[LeetCode](https://leetcode.com/problems/contiguous-array/description/?envType=daily-question&envId=2024-03-16)

<https://github.com/AdityaKonda6/-50DaysOfCoding>

<https://leetcode.com/problems/contiguous-array/description/?envType=daily-question&envId=2024-03-16>

<https://www.linkedin.com/in/aditya-adi-konda/>

Day 26 of [#50dayscodingchallenge](https://www.linkedin.com/feed/hashtag/?keywords=50dayscodingchallenge&highlightedUpdateUrns=urn:li:activity:7166316239483461633):  
[#leetcode](https://www.linkedin.com/feed/hashtag/?keywords=leetcode&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#leetcodechallenge](https://www.linkedin.com/feed/hashtag/?keywords=leetcodechallenge&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#leetcodestreak](https://www.linkedin.com/feed/hashtag/?keywords=leetcodestreak&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#leetcode2024](https://www.linkedin.com/feed/hashtag/?keywords=leetcode2024&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#leetcode50day](https://www.linkedin.com/feed/hashtag/?keywords=leetcode50day&highlightedUpdateUrns=urn:li:activity:7166316239483461633)  
   
Just kicked off my coding journey with a fascinating problem - "Successfully solved LeetCode Problem “525. Contiguous Array.”  
   
✨ Task: Given a binary array nums, return the maximum length of a contiguous subarray with an equal number of 0 and 1.

Examples:

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.

Let's Connect:

If you find this problem intriguing or have insights to share, let's connect! I'm passionate about problem-solving, algorithmic thinking, and collaborative learning. Feel free to comment or reach out for engaging discussions and knowledge exchange.Unravel the mystery using your coding skills!

[#CodingChallenge](https://www.linkedin.com/feed/hashtag/?keywords=codingchallenge&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#Algorithm](https://www.linkedin.com/feed/hashtag/?keywords=algorithm&highlightedUpdateUrns=urn:li:activity:7166316239483461633) [#LinkedInPost](https://www.linkedin.com/feed/hashtag/?keywords=linkedinpost&highlightedUpdateUrns=urn:li:activity:7166316239483461633) #Algorithm #Optimization #DataStructures #CodingChallenge  
  
Excited about the progress and challenges ahead!  
   
Make Sure You Follow My GitHub For Solutions: <https://github.com/AdityaKonda6/-50DaysOfCoding>  
  
  
Happy coding!

**Solution:-**

class Solution {

  public int findMaxLength(int[] nums) {

    int ans = 0;

    int prefix = 0;

    Map<Integer, Integer> prefixToIndex = new HashMap<>();

    prefixToIndex.put(0, -1);

    for (int i = 0; i < nums.length; ++i) {

      prefix += nums[i] == 1 ? 1 : -1;

      if (prefixToIndex.containsKey(prefix))

        ans = Math.max(ans, i - prefixToIndex.get(prefix));

      else

        prefixToIndex.put(prefix, i);

    }

    return ans;

  }

}

