Problem M. Math

Input file:	*standard input*
Output file:	*standard output*
Time limit:	2 seconds
Memory limit:	512 mebibytes

You are given an array a of n **distinct** positive integers. Find the number of pairs (i, j) with $1 \le i, j \le n$ for which the number $a_i^2 + a_j$ is a square of an integer.

Input

The first line of the input contains a single integer n ($1 \le n \le 10^6$), the size of the array.

The second line of the input contains n distinct positive integers $a_1, \ldots, a_n$ ($1 \le a_i \le 10^6$).

Output

Output a single integer: the answer to the problem.

Example

standard input	standard output
5 1 2 3 4 5	2

Note

In the example, there are two such pairs, corresponding to $1^2 + 3 = 4 = 2^2$ and $2^2 + 5 = 9 = 3^2$.