Task B2. CALCULATOR GAME

Using a pocket calculator, enter a positive integer *K* and press "+". The calculator still shows the number *K*. Then again enter the number *K*. After pressing the "+" key for the second time, the result is: *K* + *K*. The game goal is to obtain a number, consisting of equal digits only, by repeating this operation many times,. Write a program **calcgame** that determines whether it is possible to reach the goal.

If possible, what is the number, which consists of equal digits only and is obtained by multiple summing?

Input

On the standard input, a positive integer *K* is given.

Output

If reaching the goal is impossible, print "Impossible". If possible, a line of the standard output should contain two integers separated by a space: the first is the digit itself and the secong is the amount of digits of the obtained number.

Constrains

$1 \le K \le 999$

Examples

Input	Output
37	1 3

Explanation:

37 + 37 + 37 = 111

Input	Output
25	Impossible