Problem P. Round House

Time limit 1000 ms
Mem limit 262144 kB

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.

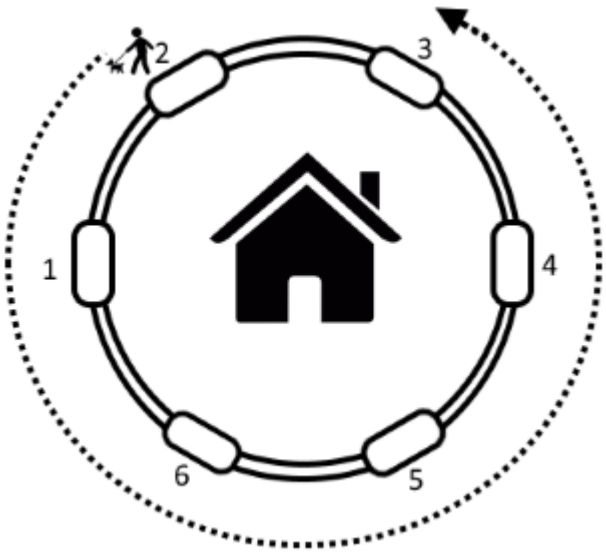

Illustration for $n = 6, a = 2, b = -5$.

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.

Sample 1

Input	Output
6 2 -5	3

Sample 2

Input	Output
5 1 3	4

Sample 3

Input	Output
3 2 7	3

Note

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