

Gambling

Some people are playing a gambling game. They all say a number between 1 and M . The person who says the same number that was said by most of the players will be the winner. If there are more than one number like this, then all the players will win who were the first to say such a “most frequent number”.

Write a program that gives the winner player, the number the player won with, and the count of people who said this number.



Input

The first line of the *standard input* contains the count of players ($1 \leq N \leq 1000$), and the maximum limit for the number ($1 \leq M \leq 1000000$). The next N lines each contain a number said by a player ($1 \leq T \leq M$).

Output

The *standard output* should consist of as many lines as many winners there are (in increasing order of the winner number). Each line should contain 3 numbers: the index of the winner, the winning number, and the count of people who chose this number.

Example

Input

```
6 100
25
20
15
15
30
20
```

Output

```
3 15 2
2 20 2
```