Time limit: 1s

H Hungry Henk

Henk is hungry. He has not eaten anything in the past 42 minutes. His belly is rumbling and he is craving some good food. Luckily for Henk, this is not the first time that he is hungry, so he knows exactly which combinations of dishes can make his belly feel full again. Henk, along with many others, calls these combinations of dishes meals. Unfortunately, Henk is very indecisive, so he wants somebody else to make a choice for him. He hands you a list of meals of which he knows that they will make his belly full, and asks you to recommend him exactly one complete meal from this list.



CC BY 2.0 by Christian Cable on Flickr, cropped

Input

The input consists of:

- One line containing a single integer $1 \le n \le 100$, the number of meals.
- n lines, one for each meal. Each of these lines contains a single integer $1 \le d \le 42$, followed by a list of d dishes that the meal consists of.

Each dish is described using at most 20 lowercase English characters.

Output

Output one line containing m, the number of dishes that you recommend, followed by m lines, containing the dishes you recommend.

If there are multiple possible solutions, you may output any one of them.

Sample Input 1

Sample Output 1

| 3 | 2 |
|---------------------|-------------|
| 2 bigburger fries | garlicbread |
| 2 pizza garlicbread | pizza |
| 2 macaroni cheese | |

Sample Input 2

Sample Output 2

| 4 | 3 |
|-------------------------|----------|
| 2 pasta pizza | pasta |
| 3 icecream sweets pasta | icecream |
| 1 megapizza | sweets |
| 2 icecream pizza | |