

Distinct Numbers

Given a list of integers, output the list in ascending order of distinct values and the corresponding number of occurrences of the value.

Input

- The first line contains one integer N - the number of integers ($1 \leq N \leq 10^5$).
- The next line contains N integers which do not exceed 10^9 .

Output

Each line contains a value and the number of occurrences of the value.

Sample

<https://drive.google.com/file/d/1F-hwy5zj26oFT7FITvYa3qDkjGdavaWh/view?usp=sharing>

Input	Output
8	0 1
0 4 3 1 5 6 1 3	1 2
	3 2
	4 1
	5 1
	6 1