

New Year Present



Nina received an odd New Year's present from a student: a set of n unbreakable sticks. Each stick has a length, l , and the length of the i^{th} stick is l_{i-1} . Deciding to turn the gift into a lesson, Nina asks her students the following:

How many ways can you build a square using *exactly* 6 of these unbreakable sticks?

Note: Two ways are distinct if they use at least one different stick. As there are $\binom{n}{6}$ choices of sticks, we must determine which combinations of sticks can build a square.

Input Format

The first line contains an integer, n , denoting the number of sticks. The second line contains n space-separated integers $l_0, l_1, \dots, l_{n-2}, l_{n-1}$ describing the length of each stick in the set.

Constraints

- $6 \leq n \leq 3000$
- $1 \leq l_i \leq 10^7$

Output Format

On a single line, print an integer representing the number of ways that 6 unbreakable sticks can be used to make a square.

Sample Input 0

```
8
4 5 1 5 1 9 4 5
```

Sample Output 0

```
3
```

Sample Input 1

```
6
1 2 3 4 5 6
```

Sample Output 1

```
0
```

Explanation

Sample 0

Given 8 sticks ($l = 4, 5, 1, 5, 1, 9, 4, 5$), the only possible side length for our square is 5. We can build square S in 3 different ways:

- $S = \{l_0, l_1, l_2, l_3, l_4, l_6\} = \{4, 5, 1, 5, 1, 4\}$
- $S = \{l_0, l_1, l_2, l_4, l_6, l_7\} = \{4, 5, 1, 1, 4, 5\}$
- $S = \{l_0, l_2, l_3, l_4, l_6, l_7\} = \{4, 1, 5, 1, 4, 5\}$

In order to build a square with side length **5** using *exactly* **6** sticks, l_0, l_2, l_4 , and l_6 must always build two of the sides. For the remaining two sides, you must choose **2** of the remaining **3** sticks of length **5** (l_1, l_3 , and l_7).

Sample 1

We have to use all **6** sticks, making the largest stick length (**6**) the minimum side length for our square.

No combination of the remaining sticks can build **3** more sides of length **6** (total length of all other sticks is $1 + 2 + 3 + 4 + 5 = 15$ and we need at least length $3 * 6 = 18$), so we print **0**.