

## Good Subsequence

A sequence  $B$  is called good if  $B_i \bmod 2 \neq B_{i-1} \bmod 2$  for all  $2 \leq i \leq |B|$ . For example,  $[1, 2, 3]$  and  $[4]$  are good sequences, but  $[1, 3]$  is not.

You are given an array  $A$  of length  $N$ . Find the length of the largest subsequence<sup>†</sup> of  $A$  that is good.

<sup>†</sup> A subsequence is a sequence that can be formed by deleting some (possibly zero) elements from the array without changing the order. For example,  $[1, 3]$ ,  $[2]$  and  $[1, 2, 3]$  are subsequences of  $[1, 2, 3]$  but  $[3, 1]$  is not.

## Input Format

- The first line of input will contain a single integer  $T$ , denoting the number of test cases.
- Each test case consists of multiple lines of input.
  - The first line of each test case contains a single integer  $N$ .
  - The second line contains  $N$  integers -  $A_1, A_2, \dots, A_N$ .

## Output Format

For each test case, output on a new line the length of the largest good subsequence of  $A$ .

## Constraints

- $1 \leq T \leq 100$
- $1 \leq N \leq 100$
- $1 \leq A_i \leq 100$

## Sample 1:

Input	Output
3	3
5	4
1 1 2 6 3	1
4	
100 1 98 97	
1	
5	

## Explanation:

**Test Case 1 :** We can choose the subsequence  $[1, 2, 3]$  which is good.

**Test Case 2 :** The entire sequence itself is good.