HASELEMENTSUM

Given an integer nnn and a list LLL of distinct integers, find whether or not there exist two distinct integers in the list that sum to nnn.

Constraints

1<n<100001 < n < 100001<n<10000 1<len(L)<5001 < len(L) < 5001<len(L)<500

Input

An integer nnn, followed by an integer len(L)len(L)len(L), followed by len(L)len(L)len(L) distinct integers representing the list LLL.

Output

Two integers in increasing order summing to nnn, or the text `False` if no such integers exist.

Sample input

```
4 3 1 3 4
```


Sample output

```
1 3
```

View submissions

Test cases

Input	Output	Points	Timeout
`4 3 1 3 4 1 3`		0	100 ms
Hidden	*Hidden*	20	100 ms
Hidden	*Hidden*	20	100 ms
Hidden	*Hidden*	30	100 ms
Hidden	*Hidden*	30	200 ms

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Inspired by the "Ultra Cool Programming Contest Control Centre" by Sonny Chan.
Modified for CS 124 by Neal Wu, with design help from Martin Camacho.
Further refined by Nikhil Benesch.