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Lab Report 7: Making Organization Networking using Router

# Objectives:

* Understand the setup of a basic organizational network.
* Learn how to connect multiple devices using switches and a router.
* Configure devices for both internal and external network communication.­

# Learning:

## Setting Up the Network:

Place one router, two switches, and 3-4 devices (e.g., PCs, laptops) in the Cisco Packet Tracer workspace. Connect each switch to the router using straight-through cables. Connect the devices to the switches using straight-through cables.

## Assign IP addresses:

Assign IP addresses to the devices within the same subnet for internal communication. Example: Switch 1 connected devices: 192.168.1.1, 192.168.1.2 Switch 2 connected devices: 192.168.2.1, 192.168.2.2 Assign the router interfaces IP addresses for each subnet: Interface connected to Switch 1: 192.168.1.254 Interface connected to Switch 2: 192.168.2.254

## Router Configuration:

Configure the router to enable communication between the two subnets. Set up static routes or use dynamic routing protocols (e.g., RIP, OSPF) if necessary.