**SCHOOL OF COMPUTER SCIENCE**

**UNIVERSITY OF PETROLEUM AND ENERGY STUDIES**

**DEHRADUN, UTTARAKHAND**



**DATA COMMUNICATION AND NETWORKS LAB**

**LABORATORY FILE**

**(2024-2025)**

**For**

**Vth Semester**

**Submitted To: Submitted By:**

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[Vth Semester] R2142220414(Roll No.)

School of Computer Sciences B.Tech. CSF (Batch-1)

**LAB EXPERIMENT – 8**

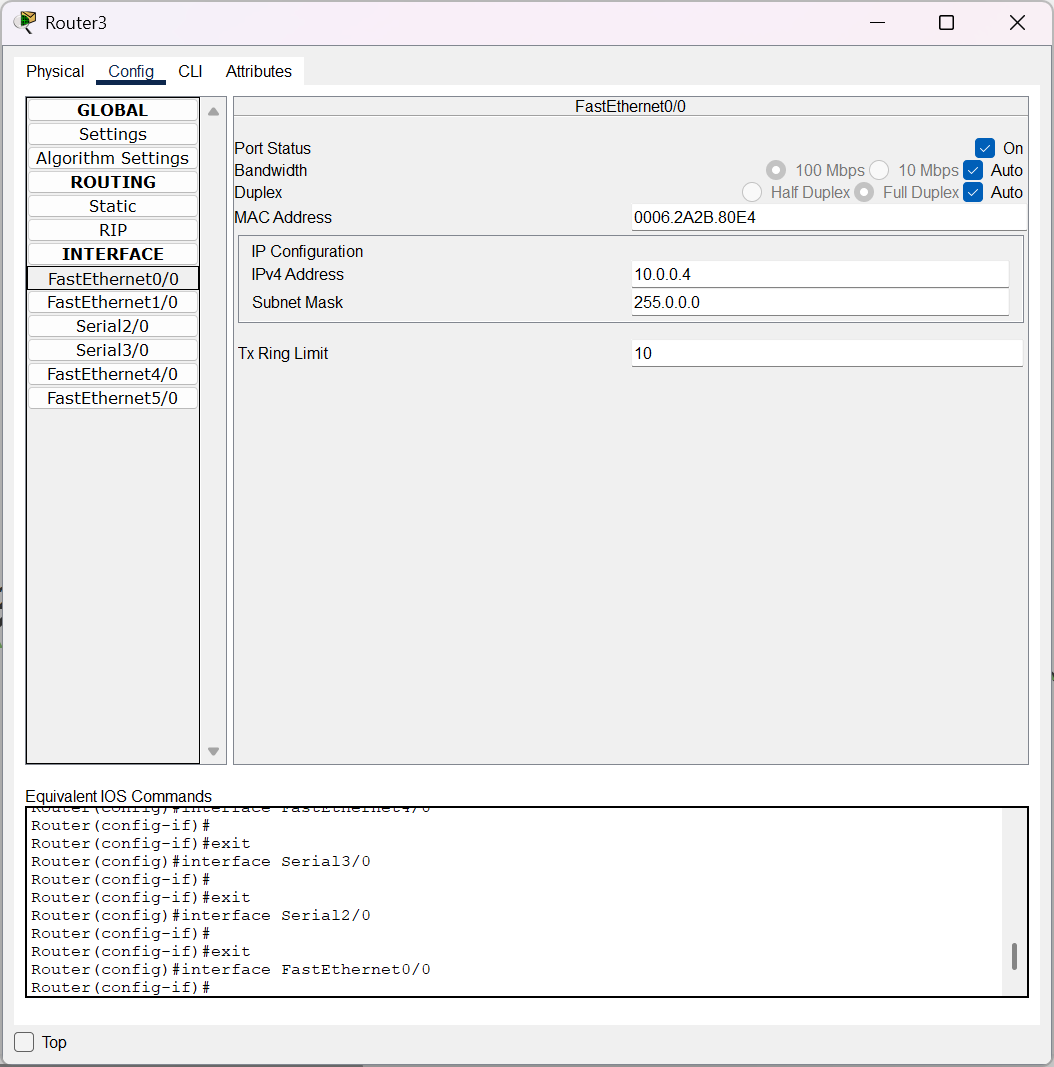
**Distance Vector Routing Simulation Using Cisco Packet Tracer – Static Routing**

