DMOPC '18 Contest 5 P3 - A Familiar Problem

For her birthday, Mimi received a set of N pencil crayons. Mimi loves her beautiful pencil crayons. In fact, she loves them so much that she assigned each of them individual names, a backstory, and also a *cuteness number*, C_i .

One day, Mimi lent out her pencil crayons for an art class assignment. When the class ended, her friend returned the pencil crayons in a neat row. Mimi then asked her a curious question:

What is the longest contiguous subsequence where the sum of the *cuteness numbers* is strictly less than M?

Can you answer her question?

Constraints

For all subtasks,

 $1 \le C_i \le 10^9$

 $1 \leq M \leq 10^{18}$

Subtask 1 [10%]

 $1 \leq N \leq 100$

Subtask 2 [20%]

 $1 \leq N \leq 2\,000$

Subtask 3 [70%]

 $1 \leq N \leq 200\,000$

Input Specification

The first line of input will contain two space-separated integers, N and M. The second line of input will contain N space-separated integers, $C_1, C_2, C_3, ..., C_N$.

Output Specification

A single integer, the length of the longest subarray where the sum of the cuteness numbers is strictly less than M.

Sample Input

5 3 1 1 1 2 3

Sample Output

2