Java 1D Array (Easy)



Problem Statement

Array is a very simple data structure which is used to store a collection of data, for example roll number of all the students in a class or name of all the countries in the world. To create an array of integer that can hold 10 values, you can write code like this:

int[] myList = new int[10];

This problem will test your knowledge on java array.

You are given an array of n integers. A sub-array is "Negative" if sum of all the integers in that sub-array is negative. Count the number of "Negative sub-arrays" in the input array.

Note: Subarrays are contiguous chunks of the main array. For example if the array is $\{1,2,3,5\}$ then some of the subarrays are $\{1\}$, $\{1,2,3\}$, $\{2,3,5\}$, $\{1,2,3,5\}$ etc. But $\{1,2,5\}$ is not an subarray as it is not contiguous.

Input Format

The first line consists an integer n. The next line will contain n space seperated integers. Value of n will be at most 100. The numbers in the array will range between -10000 to 10000.

Output Format

Print the answer to the problem.

Sample Input

```
5
1 -2 4 -5 1
```

Sample Output

9

Explanation

These are the ranges of the 9 negative subarrays in this sample:

```
[0:1]
[0:3]
[0:4]
[1:1]
[1:3]
[1:4]
[2:3]
[3:3]
```

Assume that the index is 0 based.