

**School of Computing Science & Engineering**  
**Subject: Advanced Data Structures and Algorithms (E2UC503B)**

**Programming Assignment 1**

**Last Date: September 15, 2024**

**Write algorithms, program of following problems. Also find the time and space complexity of each algorithm.**

1. Find the largest element in a given array.
2. Reverse a given array.
3. Find the second largest element in a given array
4. Check if a given array is sorted
5. Remove duplicates from a given array
6. Rotate a given array
7. Find the frequency of elements in a given array
8. Merge two sorted arrays