**Queue:**

Write an algorithm to solve the below logics

1.**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

2. **First non-repeating character in a stream**

Given an input stream of **A**of **n** characters consisting only of lower case alphabets. The task is to find the first non repeating character, each time a character is inserted to the stream. If there is no such character then append '#' to the answer.

**Example 1:**

**Input:** A = "aabc"

**Output:** "a#bb"

**Explanation:** For every character first non

repeating character is as follow-

"a" - first non-repeating character is 'a'

"aa" - no non-repeating character so '#'

"aab" - first non-repeating character is 'b'

"aabc" - first non-repeating character is 'b'