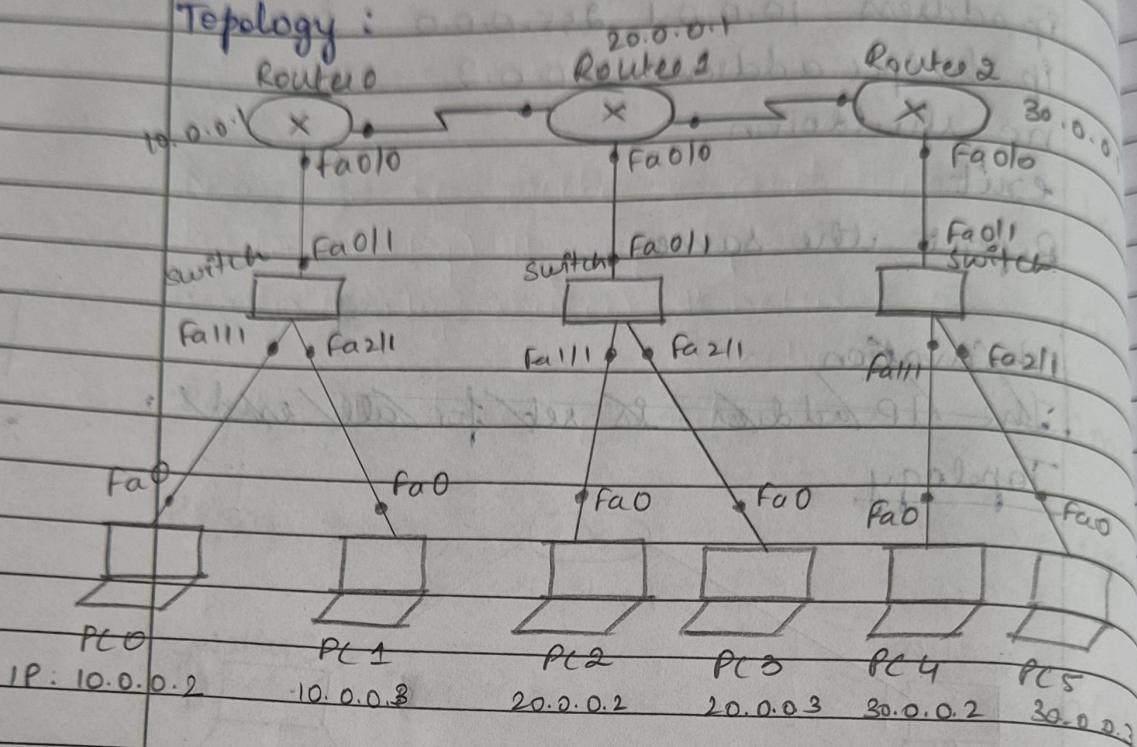


Experiment - 6.

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Aim : Configure RIP routing protocol in Routers.

Topology :



~~Config~~ Procedure :

- 1) Configure the routers, switches and generic PCs
- 2) For the PCs navigate to config interface and fast ethernet 0 and set the IP address for all six PCs
- 3) Similarly for all six PCs, navigate to config, global, settings and set gateway as the IP address of the router it is connected to.
- 4) In Router 0, navigate to config, fast ethernet 0/0, and add ip address (10.0.0.1)
- 5) Then go to serial 3/0 and update ip address as 40.0.0.1 Go to (C1) and enter command no shut.

- c) In Router 1, Go to Interface, fast ethernet 0/0 set ip address as 20.0.0.1. Go to serial 2/0 and set IP address 40.0.0.2
In CLI enter no shut.
Go to serial 3/0 and set ip address as 50.0.0.1
In CLI enter no shut.
- d) In Router 2,
Go to Interface, fast ethernet 0/0, set IP address as 30.0.0.1, Go to serial 2/0 and set IP address as 50.0.0.2.
- e) If connections are not active after this, in all routers check the fast ethernet and enter no shut in the CLI again.
- f) Now all the ~~are~~ connections are active (green).
- 10) So now go to router 0 and in CLI type
Router (config) # router rip
Router (config-router) # network 10.0.0.0
Router (config-router) # network 40.0.0.0
Router (config-router) # exit
Router (config) # exit
Router # show ip route
C
R
C
C

Now go to router 1. and in CLI type
Router (config) ~~no~~ # router rip
Router (config-router) # network 40.0.0.0
network 50.0.0.0
network 20.0.0.0

Router# show ip route

```
R>: 10.0.0.0/24 is subnet 0/0, 1 hop
C: 10.0.0.0/24 is subnet 0/0, 1 hop
C...
C: 10.0.0.0/24 is subnet 0/0, 1 hop
```

Now go to router 2 and type

Router (config) # router rip

Router (config-router) # network 50.0.0.0

Router (config-router) # network 30.0.0.0

Router# show ip route

```
R2>: 10.0.0.0/24 is subnet 0/0, 1 hop
R2>: 30.0.0.0/24 is subnet 0/0, 1 hop
R2>: 50.0.0.0/24 is subnet 0/0, 1 hop
R2>: 10.0.0.0/24 is subnet 0/0, 1 hop
R2>: 30.0.0.0/24 is subnet 0/0, 1 hop
R2>: 50.0.0.0/24 is subnet 0/0, 1 hop
```

Observation:

From PC 1 we can ping to PC 5

PC1> ping 30.0.0.3

Packets: Sent (= 4, Received = 4, Lost = 0
(0% loss).