72901. How many times?

Input file:	standard input
Output file:	standard output
Time limit:	1 second
Memory limit:	256 megabytes

You have an array of characters. Write a program, which will count how many times character appears in array.

Input

The first line contains one integer n ($1 \leqslant n \leqslant 10^5$) — array size. The next line contains n characters a_i — elements of array is guaranteed they are lowercase Latin letters.

Output

Each line must contains Latin letter in alphabet order and how many times it appears in the array. Look at the sample to better understand the problem.

Examples

standard input	standard output
10 m b d a v q i s o r	a 1 b 1 d 1 i 1 m 1 o 1 q 1 r 1 s 1 v 1
2 n m	m 1 n 1
3 f q h	f 1 h 1 q 1
6 b w a k k b	a 1 b 2 k 2 w 1