Sort

In order to automate his workload at the factory, Mirko wants to put up to use his old box-sorting robot. There are N boxes in the factory, and each box is labelled with an unique integer in range 1 to N. Mirko's task is to sort the boxes in the ascending order of their labels.
Sorting robot can only perform one specific operation: given the sequence of positions, robot can do a cyclic swap of boxes at those positions. Given sequence does not contain any position more than once.
For example, let's assume that the boxes are currently in order [4, 1, 5, 2, 3], and Mirko provides his robot with the sequence [2, 1, 3]. Robot will then rearrange the boxes so that the second box will go to position 1, first box will go to the position 3, and the third one will take the position 2. Obtained sequence of labels is [1, 5, 4, 2, 3].
Write a program that will sort the boxes using the minimal number of operations. Each sequence given to the robot can be arbitrary long.

Input

The first line of input contains integer N ($2 \leq N \leq 1000$), the number of boxes in the factory.
The following line contains N integers in range 1 to N, labels of boxes in order. No integer appears twice.

Output

The first line should contain the integer X, minimum number of operations required. The following X lines should contain the sequences given to robot, one sequence per line. Each line should start with the length of the sequence, followed by a colon, a single white space, and then space seperated sequence of positions.
NOTE: There may be multiple solutions and you can output any of them.

Sample input	Sample output
3 3 2 1	1 2: 3 1
5 2 3 1 5 4	2 3: 1 2 3 2: 5 4
5 1 2 3 4 5	0