

Segregate 0s and 1s

Given an array **arr** consisting of only **0**'s and **1**'s in random order. Modify the array **in-place** to segregate 0s onto the left side and 1s onto the right side of the array.

Examples :

Input: arr[] = [0, 0, 1, 1, 0]

Output: [0, 0, 0, 1, 1]

Explanation: After segregation, all the 0's are on the left and 1's are on the right.

Modified array will be [0, 0, 0, 1, 1].

Input: arr[] = [1, 1, 1, 1]

Output: [1, 1, 1, 1]

Explanation: There are no 0s in the given array, so the modified array is [1, 1, 1, 1]

Expected Time Complexity: O(n)

Expected Auxiliary Space: O(1)

Constraints:

$1 \leq \text{arr.size()} \leq 10^6$

$0 \leq \text{arr}[i] \leq 1$