EXP:11	Routing at Network Layer

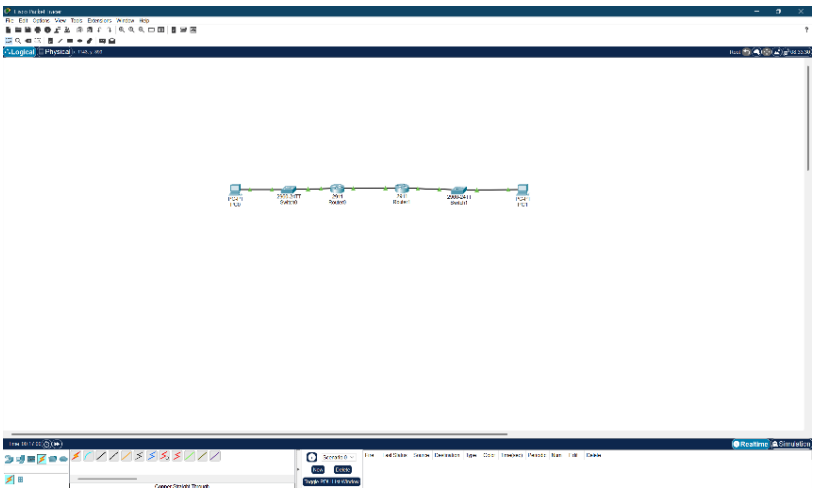
Aim

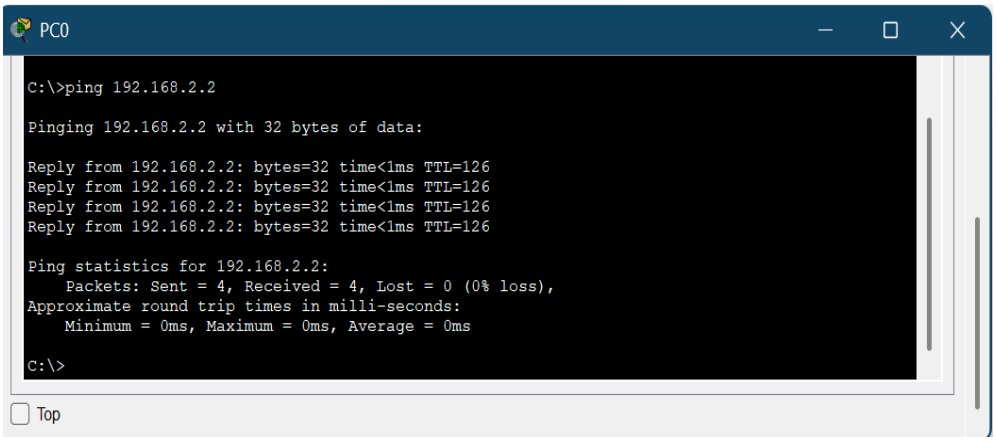
To simulate **Static Routing Protocol** and **RIP (Routing Information Protocol)** configuration using CISCO Packet Tracer.

Algorithm / Procedure

1. **Design** a multi-network topology (e.g., three routers and three networks).
2. **Simulate Static Routing:**
   - Configure the router interfaces with IP addresses.
   - Manually add static routes to the routing table of each router to reach all other networks.
   - Verify end-to-end connectivity.
3. **Simulate RIP (Dynamic Routing):**
   - Remove the static routes.
   - Enable the RIP routing protocol on all routers.
   - Advertise the directly connected networks.
   - Verify that the routing tables are automatically populated and check end-to-end connectivity.

Output:





Result

Both Static Routing and RIP dynamic routing protocols were successfully simulated in Cisco Packet Tracer. The experiment demonstrated the manual configuration of static routes versus the automatic route discovery of RIP.