

Problem C. the-birthday-bar

OS Linux

Two children, Lily and Ron, want to share a chocolate bar. Each of the squares has an integer on it.

Lily decides to share a contiguous segment of the bar selected such that:

- The length of the segment matches Ron's birth month, and,
- The sum of the integers on the squares is equal to his birth day.

Determine how many ways she can divide the chocolate.

Example

$s = [2, 2, 1, 3, 2]$

$d = 4$

$m = 2$

Lily wants to find segments summing to Ron's birth day, $d = 4$ with a length equalling his birth month, $m = 2$. In this case, there are two segments meeting her criteria: $[2, 2]$ and $[1, 3]$.

Function Description

Complete the *birthday* function in the editor below.

birthday has the following parameter(s):

- *int s[n]*: the numbers on each of the squares of chocolate
- *int d*: Ron's birth day
- *int m*: Ron's birth month

Returns

- *int*: the number of ways the bar can be divided

Input Format

The first line contains an integer n , the number of squares in the chocolate bar.

The second line contains n space-separated integers $s[i]$, the numbers on the chocolate squares where $0 \leq i < n$.

The third line contains two space-separated integers, d and m , Ron's birth day and his birth month.

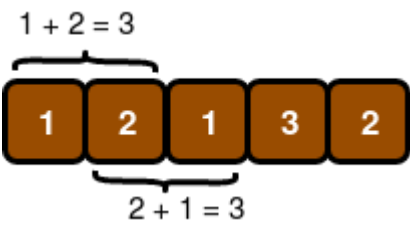
Constraints

- $1 \leq n \leq 100$
- $1 \leq s[i] \leq 5$, where $(0 \leq i < n)$
- $1 \leq d \leq 31$
- $1 \leq m \leq 12$

Input	Output
5 1 2 1 3 2 3 2	2

Explanation 0

Lily wants to give Ron $m = 2$ squares summing to $d = 3$. The following two segments meet the criteria:



Input	Output
6 1 1 1 1 1 1 3 2	0

Explanation 1

Lily only wants to give Ron $m = 2$ consecutive squares of chocolate whose integers sum to $d = 3$. There are no possible pieces satisfying these constraints:



Thus, we print 0 as our answer.

Input	Output
1 4 4 1	1

Explanation 2

Lily only wants to give Ron $m = 1$ square of chocolate with an integer value of $d = 4$. Because the only square of chocolate in the bar satisfies this constraint, we print **1** as our answer.