### DWITE Online Computer Programming Contest December 2005

## Problem 3

# **Reducing Fractions**

Reduce a fraction to its lowest mixed fraction.

For example: 168/75 = 2 18/75 = 2 6/25

The input file (DATA31.txt for the first submission and DATA32.txt for the second submission) will contain five lines of data. Each line will contain two integers, n the numerator and d the denominator, where  $-1000000 \le n$ ,  $d \le 1000000$ ,  $d \le 0$ . n and d will be separated by a single space.

The output file (**OUT31.txt** for the first submission and **OUT32.txt** for the second submission) will contain five lines of data, corresponding to each line of the input file. Each line will contain the fraction, reduced to its lowest mixed fraction. The whole number of the mixed fraction (if present) will be separated from the proper fraction (if present) by a single space. If the mixed fraction is negative, please place the negative sign at the beginning.

## Sample Input

168 75 485 -679 168 -75 35 35 -24 -18

## Sample Output

2 6/25 -5/7 -2 6/25 1 1 1/3