

COUNT SUBARRAYS WITH SUM K

★ In this problem, we are supposed to return the number of subarrays which have sum K.

Brute force solution for all subarray related questions is to calculate sum of each subarray possible.

Optimal Solution is given by the concept of prefix sum, which involves the usage of a hashmap or a hasharray. Whenever we pass an element, we will store the sum in a hashmap and keep a check for if the difference between any two sums is required sum, we add one to our counter.

Pseudocode :

```
sub Arrays With Sum K (arr, N, K) {  
    counter = 0, sum = 0  
    mpp[0] = 1  
    map mpp  
    for (i = 0 → N) {  
        sum += arr[i]  
        rem = sum - K  
        counter += mpp[rem]  
        mpp[sum] += 1  
    }
```

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