

Ex: 8a)  
Date: 9/9/24

## configuration of virtual LAN

Aim:

Simulate virtual LAN  
configuration using CISCO Packet Tracer  
simulation

perform following configuration:

1) create the network using  
switches and PCs

2) configure static IPs on PC  
as follows:

PC0: fa0/1 - IP address: 192.168.10.2

Gateway: 192.168.10.1

PC1: fa0/2 - IP: 192.168.10.3

Gateway: 192.168.10.1

PC2: fa0/3 - IP: 192.168.20.2

GW: 192.168.10.1

PC3: fa0/4 - IP: 192.168.20.3

GW: 192.168.20.1

3) open command line interface  
of switch & configure VLANs  
(VLAN 10, VLAN 20) & name  
them.

4) Assign first two PCs  
(PC0, PC1) to VLAN 10 and other two  
to VLAN 20 by configuring  
them in CLI.



configuration of  
virtual LAN

at LAN

1500 Packet Tracer

configuration:  
network using

to IP on PC

address: 192.168.10.2

gateway: 192.168.10.1

192.168.10.3

192.168.10.1

192.168.20.2

192.168.10.1

192.168.20.3

192.168.20.1

interface

VLANs

name

to PCs

other two

SW

configuration

5. open command prompt of PC0  
and ping the PC1 by ping 192.168.10.3  
and we get reply messages.

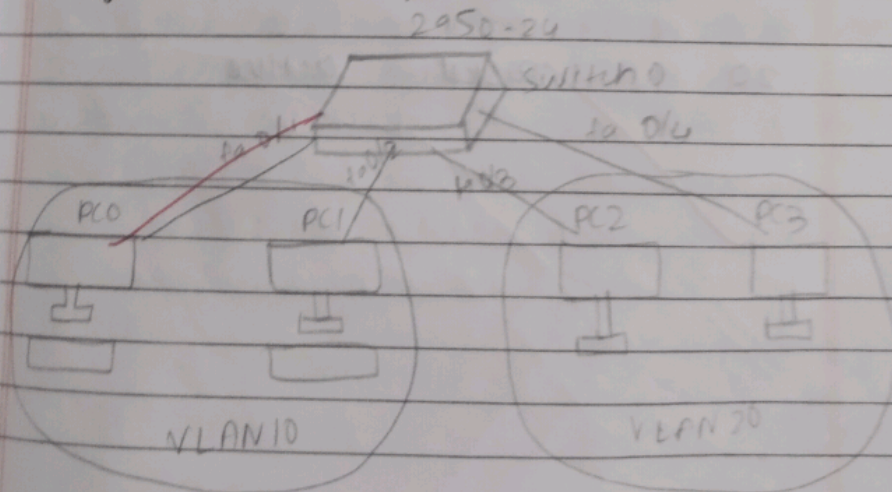
6. Open Command prompt of PC1,  
and type 'ping 192.168.10.2' and we get  
reply messages from PC0 and ping to PC2  
with 32 bytes of data.

7. open command prompt of PC2 &  
ping PC3 by ping 192.168.20.3 & get  
reply messages

8. set the file from PC2 to PC1 and  
PC1 to PC0 to check if it transfers  
successfully.

Here two VLANs network is created  
and assigned IP address to each PC.  
and check whether packets are transferred  
with VLANs successfully.

Diagrammatic representation:





output panel:

Fire	Last Status	Src	Dst	Type	Time	Packet
•	Successful	PC2	PC1	ICMP	0:00	10
•	Successful	PC3	PC2	ICMP	0:00	10

Student observation:

Write the commands used for VLAN configuration in switch

```

en
# configure
# VLAN 10
# name Cisco
# exit
    
```

for VLAN 20

```

# VLAN 20
# name Packet
# exit
    
```

# show VLAN

VLAN	NAME	Status	Ports
10	Cisco	active	fa 0/1
20	Packet	active	

Result:

is successful  
output



Dst	Type	Time	Period
PC1	ICMP	0-00	N
PC2	ICMP	0-00	N

is used for  
in switch

for VLAN20  
# VLAN20  
# name package  
# exit

has ports

five fa 0/1

five

```
# configure
# interface fa0/1
# switchport mode access
# switchport access vlan 10
# exit
```

```
# interface fa0/2
# switchport mode access
# switchport access vlan 10
# exit
```

```
# interface fa0/3
# switchport mode access
# switchport access vlan 20
# exit
```

```
# interface fa0/4
# switchport mode access
# switchport access vlan 20
# exit
```

Result:

The configuration of virtual LAN is successfully observed and the output is verified.