

Name of the laboratory: COMPUTER NETWORK LAB

Course objectives

1. To understand the functionalities of various layers of OSI model.
2. To understand the operating System functionalities.

List of experiments:

Week 1

Framing methods:

Week-1:

- A. Write a C program to implement the data link layer framing methods such as bit stuffing.
- B. Write a C programs to implement the data link layer framing method such as character stuffing.
- C. Write a C program to implement data link layer framing method character count.

Week-2:

CRC Polynomials

- a. Write a C program to implement on a data set characters the three CRC polynomials – CRC 12, CRC 16, and CRC CCIP.

Week 3:

Shortest path

- a. Write a C program to Implement Dijkstra's Algorithm to compute the shortest path through a given path.

Week 4:

Distant Vector Routing

- a. Write a C program to take an example subnet graph with weights indicating delay between nodes. Now obtain Routing table art each node using distance vector routing algorithm.

Week 5:

Broadcast Tree

- a. Write a C program Implement Broadcast Tree for a given subnet hosts.

Week-6:

Encrypting DES

- a. Write a C program to implement that to take a 64 bit playing text and encrypt the same using DES algorithm.

Week-7

Break DES

- a. Write a c program to implement to break the above DES coding.

Week-8:

Encryption and Decryption of RSA algorithm

- a. Write C program to implement RSA algorithm encrypts a text data and Decrypt the same.

