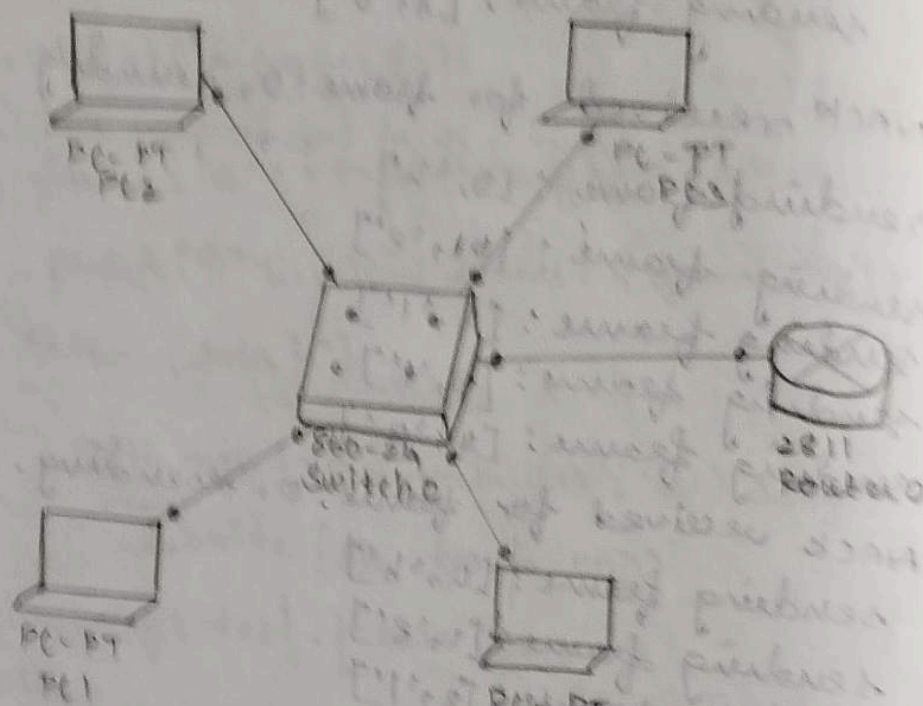Virtual LAN Configuration

AIM :

Simulate Virtual LAN Configuration using

Cisco Packet Tracer Simulation.

Packet Tracer - Configure VLANs and Trunking :

REFLECTION QUESTIONS :

1. What is needed to allow hosts on VLAN
10 to communicate to hosts on VLAN 99?

You need a layer3 device (router or layer
3 switch) to enable inter-VLAN routing,
and configure VLAN interfaces with IP
addresses for both VLAN's. Ensure that
ACLs allow traffic between the VLANs
and that hosts are set with the appropriate
default gateways.

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

Effective use of VLANs improves network segmentation, enhancing security and reducing broadcast traffic.

Student Observation:

a) Draw and label the VLAN for Q.b)
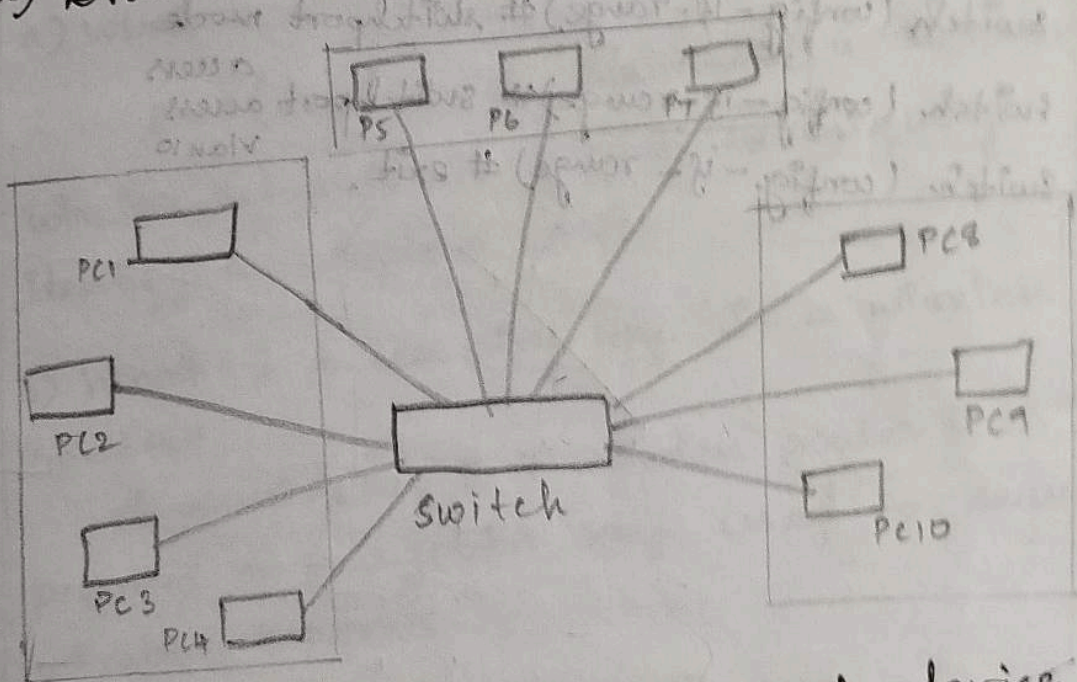
b) Show the ip configuration for each device.

Device	IP Address	Subnet Mask	Default Gateway
		255.255.255.0	192.168.26.1
PC1	192.168.20.2	255.255.255.0	.192.168.20.1
PC2	192.168.20.3	255.255.2550	192.168.20.1
PC3	192.168.20.4	255.255.255.0	192.168.20.1
PC4	192.168.20.5	255.255.255.0	192.168.20.
PC5	192.168.20.6	255.255.255.0	192.168.20.
PC6	192.168.20.7	255.255.255.0	192.168.20
PC7	192.168.20.8	255.255.255.0	192.168.20
PC8	192.168.20.9	255.255.255.0	192.168.20
PC9	192.168.20.10	255.255.255.0	192.168.2
PC10	192.168.20.11	255.255.255.0	

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

Switch > enable
Switch # configure terminal

Switch (config) # vlan 10
Switch (config-VLAN) # name Robotics
Switch (config-Vlan) # exit

Switch (config) # interface range f 0/1-10
Switch (config-if-range) # switchport mode access
Switch (config-if-range) # switchport access vlan 10
Switch (config-if-range) # exit.

Result :-

Thus, the simulation of virtual LAN configuration using cisco packet Tracer has been performed and the output is verified.