

RationalOperations Class

Write a class called RationalOperations, this class asks user for four integers: p1, q1, p2 and q2. These integers represent two rational numbers $p1/q1$ and $p2/q2$. Now write the menu method which gives option to user to perform various arithmetic operations on the rational numbers. Based upon the user choice, this program will add, subtract, multiply and divide two rational number. Finally you should display result of the operation as a rational number and not as a decimal. This program should run as long as user wants, after each result prompt user to choose another operation.

Description of some of the methods is:

- Write a method named **GCF**, this method receives two integers as parameter and returns the greatest common factor of these two integers.
- Write a method named **addRationals**, this method receives 4 parameters of type int. First two parameters represent the numerator and the denominator of the first rational number and next two parameters represent the numerator and the denominator of the second rational number. Further, this method adds two rational numbers, uses **GCF** method from 1 to reduce the sum of two rational. Finally, this method displays the sum of two rational number to screen. Note this method does not return anything.

UML for the Class

