**Cut the sticks**

https://hr-avatars.s3.amazonaws.com/ae5358e3-24f6-4d1b-8804-483a0baf5ea4/150x150.png**by**[**shashank21j**](https://www.hackerrank.com/shashank21j)

**Problem Statement**

You are given N sticks, where the *length* of each stick is a positive integer. A*cut operation* is performed on the sticks such that all of them are reduced by the length of the smallest stick.

Suppose we have six sticks of the following lengths:  
5 4 4 2 2 8

Then, in one *cut operation* we make a cut of length *2* from each of the six sticks. For the next *cut operation* four sticks are left (of non-zero length), whose lengths are the following:   
3 2 2 6

The above step is repeated until no sticks are left.

Given the length of N sticks, print the number of sticks that are left before each subsequent *cut operations*.

*Note:* For each *cut operation*, you have to recalcuate the length of smallest sticks (excluding zero-length sticks).

**Input Format**   
The first line contains a single integer N.   
The next line contains N integers: *a0, a1,...aN-1* separated by space, where *ai*represents the length of *ith* stick.

**Output Format**   
For each operation, print the number of sticks that are cut, on separate lines.

**Constraints**   
1 ≤ *N* ≤ 1000   
1 ≤ *ai* ≤ 1000

**Sample Input #00**

6

5 4 4 2 2 8

**Sample Output #00**

6

4

2

1

**Sample Input #01**

8

1 2 3 4 3 3 2 1

**Sample Output #01**

8

6

4

1

**Explanation**

*Sample Case #00 :*

sticks-length length-of-cut sticks-cut

5 4 4 2 2 8 2 6

3 2 2 \_ \_ 6 2 4

1 \_ \_ \_ \_ 4 1 2

\_ \_ \_ \_ \_ 3 3 1

\_ \_ \_ \_ \_ \_ DONE DONE

*Sample Case #01*

sticks-length length-of-cut sticks-cut

1 2 3 4 3 3 2 1 1 8

\_ 1 2 3 2 2 1 \_ 1 6

\_ \_ 1 2 1 1 \_ \_ 1 4

\_ \_ \_ 1 \_ \_ \_ \_ 1 1

\_ \_ \_ \_ \_ \_ \_ \_ DONE DONE

static void Main(String[] args)

{

int n = Convert.ToInt32(Console.ReadLine());

string[] arr\_temp = Console.ReadLine().Split(' ');

int[] arr = Array.ConvertAll(arr\_temp, Int32.Parse);

int len = arr.Length;

int min = int.MaxValue;

do

{

Console.WriteLine(len);

len = 0;

min = int.MaxValue;

for (int i = 0; i < arr.Length; i++)

{

if (arr[i] > 0)

{

min = Math.Min(arr[i], min);

}

}

for (int i = 0; i < arr.Length; i++)

{

if (arr[i] > 0)

{

arr[i] = arr[i] - min;

}

}

for (int i = 0; i < arr.Length; i++)

{

// Console.Write(arr[i] + " ");

if (arr[i] > 0)

{

len++;

}

}

// Console.WriteLine();

} while (len > 0);

}