Devu's Diet

Devu is working hard to manage his diet. Each day, he both *consumes* and *burns* a certain number of calories.

Devu keeps N days of calorie data in 2 arrays of size N: array C (calories consumed) and array B (calories burned). He wants to know the number, k, of index ranges $[l,r]$ such that: $$C[l] + C[l+1] + \ldots + C[r] \ge B[l] + B[l+1] + \ldots + B[r] \text{, where } 0 \le l \le r \le N-1 $$ Help Devu find k, then print it on a new line.

Input Format

The first line contains an integer, N, denoting the number of days tracked in C and B.
The second line contains N space-separated integers describing array C.
The third line contains N space-separated integers describing array B.

Constraints

- $1\le N \le 2 \times 10^5$

- $0\le C[i] \le 10^9$

- $ 0\le B[i] \le 10^9$

Output Format

Print k on a new line.

Sample Input

```
3
1 2 3
3 2 1
```

Sample Output

```
4
```

Explanation

$C=\{1, 2, 3\}$ $B=\{3, 2, 1\}$

The following $[l, r]$ ranges satisfy the requirements in the problem statement:

1. $[0,2]$: $C[0] + C[1] + C[2] \ge B[0] + B[1] + B[2] \rightarrow 1 + 2 + 3 \ge 3 + 2 + 1 \rightarrow 6 \ge 6$

2. $[1,2]$: $2 + 3 \ge 2 + 1 \rightarrow 5 \ge 3$

3. $[1,1]$: $2 \ge 2$

4. $[2,2]$: $3 \ge 1$

Thus, $k=4$, so we print 4 on a new line.