

# 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**,1,1,1,1] 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**,1,**1**,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:
```