# **Siddhant and Money**



#### **Problem Statement**

Siddhant likes Permutations and Combinations.

Aware of his interests, his Math professor asks him a simple question.

He gives him a pile of currency notes. He is allowed to remove a finite number of notes from the top and bottom of the pile.

What is the number of ways in which he can remove the notes such that the final pile that is left has a total currency value  $= \mathbf{k}$ , where  $\mathbf{k}$  is a constant?

#### **Input Format**

The first line contains **N** the number of notes in the pile.

The second line contains  $\mathbf{k}$  the constant value he is interested in (refer problem statement details as above).

The third line contains N space separated positive integers ( $A_1$  through  $A_n$ ): the values of the currency notes from top to bottom.

#### **Constraints:**

 $1 <= N <= 10^5$ 

 $1 < = k < = 10^{10}$ 

 $1 < = A_i < = 10^5$ 

#### **Output Format**

A single positive integer: the number of ways he can remove some notes from the top and bottom such that the sum of the remaining notes in the pile =  $\mathbf{k}$ .

## Sample Input

5

12345

#### **Sample Output**

2

### **Explanation**

He can attain a pile of total value = 3 in 2 ways:

- 1. He removes notes 1 and 2 from top of pile and 4 and 5 from bottom of pile. Thus he is left with {3}.
- 2. He does not remove any note from the top of pile and 3,4 and 5 from bottom of pile. Thus he is left with {1,2}.

(Note that he can remove a finite number of notes; this includes not removing any notes at all)