

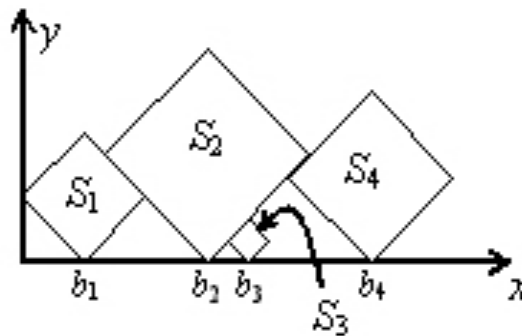


## 3799 - Kadj Squares

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In this problem, you are given a sequence  $S_1, S_2, \dots, S_n$  of squares of different sizes. The sides of the squares are integer numbers. We locate the squares on the positive  $x - y$  quarter of the plane, such that their sides make 45 degrees with  $x$  and  $y$  axes, and one of their vertices are on  $y = 0$  line. Let  $b_i$  be the  $x$  coordinates of the bottom vertex of  $S_i$ . First, put  $S_1$  such that its left vertex lies on  $x = 0$ . Then, put  $S_i$ , ( $i > 1$ ) at minimum  $b_i$  such that

- $b_i > b_{i-1}$  and
- the interior of  $S_i$  does not have intersection with the interior of  $S_1 \dots S_{i-1}$ .



The goal is to find which squares are visible, either entirely or partially, when viewed from above. In the example above, the squares  $S_1$ ,  $S_2$ , and  $S_4$  have this property. More formally,  $S_i$  is visible from above if it contains a point  $p$ , such that no square other than  $S_i$  intersect the vertical half-line drawn from  $p$  upwards.

### Input

The input consists of multiple test cases. The first line of each test case is  $n$  ( $1 \leq n \leq 50$ ), the number of squares. The second line contains  $n$  integers between 1 to 30, where the  $i$ -th number is the length of the sides of  $S_i$ . The input is terminated by a line containing a zero number.

### Output

For each test case, output a single line containing the index of the visible squares in the input sequence, in ascending order, separated by blank characters.

### Sample Input

```
4
3 5 1 4
3
2 1 2
0
```

## Sample Output

1 2 4  
1 3

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