

The Hurdle Race



Dan is playing a video game in which his character competes in a hurdle race by jumping over n hurdles with heights h_0, h_1, \dots, h_{n-1} . He can initially jump a maximum height of k units, but he has an unlimited supply of magic beverages that help him jump higher! Each time Dan drinks a magic beverage, the maximum height he can jump during the race increases by 1 unit.

Given n , k , and the heights of all the hurdles, find and print the *minimum* number of magic beverages Dan must drink to complete the race.

Input Format

The first line contains two space-separated integers describing the respective values of n (the number of hurdles) and k (the maximum height he can jump without consuming any beverages).

The second line contains n space-separated integers describing the respective values of h_0, h_1, \dots, h_{n-1} .

Constraints

- $1 \leq n, k \leq 100$
- $1 \leq h_i \leq 100$

Output Format

Print an integer denoting the *minimum* number of magic beverages Dan must drink to complete the hurdle race.

Sample Input 0

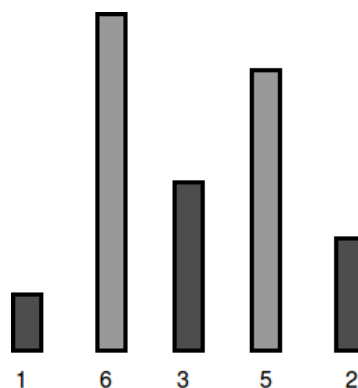
```
5 4
1 6 3 5 2
```

Sample Output 0

```
2
```

Explanation 0

Dan's character can jump a maximum of $k = 4$ units, but the tallest hurdle has a height of $h_1 = 6$:



To be able to jump all the hurdles, Dan must drink $6 - 4 = 2$ magic beverages.

Sample Input 1

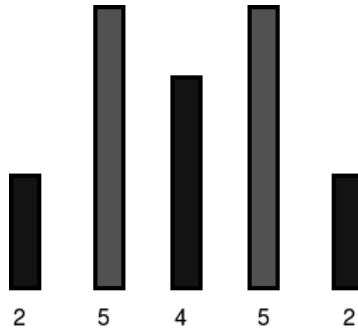
```
5 7
2 5 4 5 2
```

Sample Output 1

0

Explanation 1

Dan's character can jump a maximum of $k = 7$ units, which is enough to cross all the hurdles:



Because he can already jump all the hurdles, Dan needs to drink 0 magic beverages.