



The 2021 ICPC Greater NY Regional Contest

D • Sequinary Numerals

A sequinary numeral is a sequence of digits:

$$d_n d_{n-1} \dots d_1 d_0$$

where d_n is 1 or 2 and the others are 0, 1, or 2.

It represents the rational number:

$$d_0 + d_1 * (3/2) + d_2 * (3/2)^2 + \dots + d_n * (3/2)^n$$

Write a program which takes a sequinary numeral as input and returns the number it represents as a proper fraction.

Input

The single line of input contains a sequinary numeral of no more than 32 digits.

Output

Output consists of a single line.

If the result is an integer, the output is the decimal integer. Otherwise, the output is **N** a single space and **K/M** where **N**, **K** and **M** are decimal integers where **K < M** and **K/M** is in lowest terms ($\text{GCD}(K, M) = 1$).

Sample Input	Sample Output
2101	10

Sample Input	Sample Output
201	5 1/2