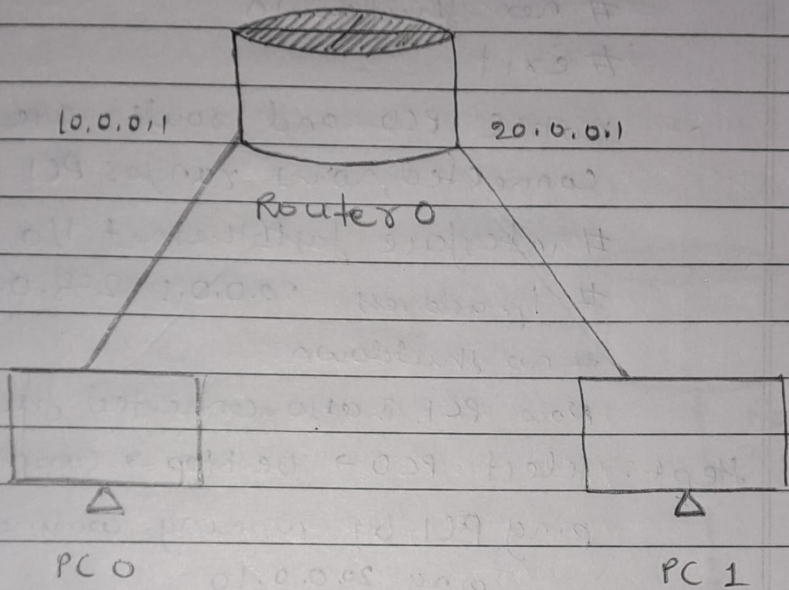


Lab-21

Objective: To create a simple network consisting of 2 PCs connected to the router facilitating communication between two PCs through network.

Topology:



IP 10.0.0.10

IP 20.0.0.10

Def gateway 10.0.0.1

Def gateway 20.0.0.1

Procedure:

- Step 1: Place 2 generic PCs and one generic router. Connect both the PCs to the router's fast ethernet ports using copper cross over wire.
- Step 2: Select PC0 wiring → Fast ethernet 0, set IP address as 10.0.0.10 and default gateway as 10.0.0.1. Similarly for PC1 IP 20.0.0.10 and default gateway as 20.0.0.1.

Step 3: select router and go to the CLI.
execute the following commands

enable

config terminal

interface fastEthernet 0/0

ip address 10.0.0.1 255.0.0.0

no shutdown

exit

notice PC0 and router are successfully
connected, now run on PC1

interface fastEthernet 1/0

ip address 20.0.0.1 255.0.0.0

no shutdown

Now PC1 is also connected successfully.

Step 4: select PC0 → Desktop → Command prompt

ping PC1 by running command

ping 20.0.0.10

observe the output

Observation

PC0 successfully ping PC1 with 32 bytes
of data

Routers can be used to manage
communication between two different
networks while doing ping test we can see
that chance of losing one packet
are high bcz the router will be
busy in establishing the connection.