



HOME CONTESTS GYM PROBLEMSET GROUPS RATING API CANADA CUP 🛣 SECTIONS

PROBLEMS SUBMIT STATUS STANDINGS CUSTOM TEST

B. Fence

time limit per test: 1 second memory limit per test: 256 megabytes input: standard input output: standard output

There is a fence in front of Polycarpus's home. The fence consists of n planks of the same width which go one after another from left to right. The height of the i-th plank is h_i meters, distinct planks can have distinct heights.

Fence for n = 7 and h = [1, 2, 6, 1, 1, 7, 1]

Polycarpus has bought a posh piano and is thinking about how to get it into the house. In order to carry out his plan, he needs to take exactly k consecutive planks from the fence. Higher planks are harder to tear off the fence, so Polycarpus wants to find such k consecutive planks that the sum of their heights is minimal possible.

Write the program that finds the indexes of K consecutive planks with minimal total height. Pay attention, the fence is not around Polycarpus's home, it is in front of home (in other words, the fence isn't cyclic).

Input

The first line of the input contains integers n and k ($1 \le n \le 1.5 \cdot 10^5$, $1 \le k \le n$) — the number of planks in the fence and the width of the hole for the piano. The second line contains the sequence of integers h_1 , h_2 , ..., h_n ($1 \le h_i \le 100$), where h_i is the height of the i-th plank of the fence.

Output

Print such integer j that the sum of the heights of planks j, j + 1, ..., j + k - 1 is the minimum possible. If there are multiple such j's, print any of them.

Examples

input	
73 1261171	
output	
3	

Note

In the sample, your task is to find three consecutive planks with the minimum sum of heights. In the given case three planks with indexes 3, 4 and 5 have the required attribute, their total height is 8.

Codeforces Round #211 (Div. 2)

Finished

→ Virtual participation

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Start virtual contest

→ Problem tags	
(brute force) (dp)	
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