

Several people are standing in a row and need to be divided into two teams. The first person goes into *team 1*, the second goes into *team 2*, the third goes into *team 1* again, the fourth into *team 2*, and so on.

You are given an array of positive integers - the weights of the people. Return an array of two integers, where the first element is the total weight of *team 1*, and the second element is the total weight of *team 2* after the division is complete.

Example

For $a = [50, 60, 60, 45, 70]$, the output should be `alternatingSums(a) = [180, 105]`.

Input/Output

- **[execution time limit] 0.5 seconds (cpp)**

- **[input] array.integer a**

Guaranteed constraints:

$1 \leq a.length \leq 10^5$,

$45 \leq a[i] \leq 100$.

- **[output] array.integer**