

Day 18 coding Statement : Write a program to Add two fractions

Description

Get the values for numerator and denominator of two fractions, then add that fractions. Consider the following format

$$x_3/y_3 = (x_1/y_1) + (x_2/y_2)$$

here $x_3 = (x_1 * y_2) + (x_2 * y_1)$ and $y_3 = (y_1 * y_2)$

Input

2 3

4 3

Output

2/1

```
import java.util.Scanner;

public class Program {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter the value for x1 and y1: ");
        int x1 = sc.nextInt();
        int y1 = sc.nextInt();
        System.out.print("Enter the value for x2 and y2: ");
        int x2 = sc.nextInt();
        int y2 = sc.nextInt();
        int Div;
        int x3 = (x1 * y2) + (x2 * y1);
        int y3 = y1 * y2;
        if (x3 > y3)
            Div = y3;
        else
            Div = x3;
        for (int i = Div; i > 0; i--) {
            if (x3 % i == 0 && y3 % i == 0) {
                x3 = x3 / i;
                y3 = y3 / i;
            }
        }
        System.out.print("Sum of fractions is " + x3 + "/" + y3);
    }
}
```