



Sock Merchant

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Problem

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John works at a clothing store and he's going through a pile of socks to find the number of matching pairs. More specifically, he has a pile of n loose socks where each sock i is labeled with an integer, c_i , denoting its color. He wants to sell as many socks as possible, but his customers will only buy them in matching pairs. Two socks, i and j , are a single matching pair if they have the same color ($c_i = c_j$).

Given n and the color of each sock, how many pairs of socks can John sell?

Input Format

The first line contains an integer, n , denoting the number of socks.

The second line contains n space-separated integers describing the respective values of $c_0, c_1, c_2, \dots, c_{n-1}$.

Constraints

- $1 \leq n \leq 100$
- $1 \leq c_i \leq 100$

Output Format

Print the total number of *matching pairs* of socks that John can sell.

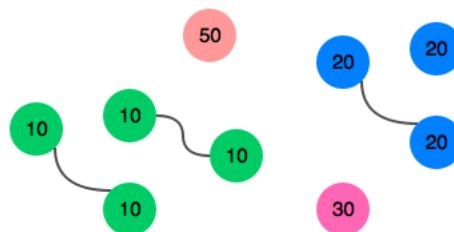
Sample Input

```
9
10 20 20 10 10 30 50 10 20
```

Sample Output

```
3
```

Explanation




As you can see from the figure above, we can match three pairs of socks. Thus, we print **3** on a new line.

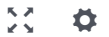
Max Score:10

Difficulty: Easy

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Java 7



```
1 import java.io.*;
2 import java.util.*;
3 import java.text.*;
4 import java.math.*;
5 import java.util.regex.*;
6
7 public class Solution {
8
9     static int sockMerchant(int n, int[] ar) {
10         // Complete this function
11     }
12
13     public static void main(String[] args) {
14         Scanner in = new Scanner(System.in);
15         int n = in.nextInt();
16         int[] ar = new int[n];
17         for(int ar_i = 0; ar_i < n; ar_i++){
18             ar[ar_i] = in.nextInt();
19         }
20         int result = sockMerchant(n, ar);
21         System.out.println(result);
22     }
23 }
24
```

Line: 1 Col: 1

 [Upload Code as File](#)☐ Test against custom input

Run Code

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