

Ex: 2a
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Periodical - 800

a) Virtual LAN

Aim: simulate virtual configuration using Cisco packet tracer simulation.

Procedure.

1) Create network using 1 switch & 4 PCs

2) Assign IP addresses to the PCs

PC0 - 10.0.0.1

PC1 - 10.0.0.2

PC2 - 10.0.0.3

PC3 - 10.0.0.4

3) Check the network by sending packets

4) Right-click on switch & then on CLI run

the following command

~~enable~~

~~# config t~~

vlan 2

name office

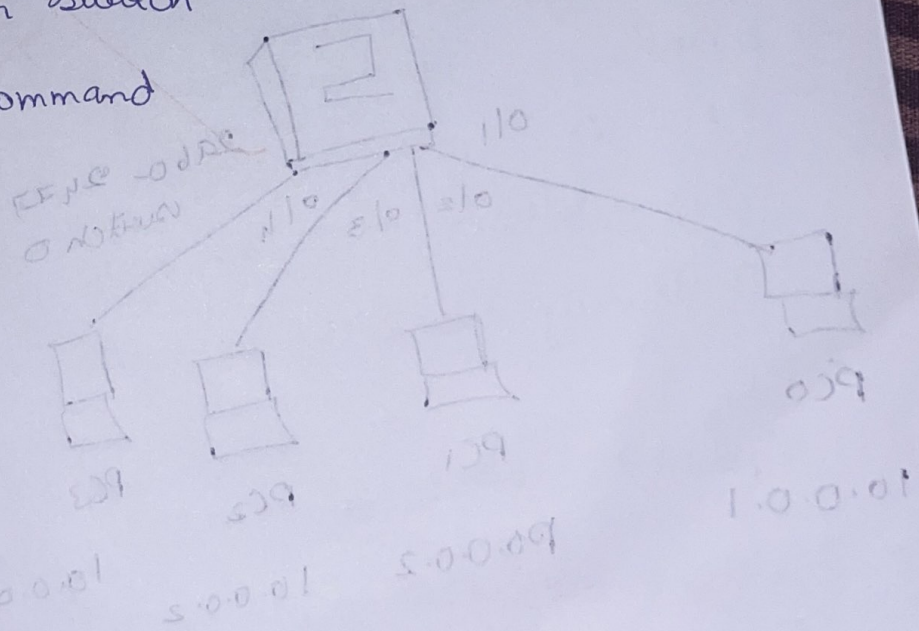
exit

vlan 3

name home

exit

configure fastEthernet 0/1



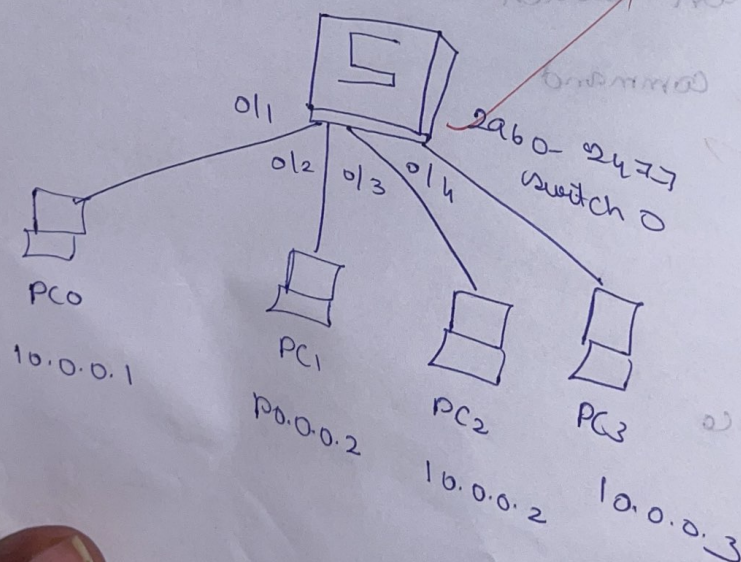

```

# switch port access vlan 2
# exit
# interface fastethernet 0/2
# switch port access vlan 2
# exit
# interface fastethernet 0/3
# switch port access vlan 3
# exit

```

5) Now they ping packet from PC's to one another

Diagrammatic representation



Observation:

When packets are transferred for PC's with same IP address, the packets are not transferred.

Output

File	dest	source	Status
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PC0	10.0.0.1	10.0.0.1	Success
PC1	10.0.0.2	10.0.0.2	Failed

Result:

Thus, using Cisco

Observation:

When packet transferred from PC0 to PC1 the packets are successfully transferred. Similarly for PC's within same VLAN packet are transferred successfully whereas for PC's can't transfer packets out of its VLAN.

Output

File	Dest	Source	Des type	Colour	Time	Protocol	Num
①	Success	PC0	PC1	ICMP	0.000	N	0
②	Failed	PC1	PC2	ICMP	0.655	N	0

Result:

Thus the virtual LAN has been stimulated using Cisco packet tracer.

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