Ring a Ring o’ Roses

Consider N children playing Ring a Ring o’ Roses. While playing they move in anti-clockwise direction. With each step, child x(who is initially at position x) moves to (x-1)th position. N such steps contributes to one rotation. Given n (number of steps) and the initial position of the child x, find the position of the child after taking n steps.

Constraints:

1 <= N <= 10

1 <= n <= 10^5

Input format:

First line consists of 3 spaced integers,

N - number of children

n - number of steps

x - initial position of child x

Output format:

Integer representing position of child x after moving n steps in anti-clockwise direction.

Test Case 0:

Input 0:

5 2 2

Output 0:

5

Test Case 1:

Input 1:

7 13 5

Output 1:

6

Explanation(Test Case 0):

Initial positions of N children,

1 2 3 4 5

After 1 step in anti-clockwise direction,

2 3 4 5 1

After 2 steps,

3 4 5 1 2

Position of child 2 is ‘5’