Creating a Sequence

Time limit: 2.0s **Memory limit:** 64M

Kirito is tired of maintaining sequences, so he decides to create them instead!

He thinks of two positive integers, N and K, and then creates a sequence of N non-negative integers that sums to K.

Because he finds this so relaxing, he invites you to join him! However, you find this just *a bit* boring, so you decide to also **minimize the product of your sequence**. Can you write a program that creates such a sequence?

Constraints

 $2 \le N \le 100\,000$

 $1 \leq K \leq 1\,000\,000\,000$

Scoring

Your program will get 50% of the points if the N numbers sum to K, and the remaining 50% if the product is minimized.

Input Specification

The first and only line of input will contain two space separated integers, N and K.

Output Specification

Your program should output a single line: N space-separated non-negative integers that sum to K, such that their product is minimized.

Sample Input

2 926

Sample Output

223 703

Note that the sample output may not be the most optimal solution.