You are given a sequence **A** consisting of **N** integers (not to be confused with the sequence from the previous task). 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

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

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

OUTPUT

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, $\mathbf{N} \leq 50$.

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

SAMPLE TESTS

input	**input**	**input**
2 1 3	6 1 2 3 5 7 10	3 -1 2 0
output	**output**	**output**
1	4	1