to observe data Exchange

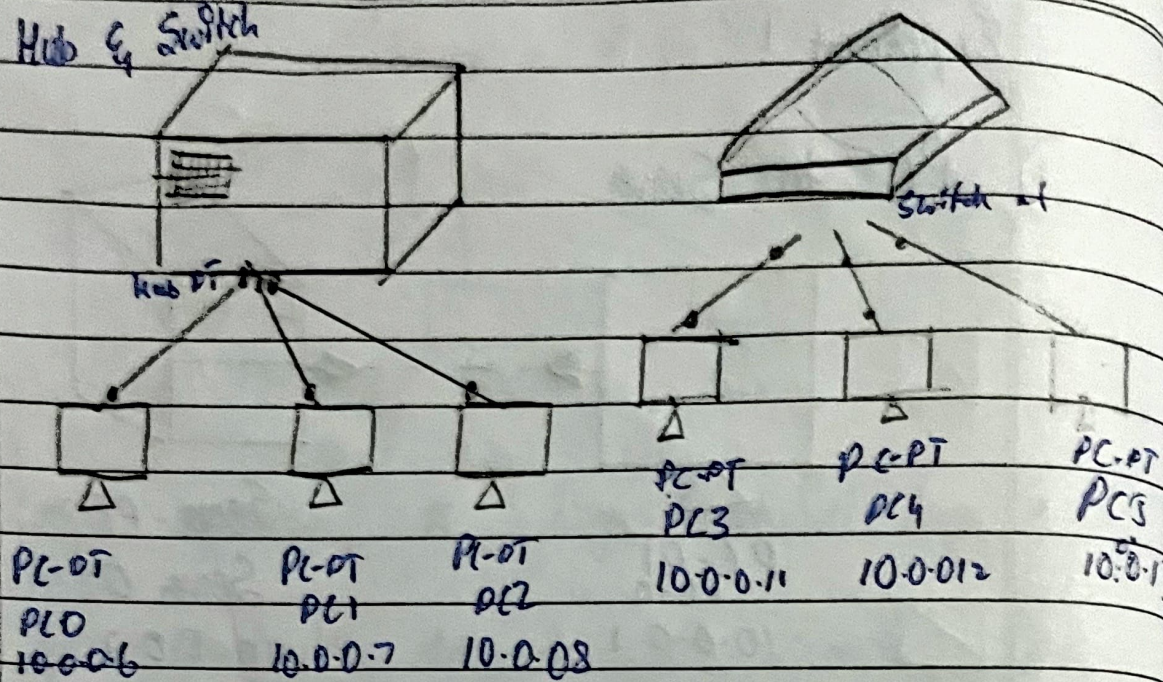Topology :- A PC is connected to server using a crossover ethernet cable.

IP address of PC- 10.0.0.1 , Server -10.0.0.2

Observation :-
Direct communication allows PC to communicat with sever, which is typically in small networks for tasks such as file sharing service request or testing server response to client response.

2) Hub & Switch

Switch nt

hub nt

| PC-OT PLO 10.0.0.6 | PC-OT PC1 10.0.0.7 | PC-OT PC2 10.0.0.8 | PC-OT PC3 10.0.0.11 | PC-PT PC4 10.0.0.12 | PC-PT PC5 10.0.0.1 |

Aim :- To create sample network consisting of 3 PC connected to a central hub and another network with 3 pc's connected to switch this connection will help observe the behaviour of data transmission using hub & switch.

Topology :- 3 pc's are connected to a hub & switch using straight through ethernet cables.

Observation :- Hub broadcasts packets to all devices which may cause through unnecessary traffic.

Switch forwards packets only to appropriate device by learning mac address, using it more efficient in reducing traffic.