Prime Factorization

Time limit: 1.0s **Memory limit:** 128M

Oh no! **Phoenix1369** is taking ICS this semester and once again, he has left his homework to the last minute. Luckily, it only consisted of one question:

> Given a list of natural numbers, output the prime factorization of each number.

Unfortunately, he was too busy typing up this problem statement to do it.

Would you write a program that does his homework for him? As compensation, he will gladly reward you with five points.

Input Specification

The input begins with an integer N, where $1 \leq N \leq 1000$, indicating the number of lines to follow.
The next N lines will each contain a test case in the form of a single natural number M, where $2 \leq M \leq 10^7$.

Output Specification

For each integer M, your program should output the prime factorization of M on a single line, separated with single spaces and sorted in non-decreasing order.

Sample Input

```
5
3
13
42
666
1369
```

Sample Output

```
3
13
2 3 7
2 3 3 37
37 37
```