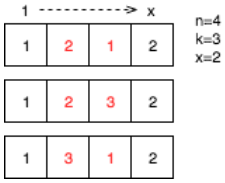
Construct the Array

Your goal is to find the number of ways to construct an array such that consecutive positions contain different values.

Specifically, we want to construct an array with n elements such that each element between 1 and k, inclusive. We also want the first and last elements of the array to be 1 and x.

Given n, k and x, find the number of ways to construct such an array. Since the answer may be large, only find it modulo $10^9 + 7$.

For example, for $n = 4$, $k = 3$, $x = 2$, there are 3 ways, as shown here:



Complete the function $countArrayFill$ which takes input n, k and x. Return the number of ways to construct the array such that consecutive elements are distinct.

Constraints

- $3 \leq n \leq 10^5$
- $2 \leq k \leq 10^5$
- $1 \leq x \leq k$

Subtasks

- For 20% of the maximum score, $n \leq 10^3$ and $k \leq 10^2$

Sample Input

jnj

Sample Output

hbj

Explanation

vhb