

CSPC2207 COMPUTER NETWORKS LAB. (0-0-3)

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. Take an example subnet of hosts and obtain a broadcast tree for the subnet.
5. Implement distance vector routing algorithm for obtaining routing tables at each node.
6. Implement data encryption and data decryption.
7. Write a program for congestion control using Leaky bucket algorithm
8. Write a program for frame sorting technique used in buffers.
9. Wireshark
 - Packet Capture Using Wire shark
 - Starting Wire shark
 - Viewing Captured Traffic
 - Analysis and Statistics & Filters.
10. Do the following using NS2 Simulator
 - NS2 Simulator-Introduction
 - Simulate to Find the Number of Packets Dropped
 - Simulate to Find the Number of Packets Dropped by TCP/UDP
 - Simulate to Find the Number of Packets Dropped due to Congestion
 - Simulate to Compare Data Rate& Throughput.
 - Simulate to Plot Congestion for Different Source/Destination
 - Simulate to Determine the Performance with respect to Transmission of Packets