Problem C
Cursed Code

Time limit: 5 seconds

Memory limit: 512 megabytes

Problem Description

Carl is editing a code file with r lines and c characters in each line. Lines are indexed from top to bottom and characters are indexed from left to right, both starting from 0. The j^{th} character of the i^{th} line can be described as coordinates (i, j), where $0 \le i < r$ and $0 \le j < c$. Initially, each character is an `f`.

Carl uses the cursed editor "`miv`" to edit his code. The characters are arranged into an $r \times c$ grid inside the editor. There is a pointer that points to a character, initially at $(0, 0)$. A main feature of `miv` is the "pointer reset" operation. When it is applied, `miv` will select the `f` at (i, j) with minimum j and move the pointer there. If there are multiple `f`'s with minimum j, it will choose the one with minimum i among them.

One day, the editor suddenly gained consciousness itself and started destroying the file. The file destruction process is as follows:

1. `miv` does the "right shift" operation for k times. In each "right shift", the pointer is moved to the next `f` to its right. If there are no `f`'s on the right, it is moved to the leftmost `f` in that row instead.

2. The character currently pointed at by the pointer is erased and replaced by a space. After that, if all characters in that row are erased, `miv` performs a "pointer reset". Otherwise, it performs a "right shift".

3. `miv` does the "down shift" operation for k times. In each "down shift", the pointer is moved to the next `f` below it. If there are no `f`'s below, it is moved to the topmost `f` in that column instead.

4. The character currently pointed at by the pointer is erased and replaced by a space. After that, if all characters in that column are erased, `miv` performs a "pointer reset". Otherwise, it performs a "down shift".

5. The steps 1 to 4 are repeated until all characters are erased except one. Then a segmentation fault occurs, ending the whole process.

Since the process is done so fast, Carl only sees one character left after one blink. What are the coordinates of that character?

Input Format

The input contains three spaced-separated integers r, c, k in one line.

Output Format

Output two integers m, n separated by a space, meaning that the last character left is the n^{th} one on line m.

Technical Specification

- $1 \leq r \leq 500, 1 \leq c \leq 500$
- $1 \leq k \leq \min(r, c)$

Sample Input 1

```
3 3 2
```

Sample Output 1

```
2 2
```

Hint

In the sample, the code is originally 3×3 `f`'s. Let `[ ]` represent the pointer and `.` denote a space. After doing step 1, the pointer moves to $(0, 2)$:

```
[f] f   f         f  [f] f         f   f  [f]
 f  f   f    ->   f   f  f    ->   f   f   f
 f  f   f         f   f  f         f   f   f
```

After doing step 2, the character at $(0, 2)$ is erased and the pointer moves to $(0, 0)$:

```
 f  f  [f]        f   f  [.]      [f]  f   .
 f  f   f    ->   f   f   f   ->   f   f   f
 f  f   f         f   f   f        f   f   f
```

After step 3, the pointer moves to $(2, 0)$:

```
[f] f   .         f   f   .        f   f   .
 f  f   f    ->  [f]  f   f   ->   f   f   f
 f  f   f         f   f   f       [f]  f   f
```

After step 4, the character at $(2, 0)$ is erased and the pointer moves to $(0, 0)$:

```
 f  f   .         f   f   .       [f]  f   .
 f  f   f    ->   f   f   f   ->   f   f   f
[f] f   f        [.]  f   f        .   f   f
```

This process continues until all characters are erased except one, and the final code look likes this:

```
 .  .   .
 .  .   .
 .  .  [f]
```

so the answer is "`2 2`".