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Longest AP AZ101

? Ask Doubt

Time-Limit: 1 sec Score: 100.00/100 Difficulty :

Memory: 256 MB Accepted Submissions: 100

Description

You are given an array A of N integers. You have to choose a contiguous arithmetic subarray with equal difference between consecutive integers, that has the maximum length. Find the maximum possible length.

Input Format

The first line of the input contains one integer T - the number of test cases. Then T test cases follow.

The first line of each test case contains one integer N - the length of the array.

The second line of each test case contains N space-separated integers.

Output Format

For each test case, print the maximum possible length.

Constraints

$1 \le T \le 10^5$

$2 \le N \le 10^5$

$-10^7 \le A_i \le 10^7$

It is guaranteed that the sum of N over all test cases does not exceed 10^5.

Sample Input 1

Copy

```
3
4
1 2 3 5
6
1 4 7 4 1 -2
2
1 8
```

Sample Output 1

Copy

```
3
```

C++14[GCC]

Submit

```
1
```