

K-skip Permutation

Input file: **standard input**
Output file: **standard output**
Time limit: 1 second
Memory limit: 256 megabytes

For a permutation $P = p_1, p_2, \dots, p_n$ of n , let $f(P, k)$ be the number of i satisfying $1 \leq i < n$ and $p_i + k = p_{i+1}$.

Given two integers n and k , your task is to find a permutation P of n such that $f(P, k)$ is maximized.

Recall that in a permutation of n , each integer from 1 to n (both inclusive) appears exactly once.

Input

There is only one test case in each test file.

The first and only line contains two integers n and k ($1 \leq n, k \leq 10^6$).

Output

Output one line containing n integers indicating a permutation P of n that maximizes $f(P, k)$. If there are multiple valid answers you can output any of them.

Please, DO NOT output extra spaces at the end of the line, or your answer may be considered incorrect!

Examples

standard input	standard output
3 1	1 2 3
7 3	2 5 1 4 7 3 6
3 7	1 3 2