Problem F. Faulty Fraction

Time limit: 2 seconds
Memory limit: 1024 megabytes

Felix is studying basic arithmetic at school. Today he learned division. As a final task, he calculated the result of the division of a positive integer a by a positive integer b. The result was a positive integer c, since a was divisible by b. Felix wrote $a \div b = c$ in his notebook and went outside to play football.

His little sister Fiona had been watching his studies with great interest. When Felix left, she decided to play a little trick on him: she took his notebook and erased the '$\div$' sign from the equation. As a result, the left-hand side of the equation became a single string of digits s.

Once Felix came back, he saw $s = c$ in his notebook. Unfortunately, he forgot the original values of a and b. Now he needs to split s back into two parts using the '$\div$' sign to restore a correct division equation.

Help Felix find positive integers a and b such that s is the concatenation of the decimal representations of a and b, and $a \div b = c$.

Input

The only line contains a string of digits s and an integer c. Both s and c consist of at least 1 and at most 10^5 digits and do not have leading zeros.

It is guaranteed that s is a concatenation of two positive integers a and b written without leading zeros such that $a \div b = c$.

Output

Print two positive integers a and b without leading zeros such that s is the concatenation of a and b, and $a \div b = c$. If there are multiple answers, print any of them.

Examples

standard input	standard output
42 2	4 2
2025225 9	2025 225
239239239 1001	239239 239