

Picking Numbers

Given an array of integers, find the longest subarray where the absolute difference between any two elements is less than or equal to 1.

Example

$a = [1, 1, 2, 2, 4, 4, 5, 5, 5]$

There are two subarrays meeting the criterion: $[1, 1, 2, 2]$ and $[4, 4, 5, 5, 5]$. The maximum length subarray has 5 elements.

Function Description

Complete the *pickingNumbers* function in the editor below.

pickingNumbers has the following parameter(s):

- *int a[n]*: an array of integers

Returns

- *int*: the length of the longest subarray that meets the criterion

Input Format

The first line contains a single integer *n*, the size of the array *a*.
The second line contains *n* space-separated integers, each an *a[i]*.

Constraints

- $2 \leq n \leq 100$
- $0 < a[i] < 100$
- The answer will be ≥ 2 .

Sample Input 0

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

Sample Output 0

```
3
```

Explanation 0

We choose the following multiset of integers from the array: $\{4, 3, 3\}$. Each pair in the multiset has an absolute difference ≤ 1 (i.e., $|4 - 3| = 1$ and $|3 - 3| = 0$), so we print the number of chosen integers, 3, as our answer.

Sample Input 1

```
6
1 2 2 3 1 2
```

Sample Output 1

```
5
```

Explanation 1

We choose the following multiset of integers from the array: $\{1, 2, 2, 1, 2\}$. Each pair in the multiset has an absolute difference ≤ 1 (i.e., $|1 - 2| = 1$, $|1 - 1| = 0$, and $|2 - 2| = 0$), so we print the number of chosen integers, **5**, as our answer.