

# WCIPEG 2018 ECOO Qualifier P1 - Bincent's Billows

---

**Time limit:** 1.0s    **Memory limit:** 256M

---

## WCIPEG 2018 ECOO Qualifier

For a living, Bincent runs a company which produces snacks. One of his most popular products are Billows™, for which he constantly receives custom orders.

Usually, the accountants he employs around the country are responsible for processing custom orders. However, the Accountants' Committee for Safe Labour (ACSL) has initiated a country-wide strike. As a result, Bincent must personally review the orders placed to each factory, and calculate the amount of material that each factory requires to complete all orders.

Conveniently, each size is defined by the amount of material required. Can you help Bincent find the amount of material required at each factory?

## Input Specification

---

The first line of input will contain a single integer,  $F$ , the number of factories.

Each of the  $F$  factories will be described by 3 lines of input.

The first line will contain an integer  $N$ , the number of different sizes produced at the factory.

The second line will contain the space separated integers  $a_1, a_2, \dots, a_n$ , each representing a different size.

The third line will contain the space separated integers  $b_1, b_2, \dots, b_n$ , where  $b_i$  represents the number of orders for size  $a_i$ .

All integers provided as input will be between 0 and 10 000, inclusive.

## Output Specification

---

The output should have  $F$  integers on separate lines, each integer representing the amount of material which must be transported to each factory.

## Sample Input

---

```
2
3
1 2 5
5 2 0
5
1 10 100 1000 10000
1 3 7 1 9
```

# Sample Output

---

```
9
91731
```