Divisibility Relation

English Vietnamese

Given n positive integers. Your task is to select a maximum number of integers so that there are no two numbers a, b in which a is divisible by b.

Input

- Line 1: n ($1 \le n \le 200$).
- Line 2: n positive integers $a_1, a_2, ..., a_n$ ($1 \le a_i \le 10^9$).

Output

- Line 1: k, the maximum number of integers that can be selected.
- Line 2: k selected integers.

Example

Input
8
1 2 3 5 6 8 7 9

Output
5
5 6 8 7 9

Input
4
2 3 2 3

Output
2
2 3