

Branch/Semester	Bsc (IT Cloud & Application Development) / II
Subject Name:	Routing & Switching Technology
Subject Code:	05CA0201
Assignment:	Assignment No. 3 (Computers Networks)
Due Date:	16/02/2025
Faculty Name:	Prof. Rishabh Singh

1. **Basic LAN Configuration in Packet Tracer**

- Create a simple LAN using Packet Tracer and connect multiple PCs using a switch.
- Assign static IP addresses to devices in a LAN and verify connectivity using the ping command.
- Configure and test a DHCP server to assign IP addresses dynamically.

2. **Router Configuration and IPv4 Addressing**

- Configure a Cisco router with basic settings such as hostname, passwords, and interfaces.
- Implement static routing between two or more networks and verify connectivity.
- Configure dynamic routing protocols (RIP, OSPF, EIGRP) and test network connectivity.
- Assign IP addresses using CIDR and VLSM and demonstrate efficient subnetting.



