Contiguous Array

Solution

Given a binary array, find the maximum length of a contiguous subarray with equal number of 0 and 1.

Example 1:

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

Example 2:

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

Note: The length of the given binary array will not exceed 50,000.

Java

```java
class Solution {
    public int findMaxLength(int[] nums) {
        HashMap<Integer, Integer> map = new HashMap();

        map.put(0, -1);

        int max = 0;
        int sum = 0;
        for(int i = 0; i < nums.length; i++) {
            sum += nums[i] == 0 ? -1 : 1;
            if(map.containsKey(sum)) {
                max = Math.max(max, i - map.get(sum));
            }
            else {
                map.put(sum, i);
            }
        }

        return max;
    }
}
```

Custom Testcase (Contribute)

Run Code Submit