

B. Splitting an Array

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

Given an array of  $n$  positive integers. Your task is to divide it into  $k$  segments so that the maximum sum on the segment is the minimum possible.

Input

The first line contains integers  $n$  and  $k$  ( $1 \leq k \leq n \leq 10^5$ ). The second line contains the elements of the array  $a_i$  ( $1 \leq a_i \leq 10^9$ ).

Output

Print one number, the minimum possible maximum sum on the segment.

Example

input	Copy
10 4 1 3 2 4 10 8 4 2 5 3	
output	Copy
12	

→ Submit?

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

Choose file: Choose File No file chosen

Submit

