Algoma University

School of Computer Science and Technology

COSC 2007 Data Structures II (Lab)

Assignment 1

Date of Lab: Jan 17, 2024

Important Dates:

Date of Submission	Maximum Points
Jan 17, 2024 till 11:59 P.M.	10 points
Jan 19,2024 till 11:59 P.M.	8 points
Jan 23, 2024 till 11:59 P.M.	5 points
From Jan 24, 2024	0 points

Note: Each question carries 2.5 points

1. Write a recursive function that finds and returns the minimum element in an array, where the array and its size are given as parameters.

```
//return the minimum element in a[]

int findmin(int a[], int n)
```

2. Write a recursive function that computes and returns the sum of all elements in an array, where the array and its size are given as parameters.

```
//return the sum of all elements in a[]

int findsum(int a[], int n)
```

3. Write a recursive function that determines whether an array is a palindrome, where the array and its size are given as parameters.

```
//returns 1 if a[] is a palindrome, 0 otherwise

int ispalindrome(char a[], int n)
```

4. Write a recursive function that searches for a target in a sorted array using linear search, where the array, its size and the target are given as parameters.