

4. Counting Occurrence of the Positive Integers

Problem ID: 1040

Required Problem

100pt(s)

Time Limit: 1000ms Memory Limit: 65535kB

Description

Time Limit: 10000, Memory Limit: 65536

Description:

A certain experiment obtains n positive integers of data, $n \leq 10^7$, and these numbers are no greater than 10^{15} each. Since the experiment has to satisfy certain criteria, there will be no more than 50,000 unique values. You are asked to count the number of occurrences of each unique number, and output them in ascending order.

Input:

The first line is a positive integer n .

The next n lines contain one integer for each line.

Output:

One line for each unique value in the data. Each line should contain two integers separated by a space, which are the number's value and the amount of times it appears in the data. Lines should be output in ascending order of number values.

Sample Input:

9 (the total number of integer n)

2

4

6

2

6

4

2

8

6

Sample output:

2 3

4 2

6 3

8 1