

B. Ropes

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

There are  $n$  ropes, you need to cut  $k$  pieces of the same length from them. Find the maximum length of pieces you can get.

Input

The first line contains two integers  $n$  and  $k$  ( $1 \leq n, k \leq 10000$ ). Next  $n$  lines contain one number each, the length of the rope  $a_i$  ( $1 \leq a_i \leq 10^7$ ).

Output

Output one real number, maximum length of pieces you can get. The answer will be considered correct if the relative or absolute error does not exceed  $10^{-6}$ .

Example

input	Copy
4 11 802 743 457 539	
output	Copy
200.5	

→ Submit?

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

Choose file: Choose File No file chosen

Submit

