

# Indian Institute of Information Technology, Allahabad

**Course: Computer Networks**

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

**Lab Assignment #1**

**Deadline: 16/01/2024**

**Instructor: Dr. Vijay K. Chaurasiya**

1. Install Linux in your system. Write all programs in both **C and Python** programming languages.
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 the following sorting algorithms. Your program should take unsorted list of data from a file, sort and append the sorted list back to the file after the unsorted list.
  - i. Quick Sort
  - ii. Merge Sort
  - iii. Insertion Sort
4. Implement linked list and all its operation and demonstrate with suitable input/output operations.