CODEFORCES β
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PROBLEMS   SUBMIT   STATUS   STANDINGS   CUSTOM TEST

A. Round House

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

Vasya lives in a round building, whose entrances are numbered sequentially by integers from 1 to n. Entrance n and entrance 1 are adjacent.

Today Vasya got bored and decided to take a walk in the yard. Vasya lives in entrance a and he decided that during his walk he will move around the house b entrances in the direction of increasing numbers (in this order entrance n should be followed by entrance 1). The negative value of b corresponds to moving $|b|$ entrances in the order of decreasing numbers (in this order entrance 1 is followed by entrance n). If $b = 0$, then Vasya prefers to walk beside his entrance.
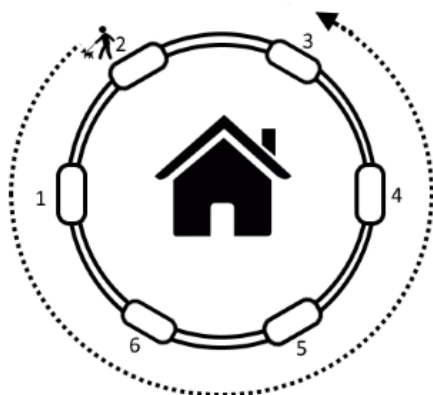

Illustration for $n = 6$, $a = 2$, $b = -5$.

Help Vasya to determine the number of the entrance, near which he will be at the end of his walk.

Input

The single line of the input contains three space-separated integers n, a and b ($1 \le n \le 100$, $1 \le a \le n$, $-100 \le b \le 100$) — the number of entrances at Vasya's place, the number of his entrance and the length of his walk, respectively.

Output

Print a single integer k ($1 \le k \le n$) — the number of the entrance where Vasya will be at the end of his walk.

Examples

input	Copy
6 2 -5	

output	Copy
3	

input	Copy

→ **Virtual participation**

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ACM-ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ **Problem tags**

implementation   math

No tag edit access

→ **Contest materials**

- Announcement   ✕
- Tutorial   ✕

```
5 1 3
```

output   Copy

```
4
```

input   Copy

```
3 2 7
```

output   Copy

```
3
```

Note

The first example is illustrated by the picture in the statements.