

Not Cross Product

Write a program to compute the dot product of two vectors

Input format

The first line will contain a single integer n : the number of elements (dimensions) in each vector.
The next line will contain n integers separated by spaces where i th integer (0-based indexing) is the i th element of the first vector.

The next line will contain n integers separated by spaces where the i th integer (0-based indexing) is the i th element of the second vector.

Output format

A single number: dot product of the 2 vectors

Constraints

$1 \leq n \leq 1e5$ $-100000 \leq \text{each element of both vectors} \leq 100000$

Sample Input 1

```
10
713 39 571 440 227 -19 -348 -88 870 -268
-510 -784 -344 516 747 -818 122 -26 131 -839
```

Sample Output 1

```
120175
```