

Alongside being a palindrome, Nadan is also a successful businessman who finances young software developers when they start working on their projects. This year, he decided to distribute K kunas (Croatian currency) to N projects in a way that each project gets at least one kuna and all projects get a different amounts of kunas. This will always be possible.

Write a program which will, for a given N and K , find one possible distribution of K kunas to N projects.

INPUT

The first line contains a positive integer K ($100 \leq K \leq 1\,000\,000$), number from the task description.
The second line contains a positive integer N ($1 \leq N \leq 100$), number from the task description.

OUTPUT

For a chosen money distribution, output the amount of money the first project will get in the first line, the amount of money the second project will get in the second line and so on until the N -th line where you should output the amount of money the N -th project will get.

SCORING

In test cases worth 25 points, it will hold that $N = 5$.

If your solution outputs a distribution where all projects didn't get a different amount of kunas, you will get 3 out of the possible 5 points for that test case.

SAMPLE TESTS

input

100
5

output

10
30
20
5
35

input

200
1

output

200

input

100
4

output

21
36
12
31