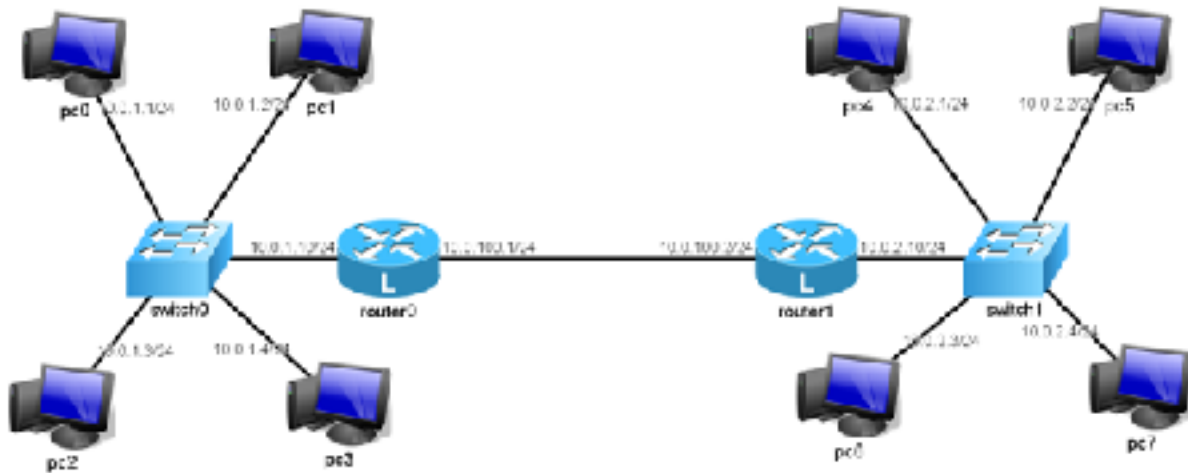# EE 5240 Practical Exercise #2
Network Simulation via Psimulator

1. Using the Psimulator GUI, build the network in the image below.

To be clear, here are the IP addresses for each device:

Device	IP Address	Interface ID
PC 0	10.0.1.1/24	eth0
PC 1	10.0.1.2/24	eth0
PC 2	10.0.1.3/24	eth0
PC 3	10.0.1.4/24	eth0
PC 4	10.0.2.1/24	eth0
PC 5	10.0.2.2/24	eth0
PC 6	10.0.2.3/24	eth0
PC 7	10.0.2.4/24	eth0
Router 0	10.0.1.10/24 10.0.100.1/24	eth0 eth1
Router 1	10.0.2.10/24 10.0.100.2/24	eth0 eth1

2. Invoke the back-end simulator and connect it to the front-end.

3. List the routing table entries that must be added to each device through the `ip route add` commands so that the network is fully functional. Show the final routing table for each router using the `ip route show` command.

4. Demonstrate that the network is functional by using the `ping` command on PC 0 and connecting to each other device on the network. Be sure to capture the events for *one* full ping. Explain what each step accomplishes. (For example, "There is an ARP request arriving at router 1 to find the MAC address for IP address 10.0.100.2.") Additionally, record the RTTs for at least 5 pings.

5. Use the `traceroute` command on PC 5 to find the route to PC 2. Record the result.