COCI '12 Contest 6 #3 Dobri

Time limit: 1.0s **Memory limit:** 32M

You are given a sequence A consisting of N integers. We will call the i^{th} sequence element **good** if it equals the sum of some **three** elements in positions strictly smaller than i (an element can be used more than once in the sum).

How many good elements does the sequence contain?

Input Specification

The first line of input contains the positive integer N $(1 \leq N \leq 5000)$, the length of the sequence A.

The second line of input contains N space-separated integers representing the sequence A $(-100\,000 \leq A_i \leq 100\,000)$.

Output Specification

The first and only line of output must contain the number of good elements in the sequence.

Scoring

In test data worth at least 40% of total points, $N \leq 50$.

In test data worth at least 70% of total points, $N \leq 500$.

Sample Input 1

```
2
1 3
```

Sample Output 1

```
1
```

Sample Input 2

```
6
1 2 3 5 7 10
```

Sample Output 2

```
4
```

Sample Input 3

```
3
-1 2 0
```

Sample Output 3

```
1
```