EXPERIMENT NO –06:

Dynamic Routing using Packet Tracer (Distance vector).

AIM::

To Configure a network using distance vector routing (Routing information protocol) using packet tracer software and hence to transmit data between the devices in real time mode as well as simulation mode.

## Software/Apparatus required:

Packet Tracer/End devices, Hubs, connectors

Steps for building topology:

Step 1: Start Packet Tracer

Step 2: Choosing Devices and Connections

Step 3: Single click on the End Devices. Single click on the Generic Host. Place PC0, PC1 on topology area. Connect PCs to Switch 1. Similarly Place PC2, PC3 on topology area for receiver side. Connect these PCs with switch 1 and 2 respectively through connecting wires. Select Router1 and Router 2 and place the router 1, 2 between two switches. Connect these switches into router through connecting wires.
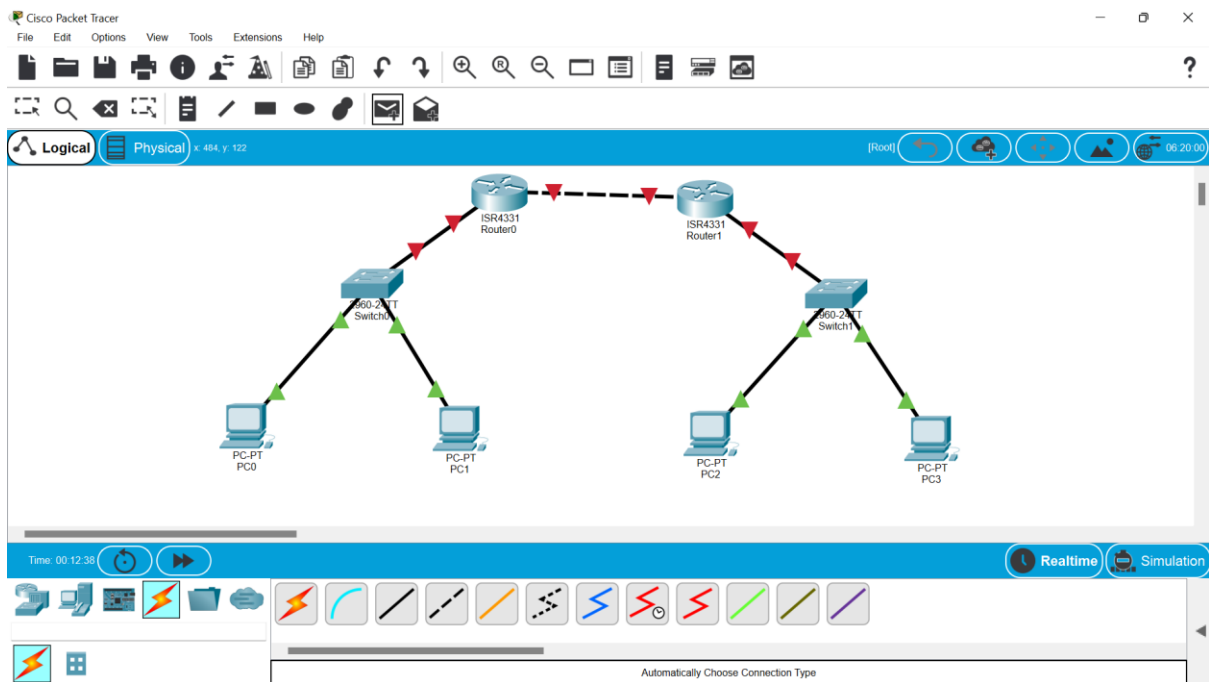
Step 3:Configuring IP Addresses, Gate Way and Subnet Masks on the Hosts

To start communication between the hosts IP Addresses, subnet Masks and Gate way had to be configured on the devices. Click once on PCs. Choose the Config tab and click on FastEthernet0. Type the IP address in its field. Based on router create gate way click on the subnet mask. It will be generated automatically

Step 4: Verifying Connectivity in Realtime Mode Be sure you are in Realtime mode.

Select the Add Simple PDU tool used to ping devices. Click once on PC0, then once on PC3. The PDU Last Status should show as Successful.

Step 5:Verifying Connectivity in Simulation Mode Be sure you are in Simulation mode.

Deselect all filters (All/None) and select only ICMP. Select the Add Simple PDU tool used to ping devices Click once on PC0, then once on PC3. Continue clicking Capture/Forward button until the ICMP ping is completed. You should see the ICMP messages move between the hosts, hub and switch. The PDU Last Status should show as Successful
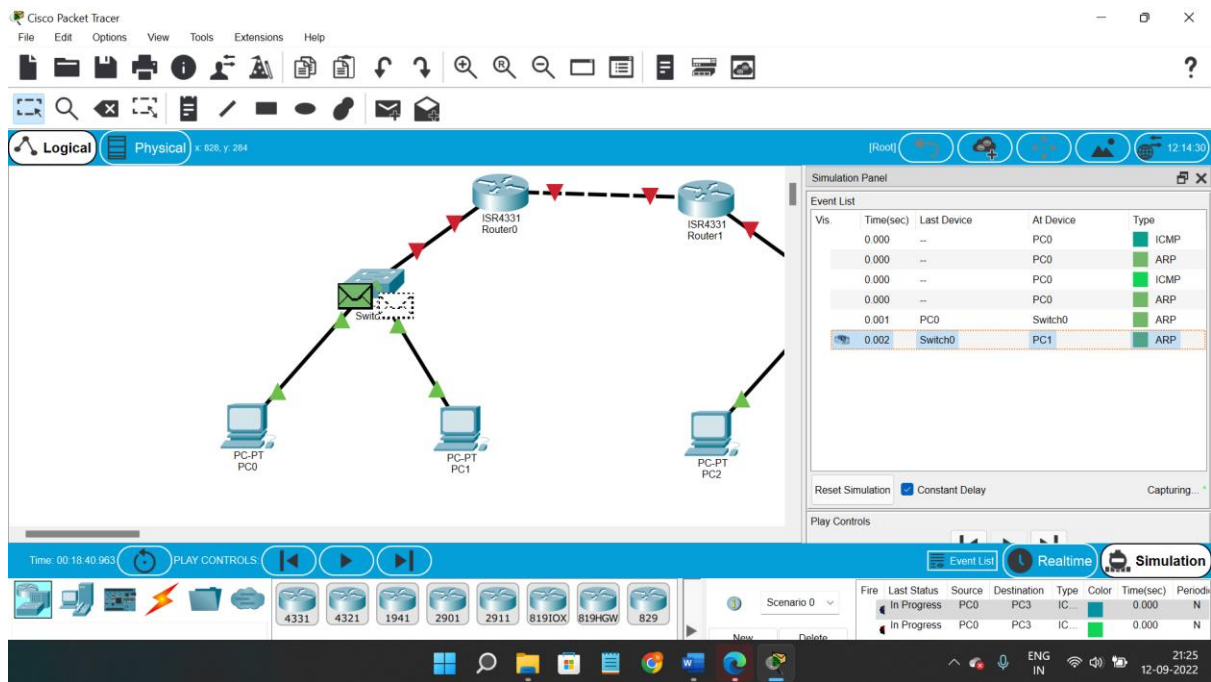
Result: Thus the Configuration of Dynamic Routing – RIP in Packet Tracer.