D. Longest Subsequence

time limit per test: 2 seconds
memory limit per test: 256 megabytes
input: standard input
output: standard output

You are given array a with n elements and the number m. Consider some subsequence of a and the value of least common multiple (LCM) of its elements. Denote LCM as l. Find any longest subsequence of a with the value $l \leq m$.

A subsequence of a is an array we can get by erasing some elements of a. It is allowed to erase zero or all elements.

The LCM of an empty array equals 1.

Input

The first line contains two integers n and m $(1 \leq n, m \leq 10^6)$ — the size of the array a and the parameter from the problem statement.

The second line contains n integers a_i $(1 \leq a_i \leq 10^9)$ — the elements of a.

Output

In the first line print two integers l and k_{max} $(1 \leq l \leq m, 0 \leq k_{max} \leq n)$ — the value of LCM and the number of elements in optimal subsequence.

In the second line print k_{max} integers — the positions of the elements from the optimal subsequence in the ascending order.

Note that you can find and print any subsequence with the maximum length.

Examples

input
7 8 6 2 9 2 7 2 3
output
6 5 1 2 4 6 7

input
6 4 2 2 2 3 3 3
output
2 3 1 2 3