

## C. Thanksgiving and meals

time limit per test: 1.0 s  
 memory limit per test: 256 MB  
 input: standard input  
 output: standard output

For Thanksgiving, Wisconsin Union Catering is planning to give out freshly prepared Thanksgiving meals to students of UW Madison. The head chef at Union South has prepared the meals in  $N$  batches where the  $i$ -th batch consists of  $a_i$  number of meals. Every day, chef will open some of the batches to feed  $K$  students. Once a batch of meals is opened for a day, it cannot be used again in the future and is discarded. Your job is to find out how many days can these  $N$  number of batches last at most, ensuring that at least  $K$  meals are available each day.

### Input

The first line consists of two integers  $N$  ( $1 \leq N \leq 10^5$ ), the total number of batches and  $K$  ( $1 \leq K \leq 3$ ), the minimum number of meals that need to be sold each day to break even.

The second line consists of  $N$  integers, the  $i$ -th of which is  $a_i$  ( $1 \leq a_i \leq 10^3$ ), the number of meals in the  $i$ -th batch.

### Output

Output one integer that indicates the maximum number of days the  $N$  batches will last.

### Examples

<b>input</b>	<a href="#">Copy</a>
6 3 2 2 3 1 1 1	
<b>output</b>	<a href="#">Copy</a>
3	

  

<b>input</b>	<a href="#">Copy</a>
6 1 2 3 1 51 32 1	
<b>output</b>	<a href="#">Copy</a>
6	

### UW-Madison Thanksgiving Cook Off'18

Private

Participant



### Thanksgiving Cook Off 18

Finished

Practice



### → Submit?

Language: Python 3.6

Choose file: Choose File No file chosen

Submit

### → Last submissions

Submission	Time	Verdict
<a href="#">45850558</a>	Nov/17/2018 01:50	Perfect result: 100 points
<a href="#">45850523</a>	Nov/17/2018 01:47	Partial result: 50 points
<a href="#">45850395</a>	Nov/17/2018 01:40	Partial result: 55 points
<a href="#">45850016</a>	Nov/17/2018 01:20	Partial result: 55 points

