

Problem 1004: Max Consecutive Ones III

Problem Information

Difficulty: Medium

Acceptance Rate: 66.87%

Paid Only: No

Tags: Array, Binary Search, Sliding Window, Prefix Sum

Problem Description

Given a binary array `nums` and an integer `k`, return the maximum number of consecutive `1`'s in the array if you can flip at most `k` `0`'s.

Example 1:

Input: `nums = [1,1,1,0,0,0,1,1,1,1,0]`, `k = 2` **Output:** `6` **Explanation:** `[1,1,1,0,0,1,1,1,1,0]` Bolded numbers were flipped from 0 to 1. The longest subarray is underlined.

Example 2:

Input: `nums = [0,0,1,1,0,0,1,1,1,0,1,1,0,0,0,1,1,1,1]`, `k = 3` **Output:** `10` **Explanation:** `[0,0,1,1,1,1,1,1,1,0,0,0,1,1,1,1]` Bolded numbers were flipped from 0 to 1. The longest subarray is underlined.

Constraints:

`1 <= nums.length <= 105` `nums[i]` is either `0` or `1`. `0 <= k <= nums.length`

Code Snippets

C++:

```
class Solution {
public:
    int longestOnes(vector<int>& nums, int k) {
```

```
}  
};
```

Java:

```
class Solution {  
    public int longestOnes(int[] nums, int k) {  
  
    }  
}
```

Python3:

```
class Solution:  
    def longestOnes(self, nums: List[int], k: int) -> int:
```