Problem H
Scientific Grading
Time limit: 1 second

You recently started working as a TA (teaching assistant) for your university's *Scientific Computing* class. Today, Professor introduced the *scientific notation*, where numbers are written in the form $m \times 10^n$ with a real number m (the *significand*) and an integer n (the *exponent*). At the end of class, she gave students the following assignment.

Given two numbers x, y in scientific notation, perform the following four arithmetic operations:

- $x + y$
- $x - y$
- $x \times y$
- x/y

As a strict grader, you decided to write a program to grade students' answers. You mark a solution correct if and only if *both* relative and absolute errors are *less than* 10^{-9} (not including 10^{-9}). If the correct answer is 0, then 0 is the only acceptable answer. Otherwise, a student's answer z will be compared to the correct answer $\tilde{z}$, and the relative and absolute errors are computed as $\frac{|z-\tilde{z}|}{|\tilde{z}|}$ and $|z - \tilde{z}|$, respectively.

Input

The first line of input contains the value of x, and the second line contains the value of y. The next four lines contain a student's answer to $x + y$, $x - y$, $x \times y$, and x/y. All numbers are in the form of `<SIGNIFICAND>e<EXPONENT>`. The significand m starts with a sign (+ or −), followed by one digit, a period (`.`), and *exactly* nine digits. The exponent n also starts with a sign (+ or −) and is followed by an integer between 0 and 10^9, inclusively. The value is computed by $m \times 10^n$. The value 0 is always represented as `+0.000000000e+0`, and for any nonzero values the first digit of their significand is not 0. It is guaranteed that x and y are both nonzero.

Output

For each student solution, output `Correct` if it is considered correct and `Incorrect` otherwise. The first line of output indicates if the student's solution to $x + y$ is correct, the second line indicates if their solution to $x - y$ is correct, the third line indicates if their solution to $x \times y$ is correct, and the fourth line indicates if their solution to x/y is correct.

Sample Input 1

```
+2.000000000e+1
+3.000000000e+2
+3.200000000e+2
-2.800000000e+2
+6.000000000e+3
+6.666666667e-2
```

Sample Output 1

```
Correct
Correct
Correct
Correct
```

Sample Input 2

```
+1.000000000e-1
+1.000000000e-1
+2.000000003e-1
+1.000000000e-18
+1.000000002e-2
+1.000000001e+0
```

Sample Output 2

```
Incorrect
Incorrect
Incorrect
Incorrect
```