E. Fox And Dinner

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

Fox Ciel is participating in a party in Prime Kingdom. There are n foxes there (include Fox Ciel). The i-th fox is a_i years old.

They will have dinner around some round tables. You want to distribute foxes such that:

1. Each fox is sitting at some table.
2. Each table has at least 3 foxes sitting around it.
3. The sum of ages of any two adjacent foxes around each table should be a prime number.

If k foxes $f_1, f_2, ..., f_k$ are sitting around table in clockwise order, then for $1 \le i \le k - 1$: f_i and f_{i+1} are adjacent, and f_1 and f_k are also adjacent.

If it is possible to distribute the foxes in the desired manner, find out a way to do that.

Input

The first line contains single integer n ($3 \le n \le 200$): the number of foxes in this party.

The second line contains n integers a_i ($2 \le a_i \le 10^4$).

Output

If it is impossible to do this, output "Impossible".

Otherwise, in the first line output an integer m (): the number of tables.

Then output m lines, each line should start with an integer k -=– the number of foxes around that table, and then k numbers — indices of fox sitting around that table in clockwise order.

If there are several possible arrangements, output any of them.

Examples

input
4 3 4 8 9
output
1 4 1 2 4 3

input
5 2 2 2 2 2
output
Impossible

input
12 2 3 4 5 6 7 8 9 10 11 12 13
output

```
1
12 1 2 3 6 5 12 9 8 7 10 11 4
```

input

```
24
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25
```

output

```
3
6 1 2 3 6 5 4
10 7 8 9 12 15 14 13 16 11 10
8 17 18 23 22 19 20 21 24
```

Note

In example 1, they can sit around one table, their ages are: 3-8-9-4, adjacent sums are: 11, 17, 13 and 7, all those integers are primes.

In example 2, it is not possible: the sum of 2+2 = 4 is not a prime number.