Problem 930: Binary Subarrays With Sum

Problem Information

Difficulty: Medium
Acceptance Rate: 67.52%
Paid Only: No
Tags: Array, Hash Table, Sliding Window, Prefix Sum

Problem Description

Given a binary array `nums` and an integer `goal`, return _the number of non-empty**subarrays** with a sum_ `goal`.

A **subarray** is a contiguous part of the array.

Example 1:

Input: nums = [1,0,1,0,1], goal = 2 **Output:** 4 **Explanation:** The 4 subarrays are bolded and underlined below: [_**1,0,1**_ ,0,1] [_**1,0,1,0**_ ,1] [1,_**0,1,0,1**_] [1,0,_**1,0,1**_]

Example 2:

Input: nums = [0,0,0,0,0], goal = 0 **Output:** 15

Constraints:

* `1 <= nums.length <= 3 * 104` * `nums[i]` is either `0` or `1`. * `0 <= goal <= nums.length`

Code Snippets

C++:

```
class Solution {
public:
```

```
int numSubarraysWithSum(vector<int>& nums, int goal) {

}
};
```

Java:

```
class Solution {
public int numSubarraysWithSum(int[] nums, int goal) {

}
}
```

Python3:

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