Aim:

a.) Simulate static routing configuration using cisco packet tracer

b.) Simulate RIP Using CISCO Packet tracer.

a.) 1. Adding static routes: each router knows only the networks directly connected to it add static route to reach a network not directly connected.

Eg: router 0, networks 10.0.0/8, 20.000/8 & 40.0.0.0/3 are directly connected but 30.0.0.0/8, 50.0.0.0/8

2. Creating Main & backup routes administrative distance decides preference of routes the lower the AB, the higher the preference
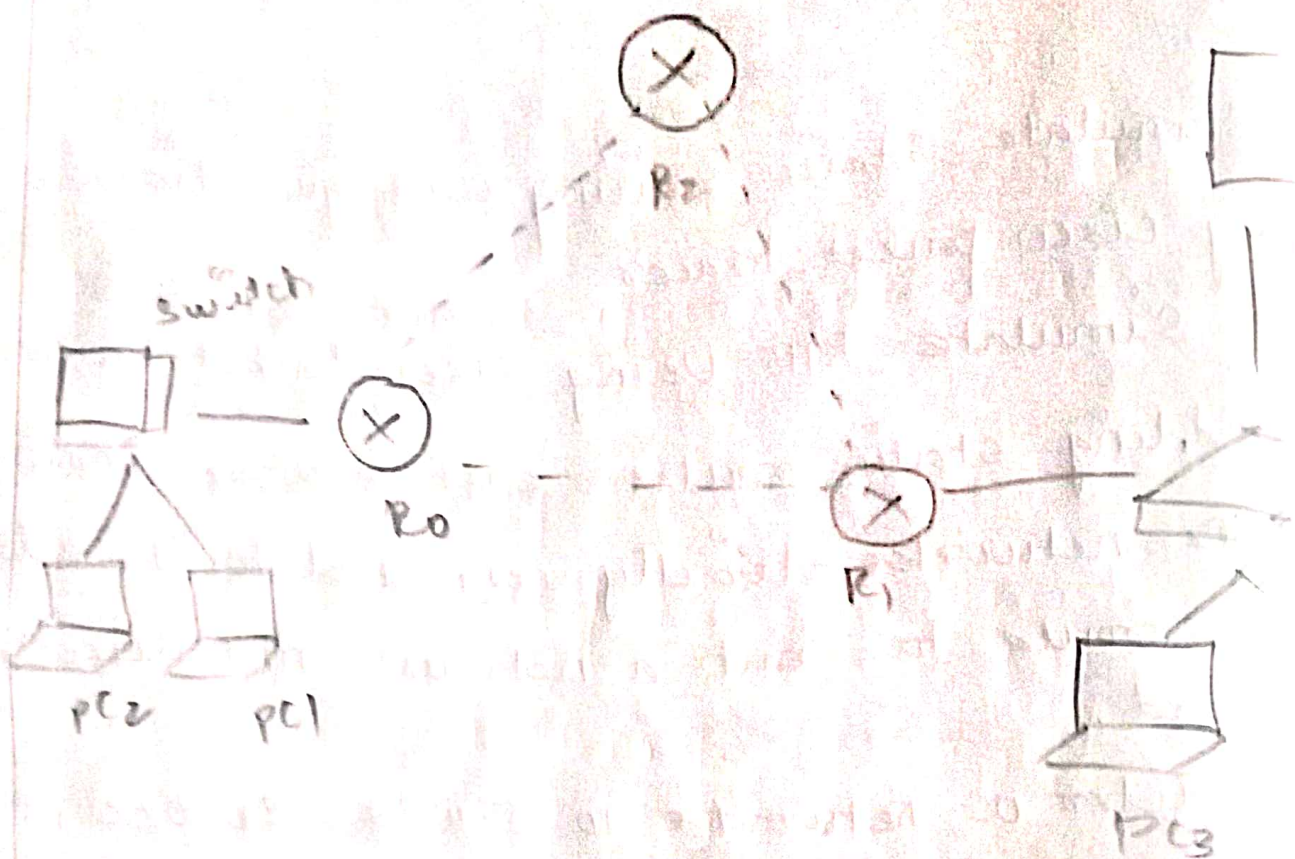
3. Router Configuration

configure static routes on each router for networks not directly connected.

4. Verifying router:

Verify routes by using commands show ip route static.

5. Testing router fail over:

→ Test connectivity using traced or ping from a device on a connected network.

6. Deleting a static route.

b.)

1. Initial IP configuration for dev[...]

2. Assign IP addresses to devices fo[...]
   PCs and routers

3. Enable, configure interfaces on rou[...]

4. configure RIP on routers.

5. Verify and test redundancy
   - use ping command on PC1
   - use tracer to see RIP redirect[...]
   traffic through an alternate route