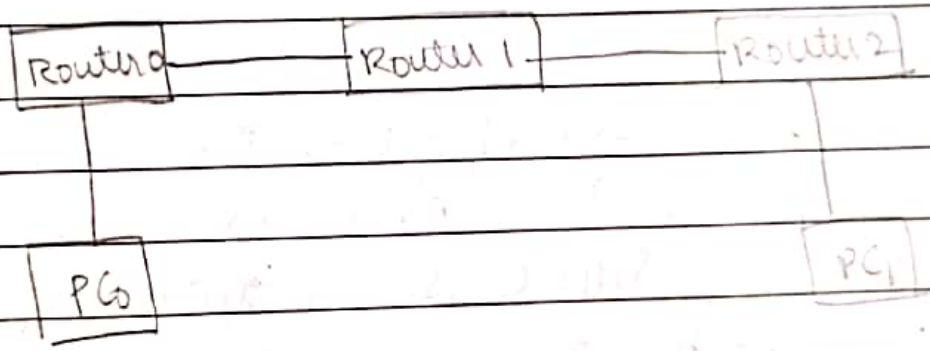
Trishala K Shetty
1BM18CS118

EXP-4

Q. Configuring default route to router

AIM: To understand how packets are transferred between PCs via 3 routers with default route.

TOPOLOGY:



PROCEDURE: 1) Take 2 PCs connect them to 2 different routers and connect those 2 routers to another router
2) Set PC0 IP address to 10.0.0.1 and PC1 to 40.0.0.1 with subnet mask 255.0.0.0 in the config → fastethernet
3) Go to each router CLI and type the commands provided CLI
4) Go to PC0 config gateway type the address given PC0 → 10.0.0.10 (Router 0) PC1 → 40.0.0.2 (Router 2)

5) Go to Command prompt of PC0 and ping PC1 and vice versa

CLI: Router 0 -

no → enable → config t → interface fastethernet 0/0 → ip address 10.0.0.10 255.0.0.0 → no shut → exit → interface serial 2/0 → ip address 20.0.0.1 255.0.0.0 → no shut → exit

Router 1 -

no → enable → config t → interface serial 2/0 → ip address 20.0.0.2 255.0.0.0 → no shut → exit → interface serial 3/0 → ip address 30.0.0.1 255.0.0.0 → no shut → exit

Router 2 -

no → enable → config t → interface fastethernet 0/0 → ip address 40.0.0.10 255.0.0.0 → no shut → exit → interface serial 2/0 → ip address 30.0.0.2 255.0.0.0 → no shut → exit

To connect through default route:

Router0 - ip route 0.0.0.0 0.0.0.0 20.0.0.2
exit
show ip route

Router 1 -

ip route 10.0.0.0 255.0.0.0 20.0.0.1

ip route 40.0.0.0 255.0.0.0 30.0.0.2

Exit

Router 2 - ip route 0.0.0.0 0.0.0.0 30.0.0.1

Exit

OBSERVATION: After all connections successfully pinged PC1 from PC0 and vice versa