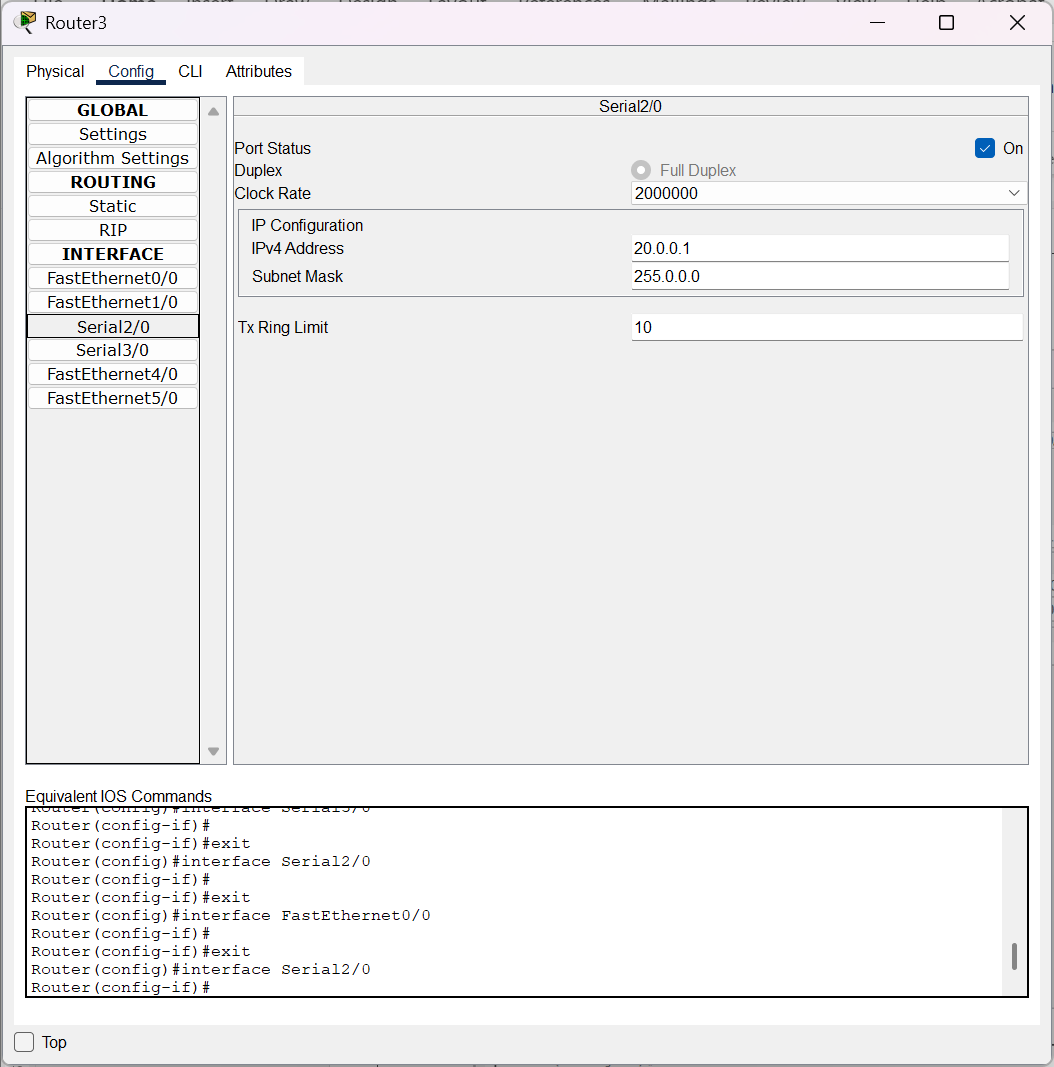
**Objective**

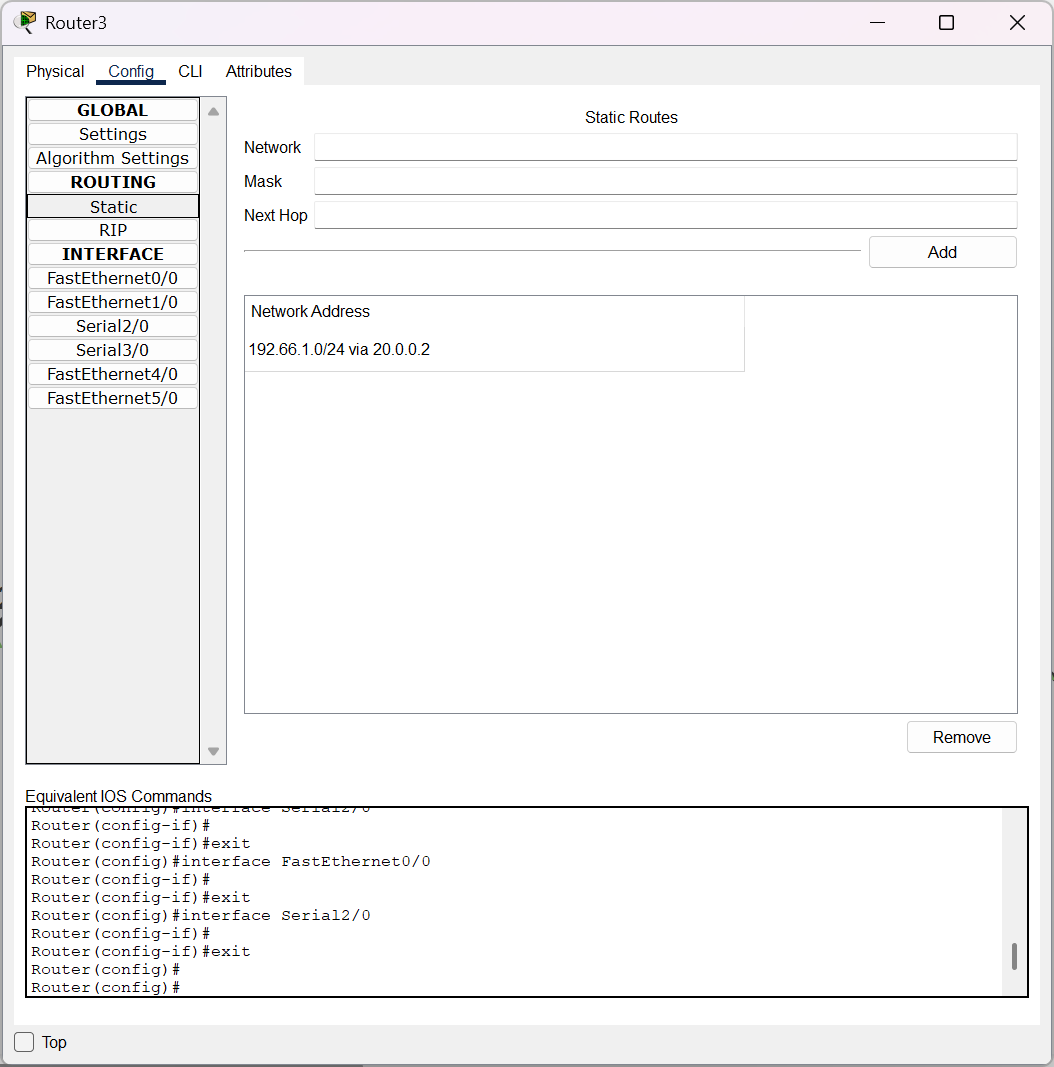
Simulate and verify the Distance Vector Routing protocol in a network using Static Routing tables in Cisco Packet Tracer. The focus is on creating a network topology, configuring static routes, and observing how routers forward packets.

