

Problem 4: DutchNationalFlag

Time efficiency: $O(n)$

Space efficiency: $O(1)$

Explanation: For DutchNationalFlag there isn't a particular algorithm or data structure I'm using to my advantage here. I'm just doing a generic iterative approach to this solution.

This problem to me is simply asking for an in place sorting. The obvious solution, is to keep the 1's where they are, and sort the 0, and 2 to it's left, and right area.