CS1005: Assignment #1
IIITDM Kancheepuram

April 11, 2022

1   Problem 1

In your institute, a Tech feast is going to organize where various events will be conducted. Students from the various institutions in Chennai will participate in different events. You have to write a program that will create n events and for each event enroll M students.

You need to enter the following details of the students
$Student\_id, Name, Institute Name, Age$

After entering all the details, show the participants list based on the chosen event.

2   Problem 2

In your last course Programming in C, every student got different marks. Read the Student's roll number and Marks in an array. Segregate even and odd marks in the array. Print the array which will show all the students who got even numbers marks first, and then the odd numbers marks. Analyze and print the Time and Space complexity for your Algorithm.

3   Problem 3

Take the inputs from the user as 0's and 1's in an array, and find the largest subarray which contains equal no of 0s and 1s. Analyze and write time and space complexity.
   Example1:
Input: 1, 0, 1, 1, 1, 0, 0
Output: 1 to 6 (Starting Index to Finishing Index)
   Example2:
Input: 0, 0, 1, 1, 0
Output: 0 to 3 or 1 to 4
   Example3:
Input: 1, 1, 1, 1
Output: No such array
   Important Points:-

- Use Dynamic Memory Allocation.

- Implement it using C language.

- Total Marks: 15 (5 each)