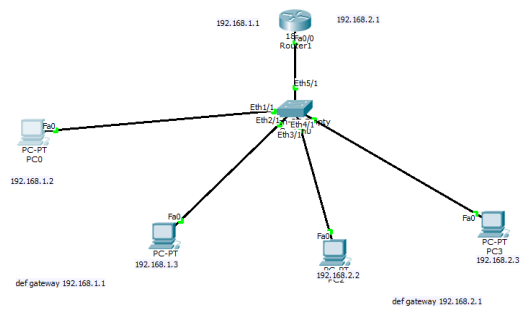


Experiment 10: Q)CONSTRUCT VLAN AND COMUNICATE



```
PC0
Physical Config Desktop Custom Interface
Command Prompt
Packet Tracer PC Command Line 1.0
PC>ping 192.168.2.2
Pinging 192.168.2.2 with 32 bytes of data:
Request timed out.
Reply from 192.168.2.2: bytes=32 time=5ms TTL=127
Reply from 192.168.2.2: bytes=32 time=1ms TTL=127
Reply from 192.168.2.2: bytes=32 time=0ms TTL=127
Ping statistics for 192.168.2.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 5ms, Average = 2ms
PC>
```

Experiment 10

To construct VLAN and the PCs communicate among a VLAN

Aim: Construct a VLAN and enable communication between PCs among a VLAN

Topology

Procedure

- Choose the 1841 router and connect a switch and 4 PCs via Ethernet interface and FastEthernet interface respectively
- Set the IP addresses of the PCs and configure the router with IP address 192.168.1.1

```

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

```

router(config-if)# ip address 192.168.2.255.255.255.0

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 on 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 dot 1 q 2

```

router(config-subif)# ip address 192.168.2.2 255.255.255.0

router(config-subif)# no shut

router(config-subif)# exit

router(config)# exit

Observation

on pinging the VLAN, the PCs are able to communicate.