There is a large pile of socks that must be paired by color. Given an array of integers representing the color of each sock, determine how many pairs of socks with matching colors there are.

Example

$n = 7$

$ar = [1, 2, 1, 2, 1, 3, 2]$

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.

sockMerchant has the following parameter(s):

- int n: the number of socks in the pile
- int ar[n]: the colors of each sock

Returns

- int: the number of pairs

Input Format

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

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

Constraints

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

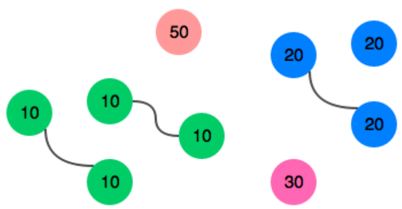
Sample Input

```
STDIN                   Function
-----                   --------
9                       n = 9
10 20 20 10 10 30 50 10 20  ar = [10, 20, 20, 10, 10, 30, 50, 10, 20]
```

Sample Output

```
3
```

Explanation



There are three pairs of socks.

Change Theme Language Python 3

```python
#!/bin/python3

import math
import os
import random
import re
import sys

#
# Complete the 'sockMerchant' function below.
#
# The function is expected to return an INTEGER.
# The function accepts following parameters:
#  1. INTEGER n
#  2. INTEGER_ARRAY ar
#

def sockMerchant(n, ar):
    # Write your code here
    pairs = {}
    result = 0
    for ele in ar:
        pairs[ele] = pairs.get(ele, 0) + 1

    for key, value in pairs.items():
        result += value // 2

    return result

if __name__ == '__main__':
    fptr = open(os.environ['OUTPUT_PATH'], 'w')

    n = int(input().strip())

    ar = list(map(int, input().rstrip().split()))

    result = sockMerchant(n, ar)

    fptr.write(str(result) + '\n')

    fptr.close()
```

Line: 28 Col: 18

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

Next Challenge

Test case 0

Test case 1

Test case 2

Compiler Message

Success

Input (stdin) Download