

THE ACM-ICPC 2015

VIETNAM SOUTHERN PROGRAMMING CONTEST Host: University of Science, VNU-HCM

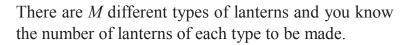


September 26, 2015

Problem A Lantern

Time Limit: 1 second

Mid-Autumn Festival is coming. Kids always love to play with lanterns. Therefore, you decide to make many lanterns to donate for young children.





You have N robots that can help you make lanterns automatically and you can only assign a robot to make a single type of lanterns. In fact, you are not required to use all N robots to make lanterns.

To quickly have all lanterns ready for young kids, you should minimize the maximum number of lanterns a robot should make.

Input

The first line of input contains two integers N ($1 \le N \le 10^9$) and M ($1 \le M \le 10^5$). The next M lines each contains a single positive integer in range from 1 to 10^9 , which is the number of lanterns of the i^{th} type that you want to make.

Output

Display a single positive integer that is the minimum value of the maximum number of lanterns that a robot makes.

Sample	e Input
--------	---------

Sample Output

5 2	3
7	
4	