**People in Paintings**

Every day, as part of his walk around the museum, Drew likes to visit the art gallery, which has **N** paintings labeled 1…**N** lined up in a row. Each painting ***i*** has **pi** people (1 ≤ **pi** ≤ 1000).

As an aspiring photographer, Drew takes several photos of these paintings. In particular, for every pair of paintings (*i*, *j*) satisfying 1 ≤ *i* ≤ *j* ≤ N, Drew takes a photo of all paintings from painting *i* to *j* (inclusive).

Drew later looks at these photos and notices that some of these photos have an “average people” count – a painting that has **P** people, where **P** is the exact average number of people among all paintings in the photo. How many of Drew’s photos have an “average people”?

**Input:** The first line of input contains **N**. The second line contains **N** space-separated integers **p1**…**pN.**

**Output:** The number of photos that have an “average people”.

**Example Input:**

4

1 1 2 3

**Example Output:** 6

**Explanation:** Every photo containing just a single painting contributes to the count (there are four of these in the example). Also, the (*i*, *j*) ranges (*1*, *2*) and (*2*, *4*) in this example correspond to the photos that have an “average people”.