# Problem 2 – Three Largest Numbers

You are given **n numbers**. Write a program to print the **largest**, the **second largest** and the **third largest** among them.

### Input

The input comes from the console. The first line holds the count **n**. The next **n** lines hold the input numbers. Each input number is standard decimal-point value (positive, negative or zero), without any leading zeroes, but could have trailing zeroes after the decimal point.

The input data will always be valid and in the format described. There is no need to check it explicitly.

### Output

Print the largest, second largest and third largest numbers (when available) each at a separate line. Print the numbers in the output exactly as they were given in the input.

### Constraints

* The **countn** will be an integer number in the range [1…99].
* The input **numbers** will be decimal values in the range [-10100…10100] with at most 100 digits after the decimal point.
* Time limit: 0.3 sec. Memory limit: 16 MB.

### Examples

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |  | **Input** | **Output** |
| 5  20  50  100  10  75 | 100  75  50 | 4  -5  2.77  1.33  -3 | 2.77  1.33  -3 | 2  3  4 | 4  3 | 5  1.500000000000  25.55555555555  -0.00000000001  1.000000000001  3.333333333333 | 25.55555555555  3.333333333333  1.500000000000 |

import java.math.BigDecimal;

import java.util.Arrays;

import java.util.Locale;

import java.util.Scanner;

public class ThreeLargestNumbers {

public static void main(String[] args) {

Locale.setDefault(Locale.ROOT);

Scanner input = new Scanner(System.in);

int n = input.nextInt();

input.nextLine();

BigDecimal[] nums = new BigDecimal[n];

for (int i = 0; i < nums.length; i++) {

String num = input.nextLine();

nums[i] = new BigDecimal(num);

}

Arrays.sort(nums);

int count = 3;

for (int i = nums.length-1; i >= 0 && count > 0; i--, count--) {

System.out.println(nums[i].toPlainString());