



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Discover. Learn. Empower.

Experiment 7

Student Name: Zatch

UID:

Branch: BE-CSE

Section/Group:

Semester: 5th

Date of Performance:

Subject Name: Computer Networks

Subject Code: 22CSH-312

1. Aim: Connect the computers in Local Area Network by setting IP Address, Subnet mask & Default gateway.

2. Objective:

- Understand how to assign static IP addresses to devices in a LAN.
- Configure subnet masks to define the network size.
- Set default gateways to facilitate communication outside the local network.
- Test connectivity using ping commands.

3. Requirements:

- Cisco Packet Tracer Software
- Switches
- PC
- Copper Straight-Through Cables
- Copper Cross-Over Cables

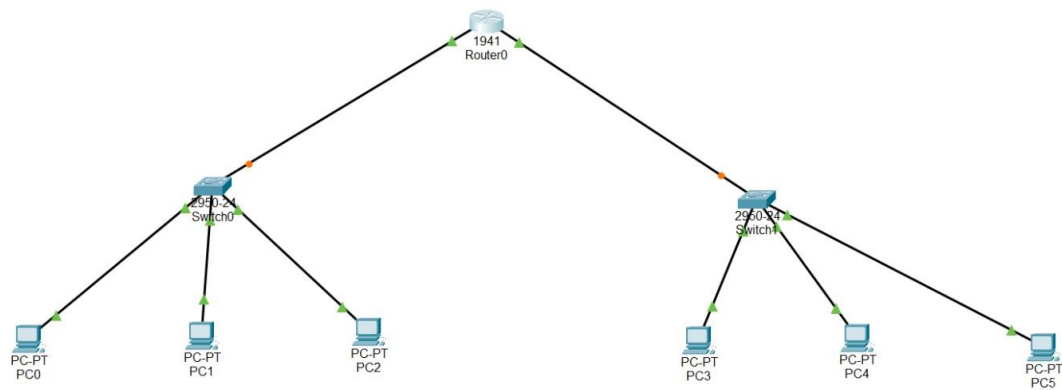
4. Procedure:

- Open Cisco Packet Tracer
- Drag and drop several switches and end devices (PCs) onto the workspace.
- Connect the devices using appropriate cables
- Click on each PC, go to the Desktop tab, and then click on IP Configuration to assign static IP addresses to each PC.
- For PCs, ensure the default gateway is set to the IP address of the router or the

switch.

- Run the simulation

5. Output



6. Learning Outcome:

- learn how to assign IP addresses and configure network settings for devices in a LAN.
- develop basic troubleshooting skills by testing connectivity using ping.
- gain insight into subnet masks and how they affect network communication.
- Learn about subnetting and default gateway
- Learn to set up and configure network devices, including switches and PCs, to demonstrate protocol functionality.