



COMPUTER NETWORKS LAB (BCSP-502)

Course Outcomes:

After completion of the course students will be able to

1. Characterize and appreciate computer networks from the view point of components and from the view point of services
2. Display good understanding of the flow of a protocol in general and a network protocol
3. Model a problem or situation in terms of layering concept and map it to the TCI/IP stack
4. Select the most suitable Application Layer protocol
5. Design a Reliable Data Transfer Protocol and develop solutions of Transport Layer
6. Describe principles of Network Layers and use IP addressing to create subnets

List of Programs:

1. Implementation of the Data Link Layer framing method such as character stuffing and bit stuffing.
2. Implementation of CRC algorithm.
3. Implementation of a Hamming (7, 4) code to limit the noise. We have to code the 4 bit data in to 7 bit data by adding 3 parity bits.
4. Implementation of LZW compression algorithm.
5. Write a socket program to implement a listener and a talker.
6. Simulation of a network of 3 nodes and measure the performance on the same network.
7. Write a program to encrypt 64-bit text using DES algorithm.