|  |  |  |
| --- | --- | --- |
| 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. 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 <= n <= 105 and 0 <= k, hi <= 109)**

**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 |