525. Contiguous Array

Medium 🏷 Topics 🔒 Companies

Given a binary array `nums`, return *the maximum length of a contiguous subarray with an equal number of* `0` *and* `1`.

Example 1:

```
Input: nums = [0,1]
Output: 2
Explanation: [0, 1] is the longest contiguous subarray with an equal
number of 0 and 1.
```

Example 2:

```
Input: nums = [0,1,0]
Output: 2
Explanation: [0, 1] (or [1, 0]) is a longest contiguous subarray with
equal number of 0 and 1.
```

```swift
class Solution {
    func findMaxLength(_ nums: [Int]) -> Int {
        var one = 0
        var zero = 0
        var ans = 0
        var sum_to_index_dict:[Int:Int] = [:]
        for i in (0..<nums.count) {
            if(nums[i] == 0){
                zero = zero + 1
            } else {
                one = one + 1
            }
            if sum_to_index_dict[(one - zero)] == nil {
                sum_to_index_dict[(one - zero)] = i
            }
            if(one == zero) {
                ans = one + zero
            } else {
                let id = sum_to_index_dict[(one - zero)]!
                ans = max(ans,(i - id))
            }
        }
        return ans } }
```