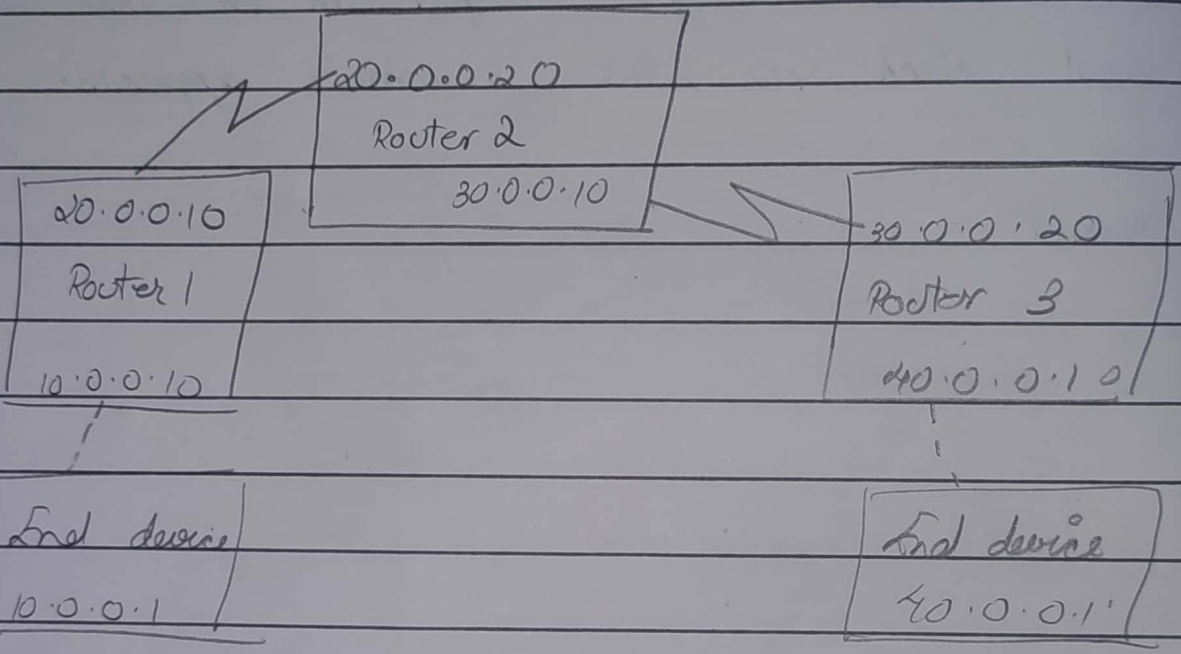
Exp-6

Aim: Configure RIP routing protocol in routers.

Topology:



Procedure:

① Connect 3 routers and 2 end devices

② Design IP addresses to both end devices. Design IP addresses to all routers. Use the following commands

```
Router > enable
Router # config t
Router (config) # interface fastethernet 0/0
Router (config-if) # ipaddress 100.0.10 255.0.0.0
Router (config-if) # no shut
Router (config-if) # exit.
```

Date :

④ Set gateways to end devices
End device 1 : 10.0.0.10
End device 2 : 40.0.0.10

⑤ Assign routers to all routers and in the configure mode use the following commands.
Router (config)# router rip
Router (config-router)# network <network address>
Router (config-router)# network <network address>

For router 1,
Router (config)# router rip
Router (config-router)# network 10.0.0.0
Router (config-router)# network 20.0.0.0

⑥ Ping end devices to test connection

Result:

> ping 10.0.0.1

Pinging 10.0.0.1 with 32 bytes of data :

Request timed out.
Reply from 10.0.0.1 : bytes=32 time=5ms TTL=125
Reply from 10.0.0.1 bytes=32 time=5ms TTL=125
Reply from 10.0.0.1 bytes=32 time=21ms TTL=125

Ping statistics for 10.0.0.1 :
Packets: Sent=4, Recieved=3 lost=1 (25% loss)

Date :

Approximate round trip times in milli-seconds

Minimum = 2ms, Maximum = 21ms, Average = 10ms

Observation:

Routing Information Protocol is a dynamic routing protocol that uses hop count as routing metric to find best path between source and destination networks. Hop count is the number of routers occuring in between source and destination networks