

Title: HotPotatoProblem Statement:

Little Timmy is playing a game of hot potato with his friends. There are a total of n people playing the game, and all n people stand around in a circle. We label the people with ids from 1 to n , clockwise.

In the game of Hot Potato, the first person ($id = 1$) takes the potato and passes it to the next person in the circle, clockwise ($id = 2$), and so on. Every k turns, the hot potato would “explode” and the person holding the hot potato would be eliminated. The eliminated person will step out of the circle, pass the potato to the next person in the circle, and the game will repeat until there are only m survivors left.

Your task is to find out who are the last m people standing.

Input:

In a single line, 3 integers, n , k , m . ($2 \leq n \leq 10^6$) ($2 \leq k \leq 50$) ($1 \leq m \leq 100$) ($k, m \leq n$)

Output:

The final list of m people remaining in the game, in sorted order.

Example:Input:

6 2 2

Output:

[1, 5]

Explanation:

Turn:	Description:	Remaining people:
1	1 passes to 2	[1, 2, 3, 4, 5, 6]
2	Potato explodes, 2 gets eliminated, passes to 3	[1, 3, 4, 5, 6]
3	3 passes to 4	[1, 3, 4, 5, 6]
4	Potato explodes, 4 gets eliminated, passes to 5	[1, 3, 5, 6]
5	5 passes to 6	[1, 3, 5, 6]
6	Potato explodes, 6 gets eliminated, passes to 1	[1, 3, 5]
7	1 passes to 3	[1, 3, 5]
8	Potato explodes, 3 gets eliminated	[1, 5]

Extension: What if N people are standing in a straight line in order of 1 to n , and they pass the potato from start to end, end to start until there are m people left?