An Animal Contest 6 P1 - Workout Routine

Time limit: 2.0s **Memory limit:** 256M

Kyriakos Grizzly wants to create a new workout routine over the course of the next N days. In order for a workout routine to be good, the amount of weights he lifts each day must be pairwise distinct, and must be in the range $[1, 10^9]$. Furthermore, the sum of the weights over the N days must be divisible by K for maximal gains. Can you create a good workout routine for Kyriakos, or let him know that it's impossible?

Constraints

$1 \leq N, K \leq 10^6$

Subtask 1 [20%]

$1 \leq N \times K \leq 10^9$

Subtask 2 [80%]

No additional constraints.

Input Specification

The only line of input contains 2 integers N and K.

Output Specification

If no good workout routine exists output -1.

Otherwise, output one line containing N integers. The integers must all be distinct and must all be in the range $[1, 10^9]$, and their sum must be divisible by K.

Sample Input

```
6 9
```

Sample Output

```
2 5 7 3 10 9
```