Cut the sticks

You are given **N** sticks, where each stick is of positive integral length. 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 6 sticks of length

```
5 4 4 2 2 8
```

then in one *cut operation* we make a cut of length 2 from each of the 6 sticks. For next *cut operation* 4 sticks are left (of non-zero length), whose length are

```
3 2 2 6
```

Above step is repeated till no sticks are left.

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

Input Format
The first line contains a single integer *N*.
The next line contains *N* integers: $a_0, a_1,...a_{N-1}$ separated by space, where a_i represents the length of i^{th} stick.

Output Format
For each operation, print the number of sticks that are cut in separate line.

Constraints
$1 \leq N \leq 1000$
$1 \leq a_i \leq 1000$

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
```