

LAB TASK- 7

Data Structure

1. Implement Binary Search Algorithm to search for an element X from any set of numbers consisting of the following functions.

int *binarySearch*(*int* *arr*[], *int* *l*, *int* *r*, *int* *x*);

2. Sort an array a={7,8,2,3,5} using the following functions:

i. Bubble Sort

***void swp*(*int *xp*, *int *yp*);**
***void bubbleSort*(*int arr*[], *int n*);**
***void printArray*(*int arr*[], *int size*);**

ii. Insertion Sort

***void insertionSort*(*int arr*[], *int n*);**
***void printArray*(*int arr*[], *int n*);**

iii. Selection Sort

***void swap*(*int *xp*, *int *yp*);**
***void selectionSort*(*int arr*[], *int n*);**
***void printArray*(*int arr*[], *int size*)**