

Problem B. Socks

Time limit 4000 ms

Mem limit 1048576 kB

Problem Statement

You have N socks. The color of the i -th sock is A_i .

You want to perform the following operation as many times as possible. How many times can it be performed at most?

- Choose two same-colored socks that are not paired yet, and pair them.

Constraints

- $1 \leq N \leq 5 \times 10^5$
- $1 \leq A_i \leq 10^9$
- All values in the input are integers.

Input

The input is given from Standard Input in the following format:

```
N
A_1 A_2 ... A_N
```

Output

Print an integer representing the answer.

Sample 1

Input	Output
6 4 1 7 4 1 4	2

You can do the operation twice as follows.

- Choose two socks with the color 1 and pair them.
- Choose two socks with the color 4 and pair them.

Then, you will be left with one sock with the color 4 and another with the color 7, so you can no longer do the operation. There is no way to do the operation three or more times, so you should print 2.

Sample 2

Input	Output
1 158260522	0

Sample 3

Input	Output
10 295 2 29 295 29 2 29 295 2 29	4