Assignement-IV
National Institute of Technology Silchar
Due date: 13 December 2022

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Subject Code: CS-101 Subject: Introduction to Computer Programming
Semester: 1st Department: CSE
Course: B.Tech Section: J

Answers should be submitted in a scanned copy of the handwritten format.
Write functions for all questions given below.

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1. Write a program to print all unique array elements.
2. Write a program to find the largest and smallest elements of the array.
3. Write a program to rotate a given array element k times. The rotation can be either left or right circular rotation. Implement both rotations.
4. Write a program to find n^{th} fibonacci number using for loop. Do not print the series.
5. Given an array arr[] of size N-1 with integers in the range of [1, N], the task is to find the missing number from the first N integers.
6. Given a number n, determine whether the given number is Armstrong number or not.
7. Given two arrays $A[]$ and $B[]$ of n items each. Write a program to compute the following equation

$$\frac{1}{n}\left(\sum_{i=0}^{n}\sqrt{(A_i^2+B_i^2)}\right)$$

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8. Given two arrays $A[]$ and $B[]$ of n items each. Write a program to compute the following equation -

$$\frac{1}{n}\prod_{i=0}^{n}\sqrt{\mid A_i - B_i \mid}$$