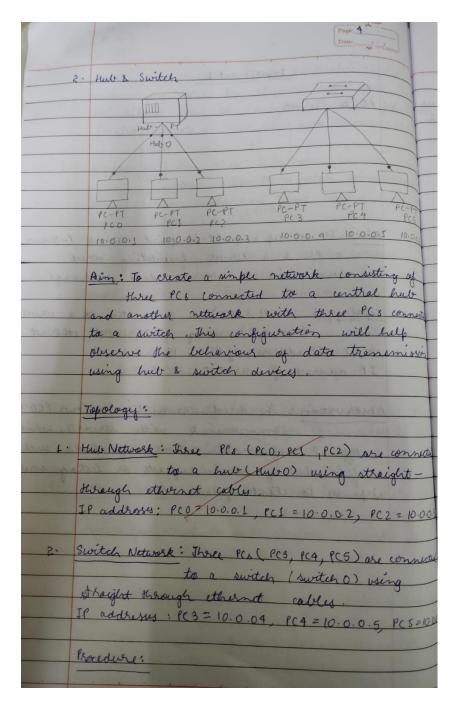
Program 1

Aim: Create a topology and simulate sending a simple PDU from source to destination using hub and switch as connecting devices and demonstrate ping messages.

Topology, **Procedure and Observation:**



	Page: 5. Date: 1.
1	for the hub; PC3, PC4, PC5 for the switch) to the cisco packet, tracer workspace
2.	Use copper straight-terrough cables to connect PCO, PCS and PCZ too shub O. IN ly connect PC 3, PC 4 & PCS too switch D using some type of cables.
3.	Assign IP addresses to each PC & obtain
- 1 - 3	subnet mask.
4.	Switch to simulation made to closerve data
234.13	traffic believiour when packets are rent
	traffic betreviour when packets are rent
3.	In the hub network, notice how the hub broadcasts packets to all devices, causing
4	botential traffic overload.
1	in she switch network, observe how the switch
6	growerds packets only too the intended recipie
7	reducing unnecessary traffic.
6 · Jh	e hub broadcasts data to all connected
	evices leading to more network congestion,
	while the switch efficiently sends data only
to	the correct device, optimizing performer
06	servation:
1. 1h	e hub broadcasts parkets to all devices, wh
m	say cause unnecessary traffic.

2. The switch forwards packets and to defend appropriate device by learning MAC address making it more efficient in reducing traffic making it more efficient in reducing traffic. Difference between Hurs & switches 1. Hub broadcast data to switches send it only to all devices. 2. Hubs create more traffic. Switches reduces traffic by directions data. 3. Hubs work at physical Switches aperate at the layer. 4. Hubs are slower due Switches are faster wie to March deadwidth dedicated brandwidth 5. Hubs are cheaper. Switches are faster wie spensive but more expensive but more			Page 6
Difference between Hules & Switches 1. Hub broadcast data to Switches send it only to all devices. 2. Hubs create more traffic. Switches reduces traffice by directioning data. 3. Hubs work at physical Switches operate at the layer. 4. Hubs are slower due Switches are faster wo data link layer. 5. Hubs are cheaper. Switches are faster wo dedicated brandwidth. 5. Hubs are cheaper. Switches are more expensive but mare	2.	The switch forwards appropriate device be making it more efficie	packets only to the y learning MAC address nt in reducing treffic
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efficient.	1	According to the second second	efficient.

Screen Shots:

