

Ex NO: 8a)

## Practical - 8a)

Date: 7/10/24

Aim:

simulate virtual LAN configuration using CISCO Packet

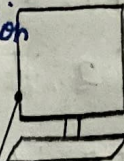
PC-PT

PC-PT

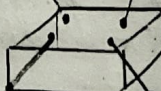
trace simulation



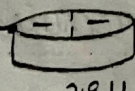
PC 4



PC 5



960-24  
switch 0



2/811  
Router 0



PC 7



PC 6

### Reflection questions:

- 1) what is needed to allow hosts on VLAN 10 to communicate to hosts on VLAN 99?

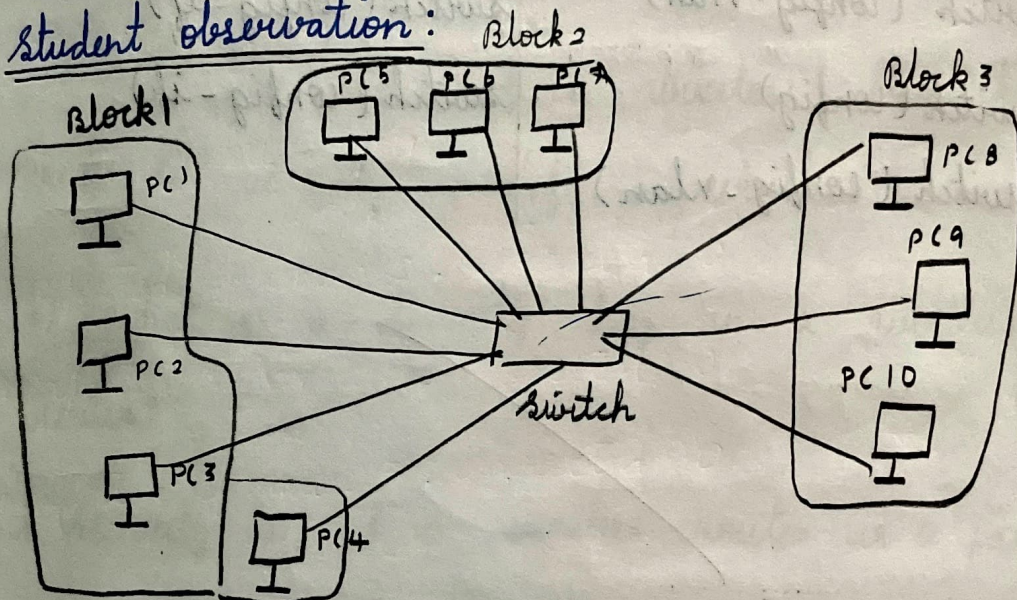
To allow hosts on VLAN 10 to communicate with hosts on VLAN 99, a router or layer 3 switch is needed to perform inter-VLAN routing, enabling traffic to pass between the two VLANs.



2) what are some primary benefits that an organization can receive through effective use of VLANs?

primary benefits of effective VLAN use include improved network security through segmentation which limits broadcast traffic & enhanced network management.

Student observation:



a) Draw & label the VLAN.

b) show the ip configuration for each device:

~~IP Address: 192.168.10.2~~

~~Subnet Mask: 255.255.255.0~~

IP Address: 192.168.10.3

Subnet Mask: 255.255.255.0.



IP Address: 192.168.99.2

Subnet Mask: 255.255.255.0

c) write the commands used for VLAN configuration in switch.

Switch > enable

Switch

Switch (config)

Switch (config-vlan)

Switch (config)

Switch (config-vlan)

Switch (config)

Switch (config-if-range)

Switch (config-if-range)

Switch (config)

Switch (config-if)

Switch (config-if)

Result:

Thus the VLAN has been setup in the CISCO  
tracer.

*[Signature]*