Problem

From an array A containing N integers, you construct a binary string S of length (N-1) as follows. For all $1 \leq i < N$:

- If $A_i < A_{i+1}$, then $S_i = 0$.
- If $A_i > A_{i+1}$, then $S_i = 1$.

Given the string S, determine the count of indices i $(1 \le i \le N)$ such that it is possible for A_i to be the **maximum** element of the array A.

Input Format

- The first line contains a single integer T the number of test cases. Then the test cases follow.
- The second line of each test case contains the binary string S of length (N-1) containing 0s and 1s only.

Output Format

For each test case, output the count of indices i $(1 \le i \le N)$ such that it is possible for A_i to be the **maximum** element of the array A.

Constraints

- $1 \le T \le 10^5$
- $2 < N < 10^5$
- Sum of N over all test cases does not exceed $10^5\,.$

Sample 1:

Input

Output

the size of the array A.

• The second line of each test case contains the binary string S of length (N-1) containing 0s and 1s only.

Output Format

For each test case, output the count of indices i ($1 \leq i \leq N$) such that it is possible for A_i to be the **maximum** element of the array A.

Constraints

- $1 \le T \le 10^5$
- $2 < N < 10^5$
- Sum of N over all test cases does not exceed $10^5\,.$

Sample 1:

Input	Output
3	1
2	1
0	2
7	
000111	
6	
11100	

Explanation:

Test case 1: Here $A_1 < A_2$. Therefore clearly only A_2 can be the maximum element of A.

Test case 2: Here $A_1 < A_2$, $A_2 < A_3$, $A_3 < A_4$, $A_4 > A_5$, $A_5 > A_6$ and $A_6 > A_7$. Therefore, clearly only A_4 can be the maximum element of A.

Test case 3: Here $A_1 > A_2$, $A_2 > A_3$, $A_3 > A_4$, $A_4 < A_5$ and $A_5 < A_6$. Therefore A_1 and A_6 both can be the maximum elements of A.