1-Sum of Biggest Neighbor *(required time:30min)*

*this question should be answered with c#*

Your program is receiving array A which consists of N integers where N>=2.

Each element of the array X is repeated maximum M times.

Find the biggest combination of two neighboring elements of array X where array X is made of the elements of array A, repeated at least M-1 times.

Write the program in the most efficient way you can. Can you tell what is your solution complexity? Is it O(n)?

# example 1:

input: [1,2,1,5,5,3,3,3,4]

output: 10

## explanation:

number 1 is repeated 2 times,

number 2 is repeated 1 time,

number 3 is repeated 3 times,

number 4 is repeated 1 time

number 5 repeated 2 times,

so, the **M** is equal to 3, so we need to filter all the input with at least the **M-1** repeat.

that would be, X=[1,1,5,5,3,3,3].

the biggest combination of neighbor element that can be found is 10

# example2:

input: [1,6,1,2,6,1,6,6]

output: 12

## explanation:

the M is equal to 4, so the element that repeated at least M-1 is [1,6,1,6,1,6,6] the biggest two neighbor elements [6,6]. the result is the sum of those, equal to 12.

#### You can’t change the Challenge function signature and output.

|  |
| --- |
| public int **Challenge**(int[] input){  *//your code here*  } |

# Answer

Please find the answer in the attached code. Required method is implemented in the ***Solver*** class.