

Statistics



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Ivancho started to learn statistics. He started with the easiest things – mode and median. He takes a list of number with N (N is odd) numbers from 0 to 100. He is too lazy to find this values by hand so he asked you to write the program **stats**, that by given N numbers calculates the mode and the median of the list of numbers.

In statistics, when calculating this values the list is being sorted ascending order. Mode is defined as the number that appears the most times in the list and median is defined as the element that is in the middle of the order. (The element with number $(n+1)/2$), when N is odd. It is guaranteed that there is only one mode in the list.

Вход

From the first row of the file stats.in is entered number – N . On the next row there are N integers – the elements of the list.

Изход

On the single line of the output file stats.out you have to print the mediane and the mode of the list.

Constrains

$1 \leq N(\text{odd number}) \leq 1000$

$1 \leq \text{each number in the list} \leq 100$

Примерен тест

| Input (stats.in) | Output (stats.out) |
|--------------------------|--------------------|
| 9 6 3 4 2 1 5 3 8 7 7 | 4 3 |

Explanation

1 2 3 3 4 5 6 8 7 7