

Problem A: Cookie Calories

Filename: cookiecals

Time limit: 1 second

On Friday, some of the campers were tempted to buy Insomnia Cookies!

In past years, Arup would have encouraged this behavior, but now, as his doctor is warning him about sweets, he would like the campers to learn to stay away from them at an earlier age, to develop healthy eating habits.

In order to do this, Arup is going to notify the campers of exactly how many calories are in their cookie orders. But, due to his extreme laziness, he is asking the campers to write a program to do the calculation for him.

Problem

Given the number of calories in each type of cookie and the number of each cookie ordered, determine the total number of calories contained in the cookie order.

Input

Input will begin with a single integer c representing the number of test cases. The first line of each test case contains a single integer, n , representing the number of types of cookies for the test case. The second line of each test case contains n space separated integers, c_1, c_2, \dots, c_n , representing the number of calories in cookie #1, cookie #2, ... cookie # n , respectively. The third line of each test case contains n space separated integers, a_1, a_2, \dots, a_n , representing the number of cookie #1, cookie #2, ..., cookie # n , for the order, respectively.

Output

For each test case, on a line by itself, output the total number of calories in all of the cookies in the order.

Input Bounds and Corresponding Credit

100 Points
<ul style="list-style-type: none">• $1 \leq c \leq 20$• $1 \leq n \leq 20$• $200 \leq c_i \leq 2000, 1 \leq i \leq n$• $0 \leq a_i \leq 20, 1 \leq i \leq n$

Samples

Input	Output
2	700
3	13000
200 400 250	
1 0 2	
5	
200 1000 300 500 2000	
0 3 0 0 5	