
Counting frequencies

P63414_en

Write a program that reads a sequence of natural numbers and that prints, for each one, how many times it appears.

Input

Input consists of a natural number n , followed by n natural numbers between 1000000000 and 1000001000 (both included).

Output

For each number x that appears in the sequence, print how many times it appears, following the format of the example. The output must be sorted in increasing order by x .

Sample input

```
7
1000000001 1000000011 1000000011 1000000004 1000000004 1000000200 1000000004
```

Sample output

```
1000000001 : 1
1000000004 : 3
1000000011 : 2
1000000200 : 1
```

Problem information

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