Last One Standing (Solved) (100 / 100)

Alice and Bob are playing a counting out game. The game goes as follows:

> Initially, there are *N* people in the game. Each person is given an ID, starting from 1 to *N*. The counting out game begins with person 1, skipping k_i people (wrap around to 1 after *N*) and the next person is eliminated from the game, then the process is repeated until there only one person is left in the game. More specifically, the game consists of *N-1* rounds. In round *i*, k_i people are skipped in the sequences of increasing ID number, and the next person is eliminated. After *N-1* rounds, there should be only one person left in the game. You should determine the ID of the person that remains.

Input Format

The first line of input is `N`, the number of people in the game.
The second line of the input is a list of number, `k`, the number of people to be skipped in each round.

Output Format

Output one number, the ID of the last person remains in the game.

Sample Input

```
N = 4
k = [6, 3, 2]
```

Sample Output

```
3
```

Explanation

Round 1: Starting at 1, skip 6 people, 1, 2, 3, 4, 1, 2. Person 2 is eliminated.
Round 2: Starting at 3, skip 3 people, 3, 4, 1. Person 1 is eliminated.
Round 3: Starting at 3, skip 2 people, 3, 4. Person 4 is eliminated.
Person 3 is the last person remains in the game.

Submit All Answers

Test Cases

Case 1 (10/10 points) | Case 2 (10/10 points) | Case 3 (20/20 points)

Case 4 (20/20 points) | Case 5 (20/20 points) | Case 6 (20/20 points)

Test Case 1

```
N = 5
k = [3, 1, 3, 2]
```

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Answer

5

Submit **Solved!**