Problem B. NYCU CAKE CLUB

Time limit	2000 ms
Memory limit	256MB

Problem Description

A member of the Chiao Tung University Cake Club has N cake orders to fulfill. Each day, the member can complete only one cake. For each order, they know how many days it will take to make the cake, as well as the penalty cost for each day the order is delayed. The delay is measured as the number of days from today until the cake order begins production (thus, only the first cake order incurs no delay penalty).

For example, consider the example test case with four cake orders. If the production order is 1, 2, 3, 4, the penalty cost would be calculated as:

$$0 \times 4 + 1000 \times 3 + 4 \times 2 + 6 \times 5 = 3038$$

However, if the production order is 2, 1, 3, 4, then the penalty cost becomes:

$$0 \times 1000 + 1 \times 4 + 4 \times 2 + 6 \times 5 = 42$$

In this case, the second production order results in a lower penalty cost (in fact, the minimum possible).

Your task is to write a program to help the Cake Club member determine the optimal sequence for completing the N cake orders to minimize the total penalty cost. And If you'd like to order cakes from our club, you can check our Instagram for pre-orders available during the sports event.

Input format

The first line contains an integer T ($1 \leq T \leq 5$), representing the number of test cases. For each test case:

- The first line contains an integer N ($1 \leq N \leq 100000$), the number of cake orders.
- The second line contains N integers, representing the number of days required to complete each cake order.
- The third line contains N integers, representing the penalty cost per day of delay for each cake order.

Output format

For each test case, output a single line with N integers, representing the optimal order of fulfilling the cake orders (from 1 to N) to minimize the total penalty cost. Note that a blank line must be printed between each test case.
If multiple solutions are possible, print the one that is lexicographically smallest.

Subtask score

Subtask	Score	Additional Constraints
1	10	$n \leq 10$
2	50	$n \leq 1000$
3	40	No constraints

Sample

Sample Input 1

```
2
4
3 1 2 5
4 1000 2 5
5
3 1 8 2 5
4 1000 8 2 6
```

Sample Output 1

```
2 1 3 4

2 1 5 3 4
```

Notes