Sort Array of 0 and 1

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

output: arr [0, 0, 0, 0, 1, 1, 1]

Approach :-

(1) Two pointers approach.

initially take i and j as 0

(2) if we encounter a[i] == 0
then we increment both
i and j

(3) if we find a[i] == 1 then we increment only i

now, because of step (3) the j remains at position where one is present.

If ahead we encounter any zero we can swap with j.

T.C → O(n)

S.C → O(1).

finish