

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 ($1 \leq n \leq 100$, $1 \leq a \leq n$, $-100 \leq b \leq 100$) — 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 ($1 \leq k \leq n$) — the number of the entrance where Vasya will be at the end of his walk.

Examples

input
6 2 -5
output
3

input
5 1 3
output
4

input
3 2 7
output
3

Note

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