Problem A. Farmer

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

You are given three numbers n, k and x. Construct an array A with the following properties:

- A contains exactly n elements.
- All elements of A are positive integers smaller than 10^6.
- There are **exactly** k pairs of indices (i, j) such that: $1 \le i < j \le n$ and $|A_i - A_j| \ge x$.

Input

Single line of input contains three numbers n ($1 \le n \le 1000$), k ($0 \le k \le \frac{n \cdot (n-1)}{2}$), x ($2 \le x \le 1000$).

Output

In single line of output print n integers, elements of array A. In case there is no array with needed properties, print -1

Examples

standard input	standard output
3 2 5	1 8 2