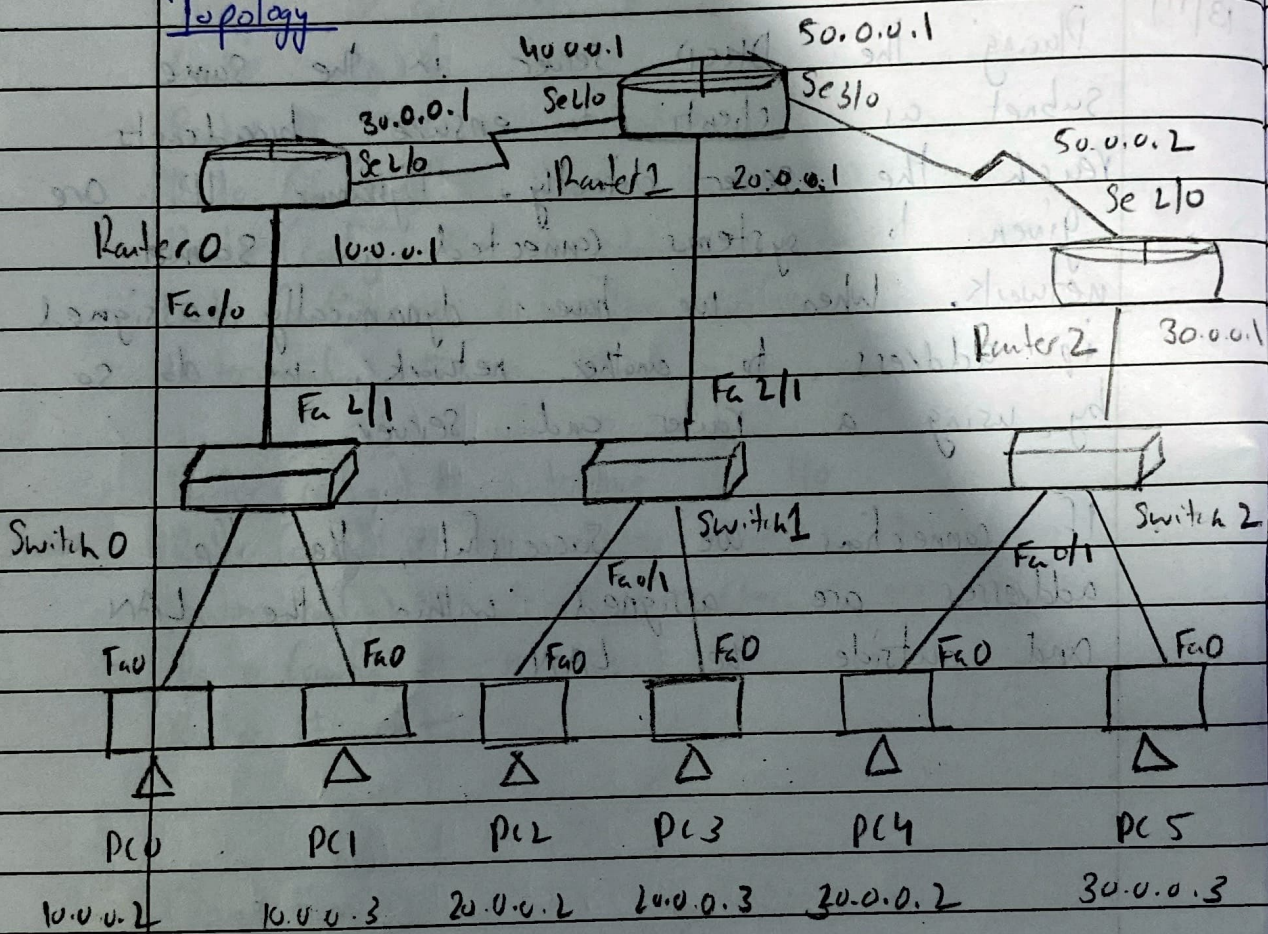Experiment 5 - Configure routing information protocol in Router

Aim - To configure the routing information protocol in all the Routers of the setup and ensure connections are well established.

Topology

1. Switch 0 connected to Router0 interface Fa0/0 using copper-straight through cable from Fa 2/1.

2. Similarly, Switch 1 and Switch 2 connected to Router 1 interface Fa 0/0 and Router 2 interface Fa 0/0 respectively.

3. Router 2 connected to Router 0 and Router 1 via Se 2/0 and Se 3/0 interface respectively.

4. PC0, PC1 connected to Switch 0 Via copper straight cable with IP address 10.0.0.2, 10.0.0.3 and respectively.

5. PC2, PC3 connected to Switch 1 Via copper straight cable with IP address 20.0.0.2 and 20.0.0.3 respectively.

6. PC4, PC5 connected to Switch 2 Via copper straight cable with IP address 30.0.0.2 and 30.0.0.3 respectively.

Procedure:
• Open cisco packet tracer and drag the following components:
Router: Place 3 routers in the middle.
Switch: Place 3 switches and connect them to the routers with Fa 2/1 interface.
PC: Place 6 PC's, two of them connected to each of the 3 switches Via Fa 0/0 interface.

Configure all the 3 routers:
• Router 0:
Router > enable
Router # > config terminal
Router # (config) # interface serial 2/0
Router (config) # ip address 30.0.0.1 255.0.0.0
Router (config) # no shut

• Router 1:
Router (config) # interface serial 2/0
Router (config) # ip address 40.0.0.1 255.0.0.0

Router (config) # interface Fa 0/0
Router (config) # ip address 20.0.0.1 255.0.0.0
Router (config) # interface Se 3/0
Router (config) # ~~int~~ ip address 50.0.0.1 255.0.0.0
Router (config) # no shut

- Router 3:
Router (config) # interface Fa 0/0
Router (config) # ip address 30.0.0.1 255.0.0.0
Router (config) # interface Se 2/0
Router (config) # ip address 50.0.0.2 255.0.0.0

→ Configure the RIP for all routers
- Router 1:
Router (config) # router rip
Router (config) # network 10.0.0.0
Router (config) # network 30.0.0.0

- Router 2:
Router (config) # router rip
Router (config) # network 40.0.0.0
Router (config) # network 20.0.0.0
Router (config) # network 50.0.0.0

- Router 3:
Router (config) # router rip
Router (config) # network 30.0.0.0
Router (config) # network 50.0.0.0

Observation!

- The routers communicate with each other and share ↑ ~~routing~~ routing table

  each of their

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