

## **LAB-2**

### **Question-1**

Write a recursive algorithm to find the position of the largest element in an array of n numbers. Further, write the recurrence relation to do so.

### **Question-2**

Write a recursive algorithm that determines whether a given word is a palindrome. Write the recurrence relation of the algorithm.

### **Question-3**

Design a recursive algorithm that reverses the contents of an array.

### **Question-4**

- (a) Write a Program to find the Fibonacci series using recursion. Write the recurrence relation.
- (b) Write a Program to find the Factorial using recursion. Write the recurrence relation.

### **Question-5**

- (a) Write an algorithm to reverse a stack using recursion.
- (b) Write an algorithm to recursively reverse a string.