

3 Fibonacci sum

Problem Statement:

In mathematics the **Fibonacci series** or **Fibonacci sequence** are the numbers in the following integer sequence.

0,1,1,2,3,5,8,13,21.... By definition, the first two numbers in the Fibonacci sequence are 0 and 1, and each subsequent number is the sum of the previous two.

In mathematical terms, the sequence F_n of Fibonacci numbers is defined by the recurrence relation.

$$F_n = F_{n-1} + F_{n-2}$$

Your task is to divide given Fibonacci number n by three different Fibonacci numbers (a, b, c) (without zero) or say that it is impossible.

Input:

Input starts with an integer T ($T \leq 1000$), denoting the number of test cases. Each case starts with an integer n ($0 \leq n < 10^{12}$). It is guaranteed that n is a Fibonacci number.

Output:

Print three required numbers: a, b and c ($a < b < c$) (without zero). a, b, c must be Fibonacci number and the total sum of a, b, c equal to n . If there is no answer for the test you have to print "**impossible**" (without the quotes).

Sample Input/Output:

Sample Input	Sample Output
1	1 2 5
8	

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