//https://www.geeksforgeeks.org/problems/first-negative-integer-in-every-window-of-size-k3345/1

//solution : <https://www.youtube.com/watch?v=Rot0y4cmlNw>

**First negative integer in every window of size k**

Given an array A[] of size N and a positive integer K, find the first negative integer for each and every window(contiguous subarray) of size K.

Example 1:

Input :

N = 5

A[] = {-8, 2, 3, -6, 10}

K = 2

Output :

-8 0 -6 -6

Explanation :

First negative integer for each window of size k

{-8, 2} = -8

{2, 3} = 0 (does not contain a negative integer)

{3, -6} = -6

{-6, 10} = -6

Example 2:

Input :

N = 8

A[] = {12, -1, -7, 8, -15, 30, 16, 28}

K = 3

Output :

-1 -1 -7 -15 -15 0

Your Task:    
You don't need to read input or print anything. Your task is to complete the function printFirstNegativeInteger() which takes the array A[], its size N and an integer K as inputs and returns the first negative number in every window of size K starting from the first till the end. If a window does not contain a negative integer , then return 0 for that window.

Expected Time Complexity: O(N)  
Expected Auxiliary Space: O(K)  
  
Constraints:  
1 <= N <= 105  
-105 <= A[i] <= 105  
1 <= K <= N