

We need to arrange M kids in N teams. We begin by placing K kids in each team, starting from the first to the N^{th} team. When we finish with the N^{th} team, we switch directions and continue, placing K kids in each team, from the $(N-1)^{\text{th}}$ to the first team, respectively. When we finish with the first team, we switch directions again and continue the process from the second to the N^{th} team, respectively, and so on until there are no kids left to distribute. For example, if we have three teams, we will place K kids in teams in the following order: first team, second team, third team, second team, first team, second team, etc.

If, at any points, there are less than K kids left to place in the current team, we place all the remaining kids in that team and end the process.

Output the number of kids in each team when the process ends.

INPUT

The first line of input contains the integers N ($2 \leq N \leq 200\,000$), K and M ($1 \leq K \leq M \leq 2\,000\,000\,000$) from the task.

OUTPUT

In a single line, output the number of kids in each of the N teams, respectively from the first to the N^{th} team.

SCORING

In test cases worth a total of 40 points, it will hold $M / K \leq 200\,000$.

SAMPLE TESTS

input

2 1 3

output

2 1

input

3 2 7

output

2 3 2

input

4 5 6

output

5 1 0 0