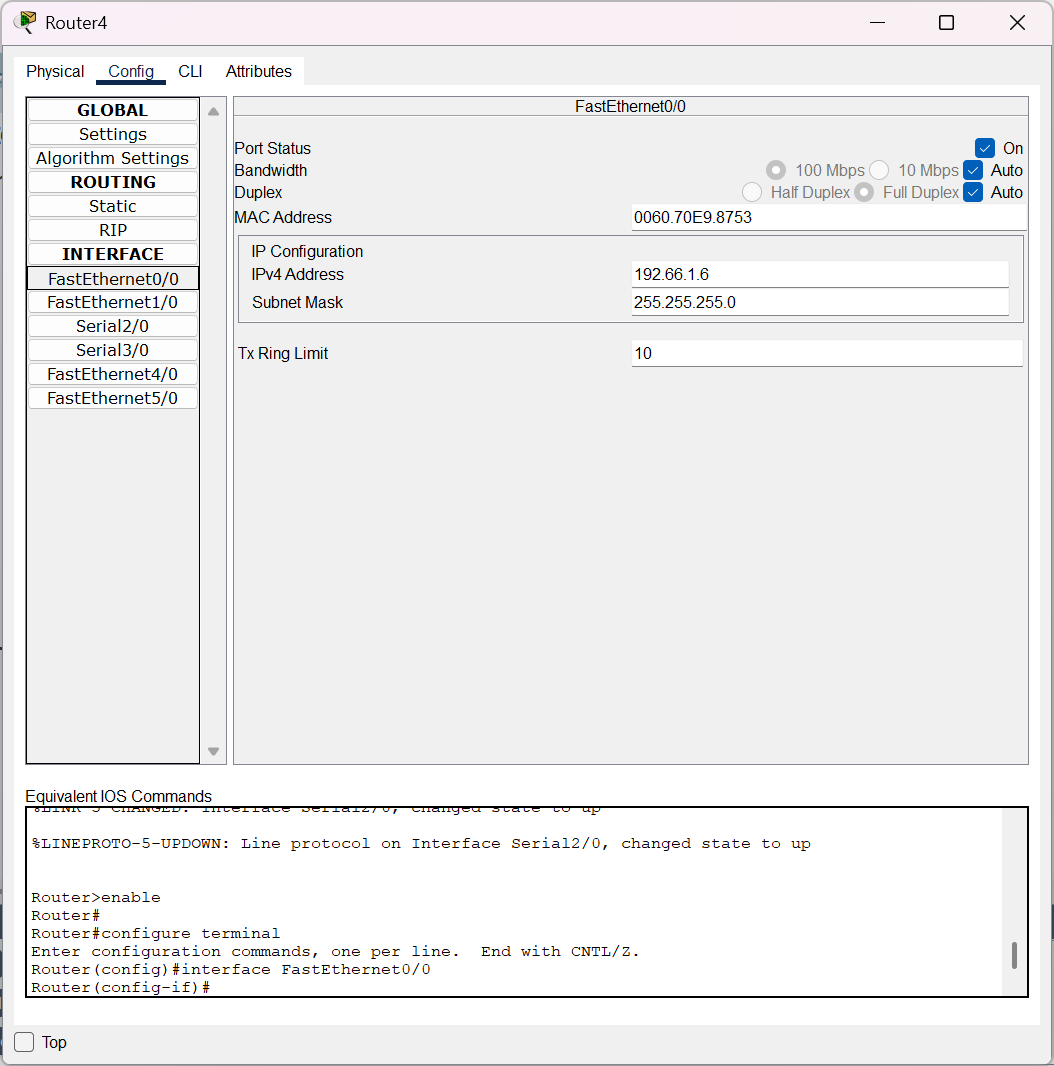
**Set Up the Devices**

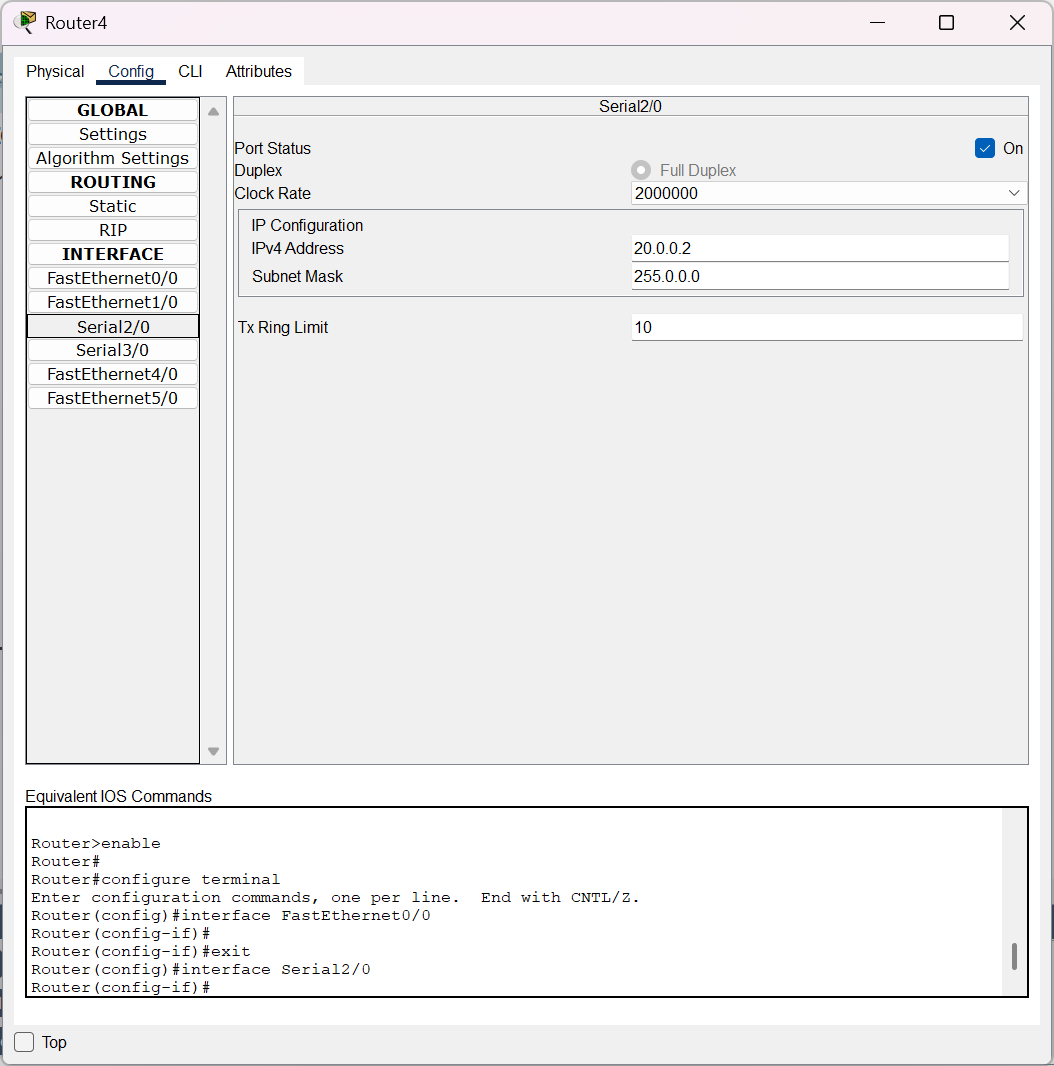
1. **Open Cisco Packet Tracer.**
2. Drag and drop the following devices:
   * **2 Router**
   * **2 Switches**
   * **4 PCs**
3. Connect the devices using the appropriate cables:
   * **Router to Switches**: Use a **crossover cable** or an **automatic cable** to connect the router's GigabitEthernet port to each switch.
   * **Switch to PCs**: Use a **straight-through cable** or an **automatic cable** to connect each PC to a switch.

