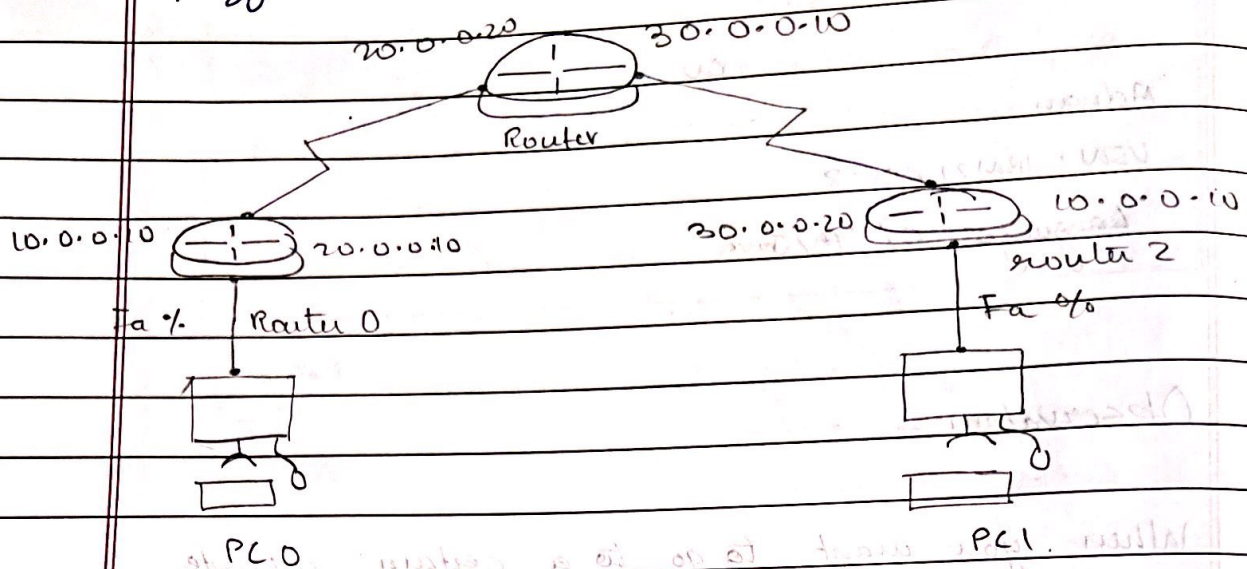# Program - 6

Aim: Configure RIP routing protocol in router.

Topology:

Procedure

- Create a network using 3 - routers & 2PC's
- Set IP address and gateway no for both
  - 10.0.0.1 — IP   10.0.0.10 - gate way - PC0
  - 40.0.0.1 — IP   40.0.0.10 - gateway - PC1
- Router ⟶ CLI mode.

  Step 1- No

  Step 2 - Enable

  Step 3 - config T

  Step 4 — interface fast etherent %

  Step 5 — IP address 10.0.0.10   255.0.0.0

  Step 6 - No short

  Step 7 - exit

  step 8 - interface se 2/0

  Step 9 - IP address 20.0.0.10   255.0.0.0

  Step 10- encapsulation ppp

  Step 11 - dock rate 640

  Step 12— No shut.

- here for router with fast ethernet excecute till step 9. and type no shut.
- Only for router to router connection excecute all steps also execute step 11.
- again to Router 0 → CLI mode :

  Step 1: config t

  step 2: router rip

  step 3: Network 10.0.0.0

  step 4: Network 20.0.0.0

  Step 5; exit

- Repeat these step for all routers
- Now go to each router and type show IP router
- Go to PC0 and Ping a msg to PC1 using ping destination IP address command.

Ping output:

  Packet tracer PC command line 1.0

  PC > Ping 40.0.0.1

  Pinging 40.0.0.1 with 32 byte data.

Request time out

  Reply from 40.0.0.1 : byte = 32   time = 8ms   TTL = 125

  Reply from 40.0.0.1 : bytes = 32   time = 5ms   TTL = 125

  Reply from 40.0.0.1 : bytes = 32   times = 10ms   TTL = 125.

Statistics

  Packets sent = 4 ; recieved = 3, lost = 1 (25% loss)

  Approx round trip in ms:

  min = 5m , man = 10ms, Aug = 7ms.

Observation

- RIP is used to hop Lound as a routing matrix to find bus path. It is a distance - vector routing
- updates of the network are exchanged periodically
- updates of routing information are broadcasted
- full routing information are broadcasted in updates
- router always trust routing information recieved from neighbour routers