Task: DAR
Free Calls

Farias Brito High School Programming Camp, Day 3. Available memory: 128 MB. *27.07.2016*

A cell phone company named Bytel has prepared a super-awesome offer for its customers. Byteasar is responsible for advertising the offer. His job consists in calling the customers of the company by himself and informing them about the offer. Byteasar has found this task quite time-consuming, so he would like to optimize his job in some way.

Bytel has n customers, numbered 1 through n. Each customer can perform free unlimited calls to one number selected by the customer. Byteasar thinks that the new offer is so awesome that each customer informed about it will share her knowledge with someone else. As Bytel customers are known to optimize their costs, each customer would inform only one person about the offer, namely the one she can call for free.

Byteasar has decided to perform exactly k calls to the company's customers. He wonders which customers to choose so that the number of customers eventually informed about the offer is maximized.

Input

The first line of input contains two integers n and k ($1 \le k \le n$) that denote the number of Bytel's customers and the number of calls that Byteasar is going to perform. The i-th of the following n lines contains one integer a_i ($1 \le a_i \le n$) representing the free number of the customer number i (the value $a_i = i$ corresponds to a customer who has not selected any free number yet; such a customer would not inform anyone else about the offer).

Output

The first line of output should contain one integer w equal to the number of Bytel's customers eventually informed about the offer provided that Byteasar performs his calls in an optimal way. The second line should contain k integers that represent the numbers of customers that Byteasar should call. All numbers in the second line should be different. If there are multiple correct answers, your program should select any one of them.

Example

For the input data:

```
12 2
4
1
1
9
10
3
4
8
7
5
8
7
```

the correct result is:

```
8
6 11
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Grading

Subtask	Constraints	Points
1	$n \le 4000$	50
2	$n \le 1\,000\,000$	50