C. Vladik and fractions

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

Vladik and Chloe decided to determine who of them is better at math. Vladik claimed that for any positive integer n he can represent fraction $\frac{2}{n}$ as a sum of three distinct positive fractions in form $\frac{1}{m}$.

Help Vladik with that, i.e for a given n find three distinct positive integers x, y and z such that $\frac{2}{n} = \frac{1}{x} + \frac{1}{y} + \frac{1}{z}$.

Because Chloe can't check Vladik's answer if the numbers are large, he asks you to print numbers not exceeding 10^9.

If there is no such answer, print `-1`.

Input

The single line contains single integer n ($1 \le n \le 10^4$).

Output

If the answer exists, print 3 distinct numbers x, y and z ($1 \le x, y, z \le 10^9$, $x \ne y$, $x \ne z$, $y \ne z$). Otherwise print `-1`.

If there are multiple answers, print any of them.

Examples

input	Copy
3	

output	Copy
2 7 42	

input	Copy
7	

output	Copy
7 8 56	