Problem A
Inner Product

Time limit: 1 second
Memory limit: 256 megabytes

Problem Description

Given two n-dimensional vectors $\vec{x} = (x_1, x_2, \ldots, x_n)$ and $\vec{y} = (y_1, y_2, \ldots, y_n)$. Write a program to compute $\vec{x} \cdot \vec{y} = \sum_{i=1}^{n} x_i y_i$.

Input Format

The input contains at most 500 test cases. Each case consists of two lines. The first line consists of n integers $x_1, \ldots, x_n$ separated by blanks, and the second line consists of n integers $y_1, \ldots, y_n$ separated by blanks. You should compute $\vec{x} \cdot \vec{y} = \sum_{i=1}^{n} x_i y_i$. You may assume that n is at least 1 and at most 100, and $x_1, \ldots, x_n, y_1, \ldots, y_n$ are unsigned 32-bit integers. The input is terminated by end-of-file, and it may contains trailing spaces.

Output Format

For each case, output a decimal integer in one line.

Sample Input

```
1
1
1 2 3 4 5 6 7 8 9
9 8 7 6 5 4 3 2 1
```

Sample Output

```
1
165
```