# Sock Merchant ☆

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**Problem**      Submissions      Leaderboard      Editorial 🔒

John works at a clothing store. He has a large pile of socks that he must pair by color for sale. Given an array of integers representing the color of each sock, determine how many pairs of socks with matching colors there are.

For example, there are $n = 7$ socks with colors $ar = [1, 2, 1, 2, 1, 3, 2]$. There is one pair of color $1$ and one of color $2$. There are three odd socks left, one of each color. The number of pairs is $2$.

**Function Description**

Complete the *sockMerchant* function in the editor below. It must return an integer representing the number of matching pairs of socks that are available.

sockMerchant has the following parameter(s):

- *n*: the number of socks in the pile

- *ar*: the colors of each sock

**Input Format**

The first line contains an integer $n$, the number of socks represented in $ar$.

The second line contains $n$ space-separated integers describing the colors $ar[i]$ of the socks in the pile.

**Constraints**

- $1 \leq n \leq 100$

- $1 \leq ar[i] \leq 100$ where $0 \leq i < n$

**Output Format**

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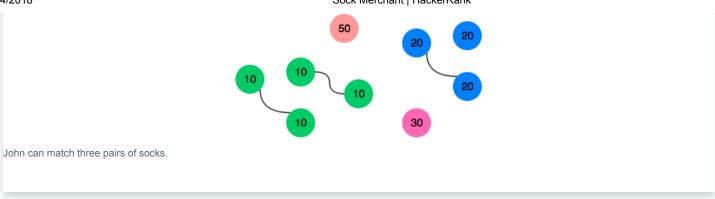
**Sample Input**

```
9
10 20 20 10 10 30 50 10 20
```
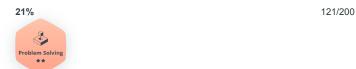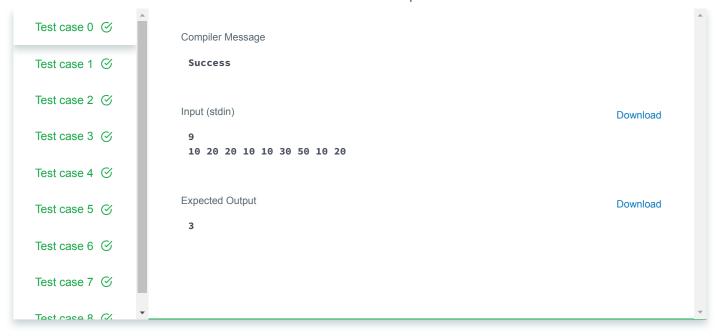
**Sample Output**

```
3
```

**Explanation**

John can match three pairs of socks.

Python 3

```
 8
 9    # Complete the sockMerchant function below.
10    def sockMerchant(n, ar):
11        '''
12        One method --
13        print(n)
14        print(ar)
15        print(set(ar))
16        pairs = 0
17        for element in set(ar):
18            print(element, ar.count(element), ar.count(element)//2)
19            pairs += ar.count(element)//2
20        print(pairs)
21        return (pairs)
22        '''
23        '''
24        Other method
25        print(sum(ar.count(x)//2 for x in set(ar)))
26        return sum(ar.count(x)//2 for x in set(ar))
27        '''
28        # One more
29        from collections import Counter
```

Line: 50 Col: 1

↑ Upload Code as File        ☐  Test against custom input            **Run Code**        **Submit Code**

⑂ Share your code as a snippet.

You have earned 10.00 points!

These points will also count towards your progress in the Problem Solving Badge.

**21%**                              121/200



## Congratulations

You solved this challenge. Would you like to challenge your friends?   f  y  in

**Next Challenge**

Test case 0 ✓

Test case 1 ✓

Test case 2 ✓

Test case 3 ✓

Test case 4 ✓

Test case 5 ✓

Test case 6 ✓

Test case 7 ✓

Test case 8 ✓

Compiler Message

**Success**

Input (stdin)                                                                    Download

**9**
**10 20 20 10 10 30 50 10 20**

Expected Output                                                                  Download

**3**