**SITTING ARRANGEMENT!**

There are  students in a classroom. The students are sitting in a single row. Teacher wants that all the girls should sit in left side of the row and all the boys should sit in right side of the row. You are provided the initial row of the students by **N** binary integers, where if **i**-th integer is zero, then it means that at the **i**-th position, there is a boy, if it is **1**, it means there is a girl.

In a single second, if a boy finds that a girl is sitting to his immediate right i.e. if a boy is sitting at ith position and a girl is sitting at (i+1)th position then they swap their positions.

Determine the total time after which all the girls move to the left side of the row and all the boys towards the right side of the row.

**Input**

The first line of each test case contains an integer **N** denoting the number of students in the row.

The second line contains **N** space-separated integers - **A1**, **A2**, ..., **AN**denoting the initial arrangement of the students.

### Output

Output is a single integer corresponding to the number of seconds required such that all girls are to the left of boys.

**Constraints**

* **1 ≤ N ≤ 105**
* **0 ≤ Ai≤ 1**

### Sample Input:

10

0 1 1 1 0 1 1 0 1 1

### Sample Output:

7

### Explanation

Initially, student's arrangement is **[0 1 1 1 0 1 1 0 1 1]**

After1st second **[1 0 1 1 1 0 1 1 0 1]**

After 2nd second **[1 1 0 1 1 1 0 1 1 0]**

After 3rd second **[1 1 1 0 1 1 1 0 1 0]**

After 4th second **[1 1 1 1 0 1 1 1 0 0]**

After 5th second **[1 1 1 1 1 0 1 1 0 0]**

After 6th second **[1 1 1 1 1 1 0 1 0 0]**

After 7th second **[1 1 1 1 1 1 1 0 0 0]**

Total time taken = **7** seconds