Dept. of CSE, NIT Silchar

Semester: 3rd. Branch: CSE Data Structures Lab

Assignment 1 Date: 03.08.2018 Submission due: August 10.08.2018

1. Consider the problem of adding two n-bit binary integer, stored in two n-element arrays A and B. The sum of the two integers should be stored in binary form in an (n + 1)-element array C. Write a C program for the above problem. The input should be two integers in the decimal form.

2. Write a C program to find the largest and smallest numbers for a given set of n numbers. Count the number of comparisons.

3. Write a C program to find the second smallest number for a given set of n numbers. Count the number of comparisons.

4. Write a C program to find the sum of contiguous subarray in an array which has the largest sum.

Let n be the size of the array and let the size of the subarray vary from 2 to (n – 1)-elements.

5. Write a program to put even and odd elements in two separate arrays.

6. Write a program to generate a two-dimensional array A and perform the following operations.

- Find whether a given element is in A.
- Store an element at a specified position in A.
- Extract an element at a specified position in A.