



STUDENT REPORT

DETAILS

Name

Mohammed Aakhil R

Roll Number

22BI24EE410-T

EXPERIMENT

Title

CANDIES

Description

Let's consider a scenario where there are K candies to be distributed among N children, each uniquely numbered from 1 to N. The distribution commences with Child A, followed by a sequential allocation to the subsequent children in the order: A, A+1, A+2,..., N. The query at hand is to identify which child will be the last recipient of a candy. In more explicit terms, after Child x (where $1 \leq x < N$) receives a candy, the subsequent candy is granted to Child x+1. Upon Child N receiving a candy, the distribution cycle restarts, and Child 1 becomes the next recipient. The primary objective is to ascertain the identity of the child who will receive the last candy in this cyclic distribution.

Note: Each child receives only 1 candy.

Input Format:

The first line of input contains 3 space separated integers N, K and A.

Output Format:

Print the friend who will be the final recipient of the candy.

Constraints:

$$1 \leq N \leq K \leq 10^8$$

Sample Input:

5 2 1

Sample Output:

2

Source Code:

```
def last_candy_child(N, K, A):
    # Calculate the position of the last child to receive the candy
    last_child = (A + K - 1) % N

    # If last_child is 0, it means the last candy goes to child N
    if last_child == 0:
        return N
    else:
        return last_child

# Sample usage
N, K, A = map(int, input().split()) # Input: number of children, candies, and starting child
print(last_candy_child(N, K, A))
```

RESULT

6 / 6 Test Cases Passed | 100 %