Data Structures – Lab

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Assignment 01

Marks: 40

Problem Statement

Let's say you have an array based list. As you know we have different methods which work on the array based list but we will be adding a new method to that class. The method's name will be **MostFrequentElementInSubArray**(int left, int right, int frequency). This method will take **3** parameters: **left index**, **right index** and **frequency** of element. Your main task will be to find those elements in the subarray (left index to right index) which occur 'frequency' times or more than 'frequency' times.

Constraints: (You should have a piece of code to check these constraints before moving ahead)
   1.   0 <= left <= right < arr.length representing a subarray of arr
   2.   2 * threshold > right - left + 1

Example:
 arr = [2,2,3,3,3,4,5,6]

We call MostFrequentElementInSubArray(0, 7, 2) and it will return the following elements (2,3).

Explanation: Because '2' occurs more than or equal to frequency times i.e 2 times. Same goes for '3' as it occurs more than 'frequency' times i.e. 3 times.

NOTE: You have to use pointers only.