

$A = [1, 1, 1, 2, 2, 3]$

$lc = 5$
return

$\hookrightarrow A = [1, 1, 2, 2, 3, _]$ (first elements
after removing
result
duplicate)

\Downarrow essentially do Count Sort?

make array $O(n)$

(
for saving counts
of the elements

like $\begin{bmatrix} 0 & 3 & 2 & 1 \\ 0 & 1 & 2 & 3 \end{bmatrix}$

\hookrightarrow make pointer to point at n element

\hookrightarrow remove one element of 1

$\hookrightarrow [0, 2, 2, 1]$

\hookrightarrow Push all elements up

$\hookrightarrow [1, 1, 2, 2, 3, _]$

\hookrightarrow Return elements in Array

\hookrightarrow Shift to Array (modified)

$[1, 1, 2, 2, 3]$ $lc = 5$