Mixed Fractions

Problem ID: mixedfractic CPU Time limit: 1 secon-Memory limit: 1024 MB

Difficulty: 1.5

Author: Michael Zmuda **Source:** 2014 ICPC North

Qualifier

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You are part of a team developing software to help students learn basic mathematics. You are to write one part of that software, which is to display possibly improper fractions as mixed fractions. A proper fraction is one where the numerator is less than the denominator; a mixed fraction is a whole number followed by a proper fraction. For example the improper fraction 27/12 is equivalent to the mixed fraction 2 3/12. You should not reduce the fraction (i.e. don't change 3/12 to 1/4).

Input

Input has one test case per line. Each test case contains two integers in the range $[1, 2^{31} - 1]$. The first number is the numerator and the second is the denominator. A line containing 0 0 will follow the last test case.

Output

For each test case, display the resulting mixed fraction as a whole number followed by a proper fraction, using whitespace to separate the output tokens.

Sample Input 1

Sample Output 1

27 12	2 3
2460000 98400	25 0
3 4000	0 3
0 0	