
Problem A. Coins 2

Input file: `standard input`
Output file: `standard output`
Time limit: 1 second
Memory limit: 512 megabytes

In ICPCCamp, people usually use coins of values $1, 2, 3, \dots, n$.

Bobo was very poor, he had only $a_1, a_2, a_3, \dots, a_n$ coins of values $1, 2, 3, \dots, n$, respectively. He bought an item of an unknown value **without making change**.

The unknown item was of non-negative integer value. Find the number of possible values it may have had.

Input

The input contains zero or more test cases, and is terminated by end-of-file. For each test case:

The first line contains one integer n ($1 \leq n \leq 15$).

The second line contains n integers a_1, a_2, \dots, a_n ($0 \leq a_i \leq 10^9$).

It is guaranteed that the number of test cases does not exceed 100, and there is at most one test case where $n > 10$.

Output

For each test case, output an integer which denotes the number of possibilities.

Example

standard input	standard output
3	6
0 1 2	12
3	
0 2 3	