Experiment 6

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Subject Name: Computer Networks **Subject Code: 22CSH-312**

1. **Aim:** Configure a network using any Routing Protocol such as Distance Vector routing or Link State Routing Protocol using Packet Tracer or NS2

2. **Objective:**

- Set up basic IP addressing for the network.
- Enable a routing protocol (RIP for Distance Vector or OSPF for Link State) on the routers.

3. **Requirements:**

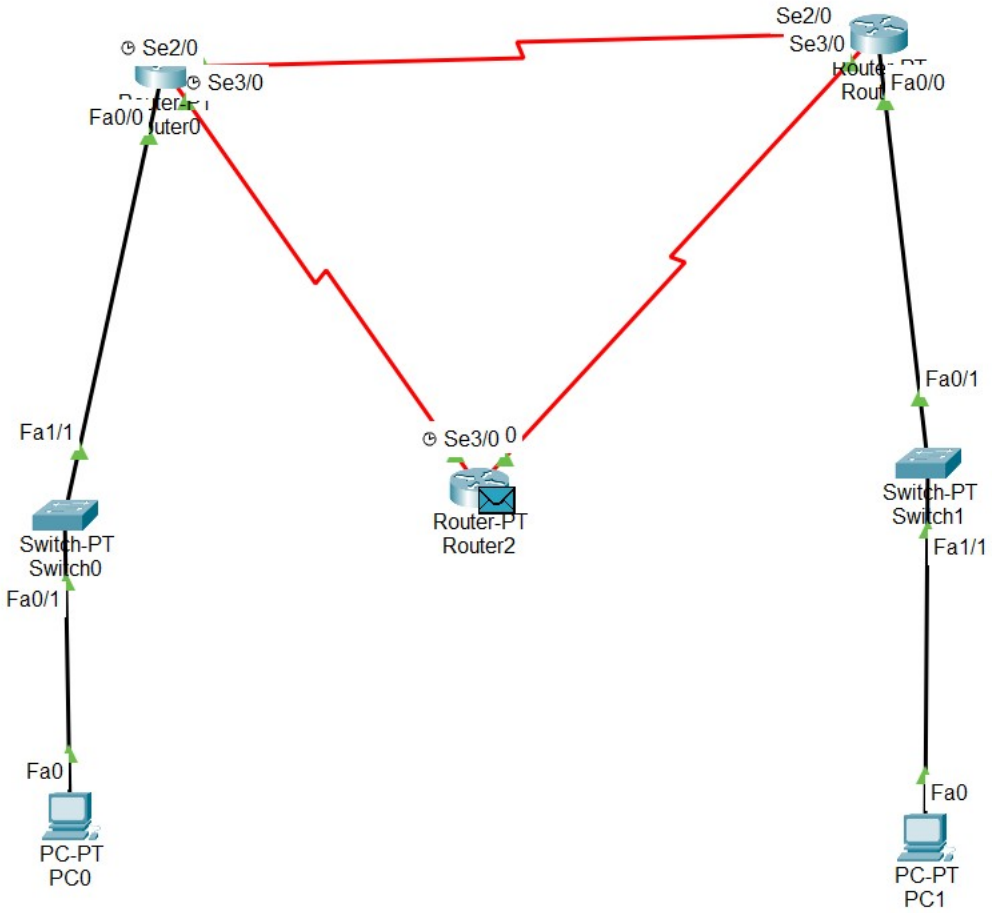
- Packet Tracer.
- Router
- Switch
- Wire

4. **Procedure:**

- Connect devices to the switch, and router in packet tracer.
- Assign IP addresses to each device.
- Configure RIP Routing on Routers.
- Check device communication via the router 1and router 2 and router 3.

- Select a source and destination device.
- Drag and drop a packet from the source to the destination
- Switch to Simulation mode in Packet Tracer.
- Click "Capture/Play" to start the simulation.

5. Output:



6. Learning Outcomes:

a. Learn the difference between Distance Vector (RIP) and Link State (OSPF) routing protocols.

b. Gain hands-on experience in configuring and managing routing protocols on Cisco routers using Packet Tracer.

c. Develop skills in designing, configuring, and troubleshooting networks with multiple subnets and routers.