The biggest sub-array made of sequential numbers

Cost: 3 | Solved: 35

Memory limit: 256 MBs

Time limit: 1 s

Input: input.txt

Output: output.txt

Task:

You are given an array of integers. Find its biggest sub-array ***a*** which satisfies the next conditions for every i=1...***m***-1 (***m*** is the length of the sub-array): | a[i] – a[i-1] | = | a[i+1] – a[i] | = 1 && a[i] - a[i-1] == a[i+1] - a[i]

Input:

The first line contains a natural ***n*** ($1 \le n \le 10^8$) – an array's length, the next line contains ***n*** elements of an array.

Output:

The length of the biggest sub-array (according to the condition).

Example:

Input	Output
11 12 11 1 2 3 4 6 7 8 9 10	5

The biggest sub-array in the example is 6 7 8 9 10 which contains 5 elements.