

55. Check If All 1's Are at Least Length K Places Away

Given an binary array nums and an integer k, return true if all 1's are at least k places away from each other, otherwise return false.

Example 1:

Input: nums = [1,0,0,0,1,0,0,1], k = 2

Output: trueExplanation: Each of the 1s are at least 2 places away from each other/

Example 2:

Input: nums = [1,0,0,1,0,1], k = 2Output: falseExplanation: The second 1 and third 1 are only one apart from each other.

AIM: To Check If All 1's Are at Least Length K Places Away

PROGRAM:

```
def k_length_apart(nums, k):  
    distance = k  
    for num in nums:  
        if num == 1:  
            if distance < k:  
                return False  
            distance = 0  
        else:  
            distance += 1  
    return True  
print(k_length_apart([1,0,0,0,1,0,0,1], 2))  
print(k_length_apart([1,0,0,1,0,1], 2))
```

OUTPUT: O(n)