

Given an array of size N containing only 0s, 1s, and 2s; sort the array in ascending order.

Example 1:

Input:

N = 5

arr[] = {0 2 1 2 0}

Output:

0 0 1 2 2

Explanation:

0s 1s and 2s are segregated into ascending order.

Example 2:

Input:

N = 3

arr[] = {0 1 0}

Output:

0 0 1

Explanation:

0s 1s and 2s are segregated into ascending order.

Your Task:

You don't need to read input or print anything. Your task is to complete the function **sort012()** that takes an array arr and N as input parameters and **sorts the array in-place**.

Expected Time Complexity: O(N)

Expected Auxiliary Space: O(1)

Constraints:

$$1 \leq N \leq 10^5$$

$$0 \leq A[i] \leq 2$$