Problem: The Hurdle Race

Dan is playing a video game in which his character competes in a hurdle race by jumping over hurdles with heights . He can initially jump a maximum height of 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 unit.
Given , , 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 (the number of hurdles) and (the maximum height he can jump without consuming any beverages).
The second line contains space-separated integers describing the respective values of .

Constraints

-
-

Output Format

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

Sample Input 0

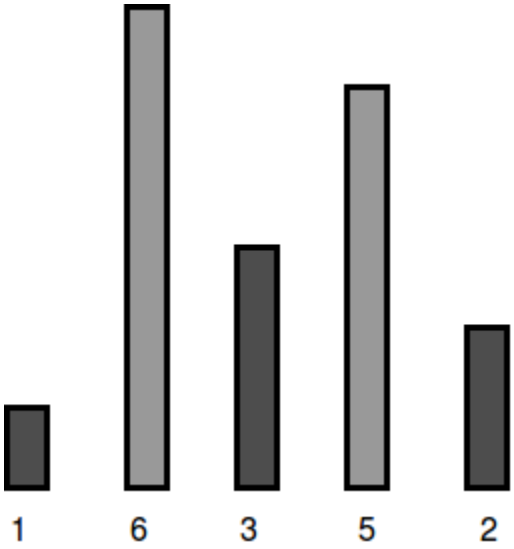
```
5 4
1 6 3 5 2
```

Sample Output 0

```
2
```

Explanation 0

Dan's character can jump a maximum of units, but the tallest hurdle has a height of :



To be able to jump all the hurdles, Dan must drink magic beverages.

Sample Input 1

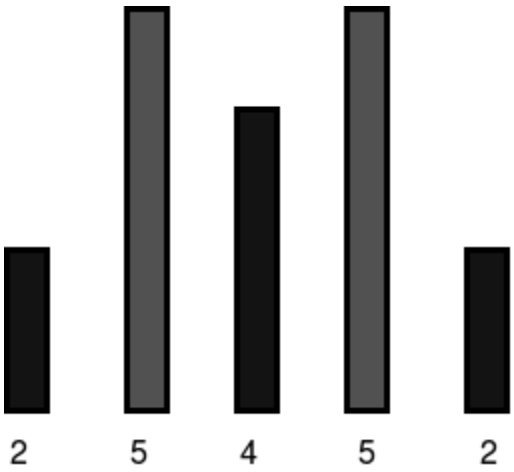
```
5 7
2 5 4 5 2
```

Sample Output 1

```
0
```

Explanation 1

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



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

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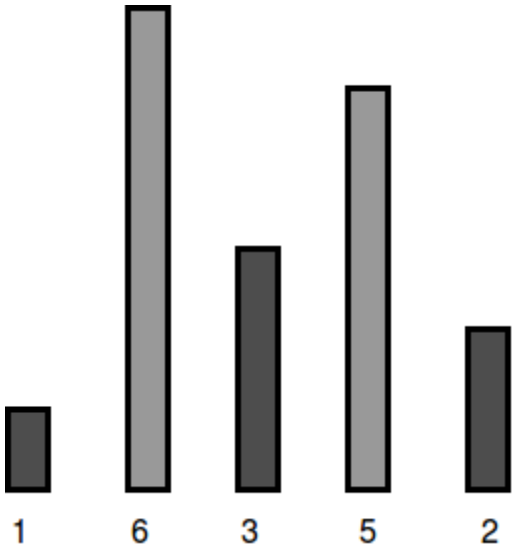

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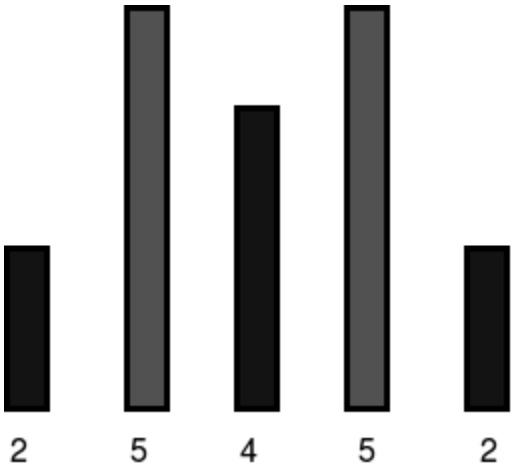

Because he can already jump all the hurdles, Dan needs to drink magic beverages.

Solution:

```
int main()
   {
      int hurdles, capacity, beverages=0;
      cin>> hurdles >>capacity;
      int heights[hurdles];

      for(int i=0; i<hurdles; i++)
         { cin>> heights[i];
           if(capacity<heights[i])
              {
                 beverages+=heights[i]-capacity;
                 capacity+=heights[i]-capacity;
              }
         }

      cout<<beverages;
      return 0;
}
```

- Anshul Aggarwal