

Summer Institute '17 Contest 1 P10 - Trading Cards

Time limit: 1.4s **Memory limit:** 256M

Alice and Carl love collecting trading cards. They both have large collections, and want to know how much their collections are worth. Both of their collections consist of several types of cards, each with an associated value.

Input Specification

The first line of input consists of a single integer, n ($1 \leq n \leq 200$), the number of card types Alice has. The second line of input consists of n integers, a_1 through a_n , where a_i represents the value of Alice's i^{th} card type ($1 \leq a_i \leq 100$). The third line of input consists of n integers, b_1 through b_n , where b_i represents how many cards of the i^{th} type Alice has ($1 \leq b_i \leq 100$). The fourth line of input consists of a single integer, m ($1 \leq m \leq 200$), the number of card types Carl has. The fifth line of input consists of m integers, c_1 through c_m , where c_i represents the value of Carl's i^{th} card type ($1 \leq c_i \leq 100$). The sixth line of input consists of m integers, d_1 through d_m , where d_i represents how many cards of the i^{th} type Carl has ($1 \leq d_i \leq 100$).

Output Specification

On a single line, output two space separated integers: the value of Alice's collection and the value of Carl's collection, respectively.

Sample Input 1

```
4
1 2 3 4
3 5 3 1
3
10 4 60
3 20 1
```

Sample Output 1

```
26 170
```