Barrackpore Rastraguru Surendranath College Department of Computer Science B.Sc. Computer Science Hon's Semester III Laboratory Assignments Paper: CMSACOR05P (Data Structures Lab)

- 1. Write a program to search an element from a given array using
  - a) Linear Search method.
  - b) Binary Search method.
- 2. Write a program to sort an array using
  - a) Bubble Sort method
  - b) Selection Sort method
  - c) Insertion Sort method
- 3. Write a program to implement stack using array.
- 4. Write a program to implement all the operations of single link list.
- 5. Write a program to implement queue using link list.
- 6. Write a program to create a Binary Search Tree (BST).
- 7. Write a program to implement Lower Triangular Matrix using onedimensional array.
- write a program to implement Symmetric Matrix using one-dimensional array.
- 9. Recursion-
  - a) Write a program to calculate factorial and to compute the factors of a given no. using recursion.
  - b) Write a program to display Fibonacci series using recursion.

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