

B. Segment with Big Sum

time limit per test: 1 second
memory limit per test: 1024 megabytes

Given an array of n integers a_i . Let's say that the segment of this array $a[l..r]$ ($1 \leq l \leq r \leq n$) is good if the sum of elements on this segment is at least s . Your task is to find the shortest good segment.

Input

The first line contains integers n and s ($1 \leq n \leq 10^5, 1 \leq s \leq 10^{18}$). The second line contains integers a_i ($1 \leq a_i \leq 10^9$).

Output

Print one integer, the length of the shortest good segment. If there are no such segments, print -1 .

Example

input	Copy
7 20 2 6 4 3 6 8 9	
output	Copy
3	

→ Submit?

Language: GNU G++20 13.2 (64 bit, win)

Choose file: Choose File No file chosen

Submit

