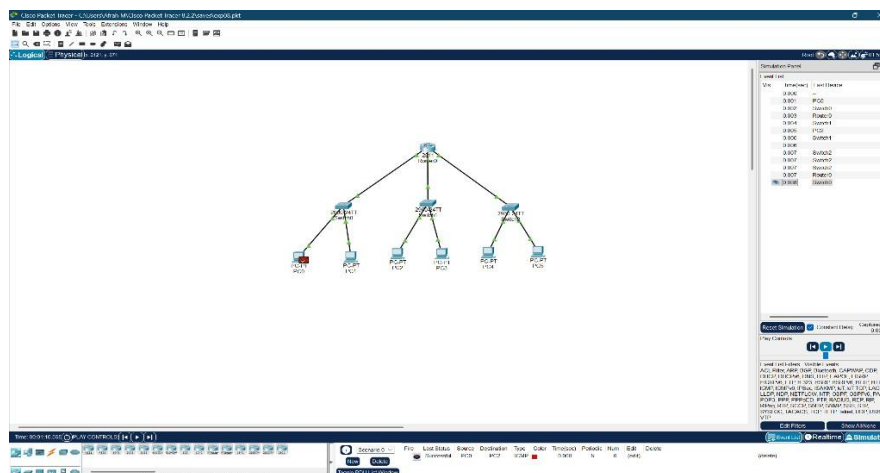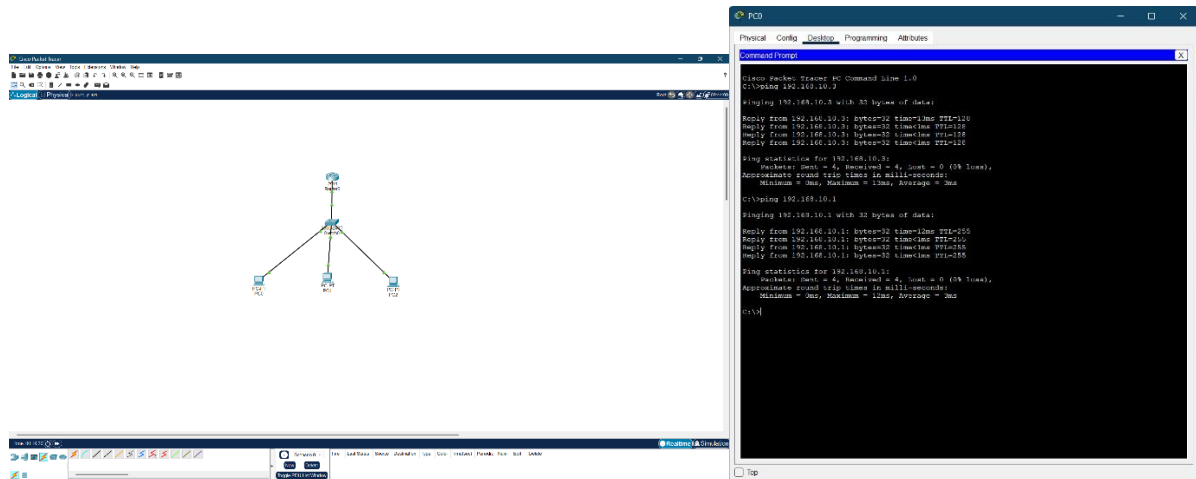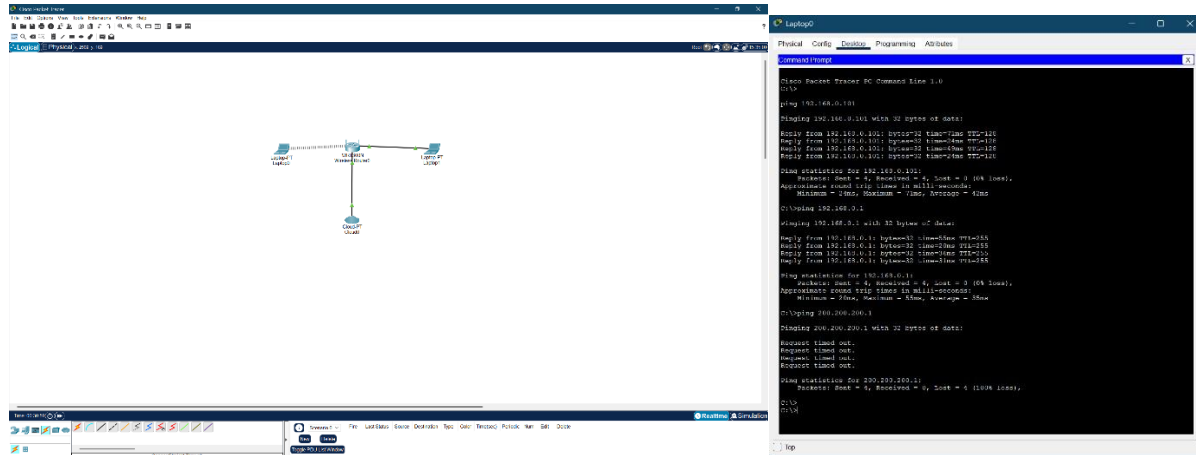| EXP:10	Internetworking with routers in CISCO PACKET TRACER simulator.

Aim

To design and configure a simple internetwork using a router, including static IP addressing, routing, and a wireless network with DHCP.

Algorithm / Procedure

1. **Design** a simple internetwork topology with two or more different networks (3-4 hosts each) connected via a Router.
2. **Configure** static IP addresses on all host machines and the router interfaces.
3. **Perform** simulation and trace how routing is done in packet transmission between the different networks.
4. **Design** and configure a separate internetwork using a **wireless router**, **DHCP server**, and an **internet cloud** to simulate a home/office network.
5. **Verify** connectivity and IP address assignment in the wireless network.

Output:

Result

A simple internetwork with a router was successfully designed and configured, demonstrating the process of inter-network routing. A wireless network with DHCP was also configured and verified.