Sorted Search 1

Given a row and column wise sorted array, find the index of an integer say x.

Input Format

- The first line contains two integer n, m denoting the size of the 2-d array; n being the number of rows and m number of columns.
- The next n lines contains space-separated integers (m per line) representing the elements of the array.
- The next line will contain an integer x.

Constraints

- $0 \leq n, m \leq 10^6$
- $-9,223,372,036,854,775,808 \leq x \leq 9,223,372,036,854,775,807$

Output Format

If x was not found in the matrix, print -1 -1, else print i j such that vec[i][j] == x. In case of multiple answers, return the indices with the least i.

Sample Input 0

```
1 10
21 62 93 122 188 276 308 350 441 514
441
```

Sample Output 0

```
0 8
```

Sample Input 1

```
3 3
55 108 120
63 113 183
82 206 267
267
```

Sample Output 1

```
2 2
```