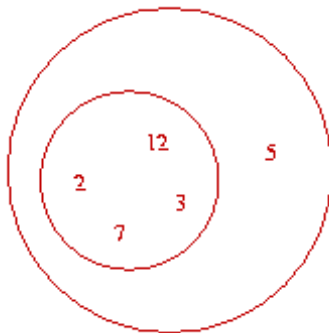


Given S , a set of integers, find the largest d such that $a + b + c = d$ where a , b , c , and d are distinct elements of S .

Input

Several S , each consisting of a line containing an integer $1 \leq n \leq 1000$ 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
```

Sample Output

```
12
no solution
```