List of Experiments

1. Implement the data link layer framing methods such as character, character-stuffing and bit stuffing.
2. Write a program to compute CRC code for the polynomials CRC-12, CRC 16 and CRC CCIP
3. Develop a simple data link layer that performs the flow control using the sliding window protocol, and loss recovery using the Go Back-N mechanism.
4. Implement Dijsktra's algorithm to compute the shortest path through a network
5. Take an example subnet of hosts and obtain a broadcast tree for the subnet.
6. Implement distance vector routing algorithm for obtaining routing tables at each node.
7. Implement data encryption and data decryption
8. Write a program for congestion control using Leaky bucket algorithm.
9. Write a program for frame sorting techniques used in buffers.
10. Wireshark
    1. Packet Capture Using Wire shark
    2. Starting Wire shark
    3. Viewing Captured Traffic
    4. Analysis and Statistics Filters.
11. How to run Nmap scan
12. Operating System Detection using Nmap.
13. Do the following using NS2 Simulator
    1. NS2 Simulator-Introduction
    2. Simulate to Find the Number of Packets Dropped
    3. Simulate to Find the Number of Packets Dropped by TCP/UDP
    4. Simulate to Find the Number of Packets Dropped due to Congestion
    5. Simulate to Compare Data Rate & Throughput.
    6. Simulate to Plot Congestion for Different Source/Destination
    7. Simulate to Determine the Performance with respect to Transmission of Packets.