

# Equal 0s and 1s

You are given an array of 0's and 1's. Find the length of the longest subarray which has an equal number of 0's and 1's.

## Input Format

First line of input contains T - the number of test cases. Its followed by 2T lines, the first line contains N - the size of the array. The second line contains the elements of the array.

## Constraints

10 points

$1 \leq T \leq 100$

$1 \leq N \leq 100$

20 points

$1 \leq T \leq 100$

$1 \leq N \leq 1000$

70 points

$1 \leq T \leq 1000$

$1 \leq N \leq 10^4$

## Output Format

For each test case, print the length of the longest subarray which has equal 0's and 1's, separated by a new line.

## Sample Input 0

```
2
5
0 1 1 0 1
6
1 1 1 1 1 0
```

## Sample Output 0

```
4
2
```

## Explanation 0

Self Explanatory