"Oooooooooooo!

If I could do the easy mathematics like my school days!! I can guarantee, that I'd not make any mistake this time!!"

Says a smart university student!!

But his teacher even smarter – "Ok! I'd assign you such projects in your software lab. Don't be so sad."

"Really!!" – the students feels happy. And he feels so happy that he cannot see the smile in his teacher's face.

The first project for the poor student was to make a calculator that can just perform the basic arithmetic operations.

But like many other university students he doesn't like to do any project by himself. He just wants to collect programs from here and there. As you are a friend of him, he asks you $\frac{100)1234}{100} \left(\frac{1}{1234} \right)$ Ans. $\frac{1234}{1234} = \frac{100}{1234}$

to write the program. But, you are also intelligent enough to tackle this kind of people. You agreed to write only the (integer) division and mod (% in C/C++) operations for him.

Input

Input is a sequence of lines. Each line will contain an input number. One or more spaces. A sign (division or mod). Again spaces. And another input number. Both the input numbers are non-negative integer. The first one may be arbitrarily long. The second number n will be in the range $(0 < n < 2^{31})$.

Output

A line for each input, each containing an integer. See the sample input and output. Output should not contain any extra space.

Sample Input

110 / 100 99 % 10 2147483647 / 2147483647 2147483646 % 2147483647

Sample Output

1 9 1 2147483646