

Row

Introduction

- Line up according to height! – thundered the Major.
- Good. Slow, but good. And now line up according to age.
- Too long! It's taking too long, you sad sacks! Again – now line up according to height and age at the same time!
- But Major, I don't think that's possible...
- An order is an order! If you can't do it in one row, form more than one! Do I always have to think for you?!

Problem

Propose how to organize the soldiers into rows. The privates, not wanting to irritate the Major further, must form as few rows as possible.

Input data

Test data are given in `row*.in` files.

The first line of a test set includes one integer T denoting the number of tests. Description of each test consists of information regarding the privates.

The first line of the description of each test includes one integer N , denoting the number of privates. Each of the next two lines consists of N different integers separated with single spaces. The numbers are the unique identifiers of the privates. The first line, with numbers a_1, a_2, \dots, a_N , represents the order of soldiers taking into account the height criterion. The second line, with numbers b_1, b_2, \dots, b_N , represents the order of soldiers sorted according to the age criterion.

$$\begin{aligned}
 1 &\leq T \leq 10 \\
 1 &\leq N \leq 10^6 \\
 1 &\leq a_i, b_i \leq N \\
 i \neq j &\Rightarrow (a_i \neq a_j \wedge b_i \neq b_j)
 \end{aligned}$$

Output data

For each test give any arrangement of all soldiers into as few rows as possible, privates being sorted in each row according to both height and age.

The first output line should consist of one integer K , denoting the number of rows. Each of the following K lines should describe one row. Description of a single row consists of the number R , denoting the number of soldiers in a given row and then R different numbers – soldiers' identifiers in a given row. Each soldier must be included in exactly one of the output rows. Soldiers' identifiers must be separated with single spaces.

Example

For the input data:

```
2
6
1 2 3 4 5 6
2 3 6 1 4 5
5
3 4 1 5 2
4 5 3 2 1
```

The correct answer is:

```
2
3 2 3 6
3 1 4 5
2
3 4 5 2
2 3 1
```

Score

If the following conditions are satisfied:

- output data is in the correct format,
- all soldiers are correctly organized into rows according to both the height criterion and the age criterion,
- there is a minimum number of rows,

the score for the set is 1. Otherwise the score is 0.