

## Largest list of prime numbers

Your task is to write a function that, given a number N, find the largest list of prime numbers that will give N after summation of the list.

### Basic Idea:

A number can be expressed as summation of longest list of prime numbers only when it is expressed only with 2 and 3.

### Input

The first line of input contains number N.

### Output

The first line contains the largest list of prime numbers.

### Sample input

### Sample output

7	2 2 3
23	2 2 2 2 2 2 2 2 2 3