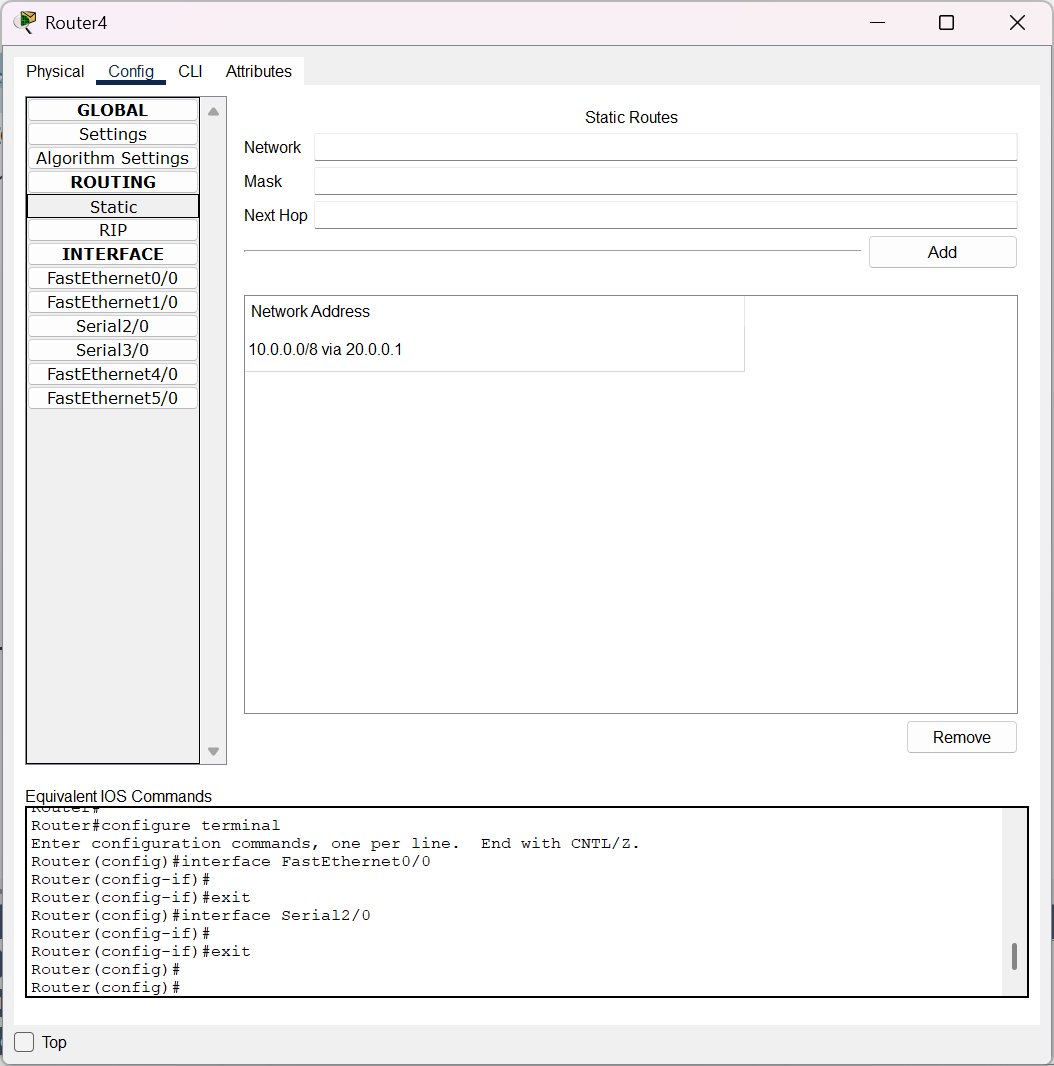


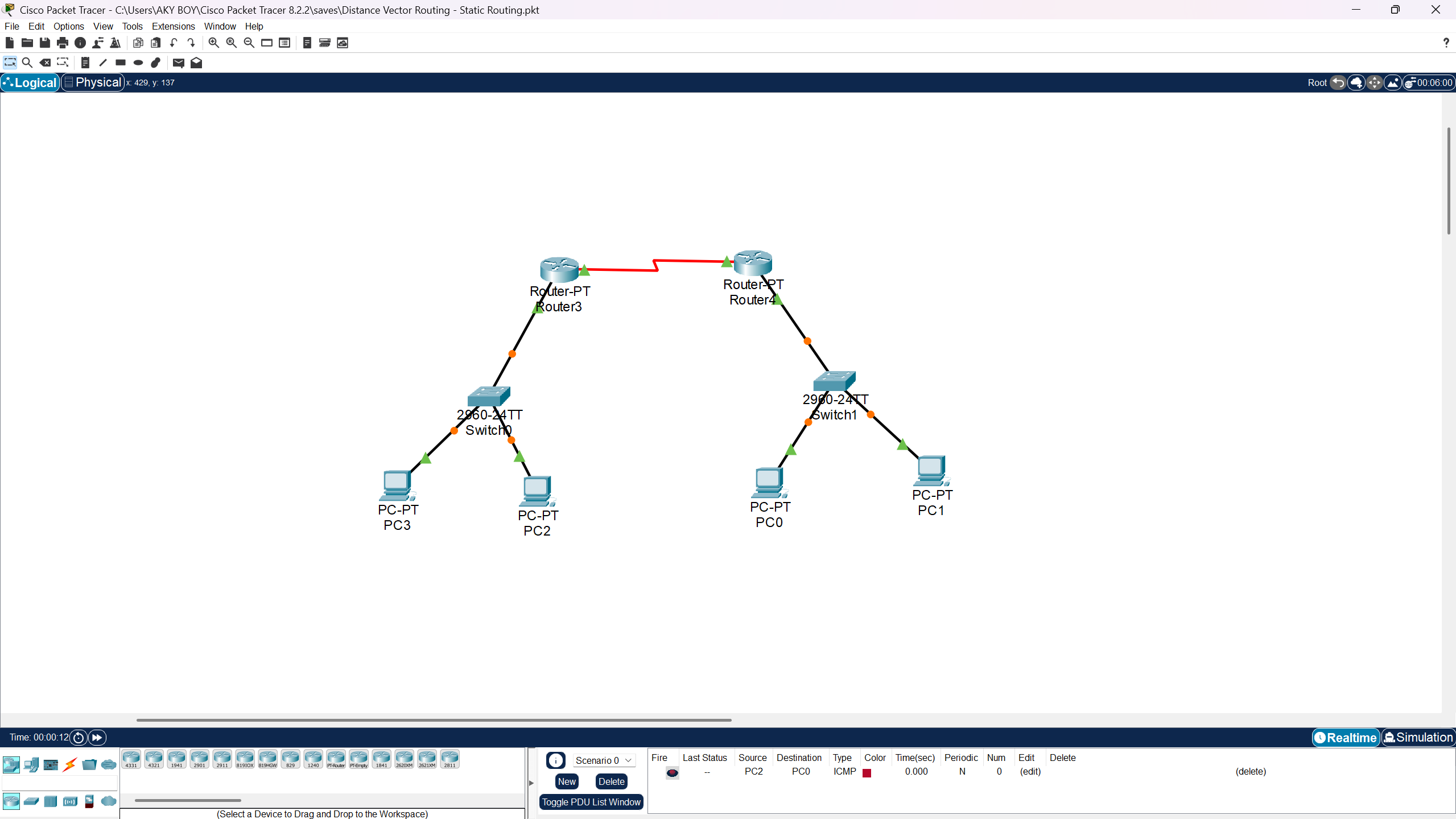










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