Mock CCC '19 Contest 1 J5 - One-way Hopscotch

Time limit: 2.0s **Memory limit:** 64M

You are playing hopscotch on a one-indexed array a of N integers. You can choose to start at some index j (which is undecided). Your goal is to reach index N. This game of hopscotch is strange. At index i, it is already defined where you must hop to. At index i, you **must** hop to index $i + a_i$.

You want to find out, for how many starting indices j $(1 \leq j \leq N)$ will you be able to reach index N?

Input Specification

The first line will contain the integer N $(1 \leq N \leq 10^5)$, the number of elements.

The second line will contain N integers, $a_1, a_2, \ldots, a_N$ $(1 \leq a_i \leq 10^3)$.

Output Specification

Output the number of starting indices j $(1 \leq j \leq N)$ where you will be able to reach index N.

Subtasks

For 3/15 of the points, $N \leq 10^3, a_i \leq 10$.

For an additional 4/15 of the points, $a_i \leq 10$.

Sample Input

```
6
5 2 2 2 3 1
```

Sample Output

```
4
```

Explanation For Sample

You will be able to reach index $N = 6$ when starting at indices $1, 2, 4$, or 6.