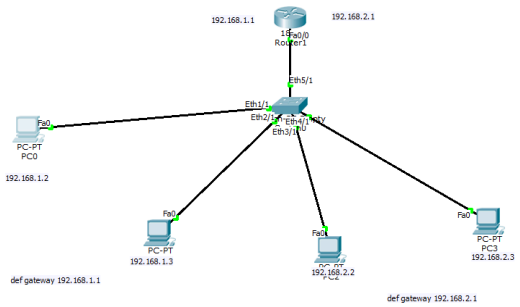
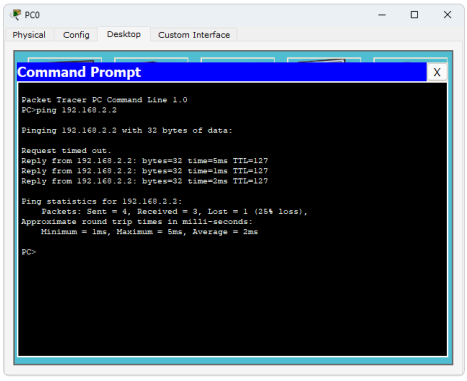
Experiment 10:
Q)CONSTRUCT VLAN AND COMUNICATE



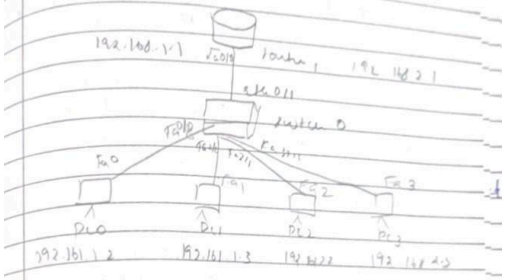


Experiment 10

Aim: To construct VLAN and its PC's communicate among a VLAN

Aim: construct a VLAN and enable communication between PC's among a VLAN

Topology



Procedure

- Choose the 1841 router and connect a switch and 4 pcs via relevant interfaces and fastethernet interface respectively

- Set the ip address of the PCs and configure the router 1 with ip address 192.168.1.1

router> enable
router> config t
router(config)# interface FA 0/0

router(config-if)# ip addres 192.168.1.1 255.255.255.0
router(config-if)# no shut

- In the switch, go to config tab and select VLAN Database.
- Set the VLAN number and VLAN name.
Select the interface i.e, fastethernet 0/1 and make it the trunk, VLAN trunking allows switches to forward frame different VLANs over a single link called trunk
- This is done by adding an additional header information called tag to the Ethernet frame
- Look into the interfaces of the switches with the 2 NEW VLAN system.

Config tab of router select VLAN DATABASE - Enter number and name of vlan created

router(vlan)# exit
router# config t
router(config)# interface fast ethernet 0/0.1
router(config-subif)# encapsulation dot1q

router(config-subif)# ip address 192.168.2.1 255.255.255.0
router(config-subif)# no shut
router(config-subif)# exit
router(config)# exit

Observation

On pinging the VLANs, the PCs are able to communicate