

1. Closest Numbers

Given an array of distinct integers, determine the minimum absolute difference between any two elements. Print all element pairs with that difference in ascending order.

Example

numbers = [6,2,4,10]

The minimum absolute difference is 2 and the pairs with that difference are (2,4) and (4,6). When printing element pairs (*i,j*), they should be ordered ascending first by *i* and then by *j*.

```
2 4
4 6
```

Function Description

Complete the function *closestNumbers* in the editor.

closestNumbers has the following parameter(s):

int numbers[n]: an array of integers

Returns

NONE

Prints

distinct element pairs that share the minimum absolute difference, displayed in ascending order with each pair separated by one space on a single line

Constraints

- $2 \leq n \leq 10^5$
- $-10^9 \leq \text{numbers}[i] \leq 10^9$

▼ Input Format for Custom Testing

Input from stdin will be processed as follows and passed to the function.

The first line contains an integer n , the size of the array *numbers*.
Each of the next n lines contains an integer, *numbers*[i].

▼ Sample Case 0

Sample Input 0

STDIN	Function
-----	-----
4	→ numbers[] size n = 4

```
4          →  numbers = [4, 2, 1, 3]
2
1
3
```

Sample Output 0

```
1 2
2 3
3 4
```

Explanation 0

The minimum absolute difference between any two elements in the array is *1*, and there are three such pairs with this difference: *(1, 2)*, *(2, 3)*, and *(3, 4)*.

▼ Sample Case 1

Sample Input 1

STDIN	Function
-----	-----
4	→ numbers[] size n = 4
4	→ numbers = [4, -2, -1, 3]
-2	
-1	
3	

Sample Output 1

```
-2 -1  
3 4
```

Explanation 1

The minimum absolute difference between any two elements in the array is 1 , and there are two such pairs: $(-2, -1)$ and $(3, 4)$.