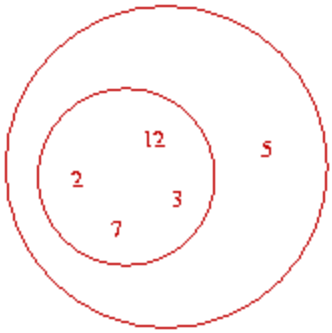
Problem C - Sumsets



Given S, a set of integers, find the largest d such that a + b + c = d where a, b, c, and d are distinct elements of S.

Input

Several S, each consisting of a line containing an integer 1 <= n <= 1000 indicating the number of elements in S, followed by the elements of S, one per line. Each element of S is a distinct integer between -536870912 and +536870911 inclusive. The last line of input contains 0.

Output

For each S, a single line containing d, or a single line containing "no solution".

Sample Input

```
5
2
3
5
7
12
5
2
16
64
256
1024
0
```

Output for Sample Input

```
12
no solution
```