

4275 Rational Number Approximation

It is well-known that any rational number can be represented as a fraction a/b .

Sometimes the denominator b is a very large integer. Mathematicians hate to write down a tedious long integer, so they usually use two fractions a_1/b_1 and a_2/b_2 to approximate the rational number a/b such that $a_1/b_1 \leq a/b \leq a_2/b_2$ and the denominators b_1 and b_2 are not greater than a given integer N .

You are to help mathematicians to find such a_1/b_1 and a_2/b_2 so that the difference between a_2/b_2 and a_1/b_1 is as small as possible.

Input

The input consists of multiple test cases.

Each test case contains exactly one line, which gives three integers a , b and N .

($0 \leq a < 2 \times 10^9$, $a < b \leq 2 \times 10^9$, $1 \leq N < 2 \times 10^9$).

The last test case is followed by a line containing three zeros.

Output

For each test case, print a line containing the test case number (beginning with 1) followed by the two fractions a_1/b_1 and a_2/b_2 formatted as the sample output.

The greatest common divisor of a_1 and b_1 must be 1, so does that of a_2 and b_2 .

Sample Input

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1 3 1
1 3 2
0 0 0
```

Sample Output

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Case 1: 0/1 1/1
Case 2: 0/1 1/2
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