Problem A – Add and substract

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Little Santiago is learning how to add and substract numbers in the school. The teacher has created a game so that the students put their knowledge into practice and to verify that they are progressing in this topic.

Each of the N students in Santiago's class will take a sheet of his math notebook and write a number a_i between 1 and 10^6. Next, each kid will sum one by one the difference between the number he has chosen with the number that each of the other students with greater list number have chosen only if this difference is not -1, 0 or 1. This is, the kid with list number i will sum each of the following numbers $a_{i+1} - a_i$, $a_{i+2} - a_i$, ..., $a_N - a_i$, only if the number is not -1, 0 or 1. As you can see, the last kid will not have any difference to sum, that's why his task is to sum all the values that the other kids got.

Santiago has the list number N, help him get his sum right.

Input

The first line of input contains an integer N ($1 \leq N \leq 10^6$), representing the number of students in the class. The second and last line in the input contains N integer numbers separated by space, where the i-th number represents the value a_i, the number the i-th kid wrote in his notebook.

Output

Output a single line with an integer indicating the result Santiago should get after performing his sums.

Sample input 1	Sample output 1
4 9 10 8 8	-4