Problem F. Fibonacci Fusion

Time limit:	4 seconds
Memory limit:	1024 megabytes

The Fibonacci numbers are $0, 1, 1, 2, 3, 5, 8, 13, 21, \ldots$ – each number (except the first two) is the sum of the two previous numbers.

You are given N numbers a_i. Count the pairs $i < j$ such that $a_i + a_j$ is a Fibonacci number.

Input

The first line of the input contains an integer N ($1 \le N \le 200\,000$).

Each of the next N lines contains an integer a_i ($1 \le a_i < 10^{2\,000\,000}$). The total number of digits in these numbers does not exceed $5\,000\,000$.

Output

Output a single integer – the number of pairs that sum to a Fibonacci number.

Example

standard input	standard output
6 50 8 8 5 72 354224848179261915070	4

Note

There are 4 such pairs:

- $a_2 + a_4 = 8 + 5 = 13$
- $a_3 + a_4 = 8 + 5 = 13$
- $a_1 + a_4 = 50 + 5 = 55$
- $a_4 + a_6 = 5 + 354224848179261915070 = 354224848179261915075$