```
class Solution {
   public int subarraySum(int[] nums, int k) {
     int sum = 0, cnt = 0;
     Map<Integer, Integer> mp = new HashMap<>();
     mp.put(0, 1);
     for (int i : nums) {
        sum += i;
        if (mp.containsKey(sum - k)) {
            cnt += mp.get(sum - k);
        }
        mp.put(sum, mp.getOrDefault(sum, 0)+1);
     }
     return cnt;
   }
}
```

Given an array of integers and an integer  $\mathbf{k}$ , you need to find the total number of continuous subarrays whose sum equals to  $\mathbf{k}$ .

## **Example 1:**

```
Input:nums = [1,1,1], k = 2
Output: 2
```