

Problem CCU13b19 – 20  
Nearest and Farthest Pairs  
Time Limit: *2 Seconds*

For a given sequence  $A$  of  $n$  nonnegative integers, the goal is find  $0 \leq i < j \leq n$  such that  $A[i] = A[j]$  and

- problem 19:  $j - i$  is minimized; or
- problem 20:  $j - i$  is maximized.

**Technical Specification**

1.  $n < 1000000$ .
2.  $0 \leq A[i] < 2000$  for all  $i$ .

**Input File Format**

There are at most 6 test cases. For each test case, the first line contains the integer  $n$ , and the next line consists of the  $n$  integers  $A[0], A[1], \dots, A[n-1]$ . The case  $n = 0$  indicates the end of input.

**Output Format**

For each test case, output the optimal  $(i, j) : A[i]$  in one line. If there is more than one optimal solution, output the one with minimum  $i$ . For the case of no solution, output “No solution”.

## Input

```
6
1 3 3 4 4 1
5
5 4 3 2 1
6
2 4 1 4 1 8
0
```

## Output for the Sample Input

For problem 19:

```
(1,2):3
No solution
(1,3):4
```

For problem 20:

```
(0,5):1
No solution
(1,3):4
```