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● EASY

● Max Score: 30 Points

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AS Sorting 3

Write a program to print all the inversions in an array `arr[]` of size `N`. Print all of the inversion pairs `{ (x, y) }` as shown below.

Note: Two numbers of array `arr` at index `i` and `j` are said to be inverted pair if `arr[i]>arr[j]` and `i<j`.

Input Format

The first line contains integer `N` denoting the number of elements.

The Second line contains `N` space separated integers denoting the elements of the array.

Output Format

Print all the inversion pairs, each in a new line in the format `(x,y)`.

Example 1

Input

```
4
8 4 2 1
```

Output

```
(8, 4)
(8, 2)
(8, 1)
(4, 2)
(4, 1)
(2, 1)
```

Explanation

8 is greater than 4,2,1 and index is less than their indexes. Similarly 4 is greater than 2 and 1 but has smaller index. Similarly 2 is greater than 1 but has smaller index than 1.

Example 2

Input

```
3
5 7 2
```

Output

```
(5, 2)
(7, 2)
```

Explanation

both 5 and 7 is greater than 2 and has smaller index. No other pairs satisfy the conditions.

Constraints

```
0 <= arr.length <= 10^4
```

```
-10^9 <= arr[i] <= 10^9
```

Topic Tags

- **Sorting**
- **Arrays**

My code

// in java

import java.util.*;

class Solution {

static void ASsort3(int arr[], int n)

{

 // Write your code and print here

 for(int i=0;i<n;i++)

 {

 for(int j=i+1;j<n;j++)

 {

 if(arr[i]>arr[j])

 {

 System.out.println("(" + arr[i] + "

 + arr[j] + ")");

 }

 }

 }

}

}

public class Main {

 public static void main(String[] args) {

 Scanner sc = new Scanner(System.in);

 int n= sc.nextInt();

 int array[] = new int[n];

 for(int i=0; i<n; i++){

```
        array[i]= sc.nextInt();  
    }  
  
    Solution Obj = new Solution();  
    Obj.ASsort3(array,n);  
}  
}
```