

## A. Cookies

time limit per test: 2 seconds  
 memory limit per test: 256 megabytes  
 input: standard input  
 output: standard output

Olga came to visit the twins Anna and Maria and saw that they have many cookies. The cookies are distributed into bags. As there are many cookies, Olga decided that it's no big deal if she steals a bag. However, she doesn't want the sisters to quarrel because of nothing when they divide the cookies. That's why Olga wants to steal a bag with cookies so that the number of cookies in the remaining bags was even, that is, so that Anna and Maria could evenly divide it into two (even 0 remaining cookies will do, just as any other even number). How many ways there are to steal exactly one cookie bag so that the total number of cookies in the remaining bags was even?

### Input

The first line contains the only integer  $n$  ( $1 \leq n \leq 100$ ) — the number of cookie bags Anna and Maria have. The second line contains  $n$  integers  $a_i$  ( $1 \leq a_i \leq 100$ ) — the number of cookies in the  $i$ -th bag.

### Output

Print in the only line the only number — the sought number of ways. If there are no such ways print 0.

### Examples

<b>input</b>
1 1
<b>output</b>
1
<b>input</b>
10 1 2 2 3 4 4 4 2 2 2
<b>output</b>
8
<b>input</b>
11 2 2 2 2 2 2 2 2 2 99
<b>output</b>
1

### Note

In the first sample Olga should take the only bag so that the twins ended up with the even number of cookies.

In the second sample Olga can take any of five bags with two cookies or any of three bags with four cookies —  $5 + 3 = 8$  ways in total.

In the third sample, no matter which bag with two cookies Olga chooses, the twins are left with  $2 * 9 + 99 = 117$  cookies. Thus, Olga has only one option: to take the bag with 99 cookies.

### → Attention

Package for this problem was not updated by the problem writer or Codeforces administration after we've upgraded the judging servers. To adjust the time limit constraint, solution execution time will be multiplied by 2. For example, if your solution works for 400 ms on judging servers, then value 800 ms will be displayed and used to determine the verdict.

### Codeforces Beta Round #94 (Div. 2 Only)

Finished

### → Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ACM-ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.



Start virtual contest

### → Problem tags

implementation

No tag edit access

### → Contest materials

- Announcement 
- Tutorial 

Server time: Nov/30/2016 19:22:38<sup>UTC+8</sup> (c4).  
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