

Subarray Sums

time limit per test: 1 second (2 seconds for Python)
memory limit per test: 500 megabytes
input: standard input
output: standard output
points: 100 · problem code: subarraysumsii

Given an array of n integers, your task is to count the number of subarrays having sum x .

Input

The first input line has two integers n and x : the size of the array and the target sum.

The next line has n integers $a_1, a_2, \dots, a_n$: the contents of the array.

Output

Print one integer: the required number of subarrays.

Constraints

- $1 \leq n \leq 2 \cdot 10^5$
- $-10^9 \leq x, a_i \leq 10^9$

Example 1

Input

```
5 7
2 -1 3 5 -2
```

Output

```
2
```

Explanation

The subarrays with sum 7 are $[-1, 3, 5]$ and $[2, -1, 3, 5, -2]$.