

**Indian Institute of Information Technology, Allahabad.**

**Course: Computer Networks**

**Batch: B. Tech. (IT) – 4<sup>th</sup> semester**

**Lab Assignment #1**

**Lab Sessions on 24/01/2023**

**Deadline: 28/01/2023**

**Instructor: Dr. Nabajyoti Mazumdar**

1. Install Linux in your system. Write all programs in C programming language.
2. Go through the man pages of following system routines and explore different parameters used. Submit a brief summary too.
  - i. socket
  - ii. bind
  - iii. connect
  - iv. listen
  - v. accept
  - vi. send
  - vii. recv
  - viii. sendto
  - ix. recvfrom
  - x. close
  - xi. shutdown
  - xii. fork
3. Implement any one of the following sorting algorithm:
  - i. Quick Sort
  - ii. Merge Sort
  - iii. Insertion Sort

Your program should take unsorted list of data from a file, sort and write back to the file after the unsorted list.
4. Implement linked list and all its operation and demonstrate with suitable input/output operations.