Find The Number

You will be given an array A of N elements. You need to find all the numbers X, such that if you divide all the elements from array A by X you will get same remainder and X is greater than 1.

Input:

Input starts with an integer **T (≤ 10)**, denoting the number of test cases.

Each case contains an integer **N (1 ≤ N ≤ 100)** denoting the number of elements of array A. The next line will contain **n** integers separated by spaces, denoting the elements of the array A. Each of these integers will be between 1 and 1 000 000 000.

The input data will guarantee that at least one integer X will always exist.

Output:

For each case of input, print the case number in the first line then in second line print all integers X separated by spaces, in increasing order.

Sample Input	Sample Output
2 3 8 16 32 5 5 17 23 14 83	Case 1: 2 4 8 Case 2: 3

Limits:

Language	Time	Memory
C	1 Second	50MB
C++	1 Second	50MB
Java	4 Second	50MB
C#	4 Second	50MB

For Java, use main as class name, do not mark your class as public and do not use custom package. Follow Ideone rule for java compilation, if you get compile error, try your code in ideone.com to see your problem.