

G	Buildings!	Time Limit: 1 sec
	Setter: Sifat Rabbi	Memory Limit: 512 MB

There are n buildings in a row. The height of the i -th building is h_i . You have k taka. With 1 taka you can increase the height of a building by 1 . So you want to spend k taka in such a way that after spending k taka the height of the lowest building will be maximized.

Input:

First line of the input will consist of two integers - n the number of buildings and k the amount of taka you have. The next line will consist of n integers the height of the buildings. ($1 \leq n \leq 10^5$ and $0 \leq k, h_i \leq 10^9$)

Output:

Print a single integer the height of the lowest building.

Sample I/O:

Sample Input	Sample Output
5 10 1 2 3 4 5	5
1 10 10	20