Number of positive-negative alternation X42771_en

Given a list of integer numbers $a_1, \ldots, a_n$ different from 0, we want to count the number of consecutive pairs with different sign, that is, the amount pairs (a_i, a_{i+1}) for indices i holding $1 \leq i < n$ such that either a_i is positive and a_{i+1} is negative, or a_i is negative and a_{i+1} is positive. For example, the list $3, 4, -5, 1, 2, -3, -2$ has 3 of such pairs: $(4, -5), (-5, 1), (2, -3)$.

Note: It is not allowed to use functions, vectors and any other way to store massive data. The solution must deal with the input data sequentially without storing arbitrarily large intermediate memory.
Score: 2.5 points over 10 (50% automatic, 50% human)

Input

The input has several cases, each one described in one line. For each case, we have a natural number n ($n \geq 2$) followed by n integer numbers $a_1, \ldots, a_n$.

Output

The output has the answer to the problem in one line for each case.

Sample input	Sample output
8 1 -1 1 -1 1 -1 1 -1	7
8 1 2 3 4 5 6 7 8	0
8 -1 -2 -3 -4 -5 -6 -7 -8	0
8 -4 -3 -2 -1 1 2 3 4	1
8 1 -1 2 -2 3 4 -3 -4	5
7 3 4 -5 1 2 -3 -2	3
2 1 1	0
2 -1 -1	0
2 -1 1	1
2 1 -1	1

Problem information

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