904: Fruits into Baskets

fruits = [1, 2, 3, 2, 2]

array represents the line of trees, where each number represents type of tree. We have been given two baskets, and our to and each basket can have only one kind of fruit. So We have to find maximum number we can pick

Eg:-   3, 3, 3, 1, 2, 1, 1, 2, 3, 3, 4

answer

We can start at any position, and stop at the tree where we cannot put anything in the basket.

→ It's like finding a subarray such that it has atmost two elements.

This can be solved using 2 pointer and a hashmap approach.

3, 3, 3, 1, 2, 1, 1, 2, 3, 3, 4

↑ start   ↑ end   SLIDING WINDOW

→ hashmap would be required to check, if there are only two elements so far

3, 3, 3, 1, 2, 1, 1, 2, 3, 3, 4

↑ start   ↑ end

$O(n)$:- increment end & start such a way that you get (end - start) as your answer.