



HOME CONTESTS GYM PROBLEMSET GROUPS RATING API CANADA CUP 🛣 SECTIONS

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 b should be followed by entrance b). The negative value of b corresponds to moving b0 entrances in the order of decreasing numbers (in this order entrance b1 is followed by entrance b2. If b3 eq., 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

62-5 output 3 input	
3	
input	
input	
513	
513 output	
4	

input	
327	
output	
2	

Note

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

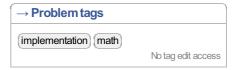
Codeforces Round #346 (Div. 2)

Finished

→ 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



×

×

→ Contest materials

- Announcement
- Tutorial