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

$x3/y3 = (x1/y1) + (x2/y2)$

here $x3 = (x1*y2) + (x2*y1)$ and $y3 = (y1*y2)$

Input

2 3

4 3

Output

2/1

Code:

```
import java.io.BufferedReader;
import java.io.InputStreamReader;
import java.util.ArrayList;

class Day_18 {
    public static void main(String[] args) {
        int x1, y1, x2, y2, x3, y3;
        ArrayList<Integer> arr = new ArrayList<>();

        for (int i = 1; i <= 2; i++) {
            System.out.print("Enter Values for x" + i + " and y" + i + " separated by space :");

            BufferedReader BIS = new BufferedReader(new InputStreamReader(System.in));
            String[] twoNums = new String[2];

            try {
                twoNums = BIS.readLine().split(" ");
                arr.add(Integer.parseInt(twoNums[0]));
                arr.add(Integer.parseInt(twoNums[1]));
            } catch (Exception e) {
                System.out.println("Please Enter numeric value separed by one space only \n" + "
Error" + e);
```

```java
            return;
        }
    }

    x1 = arr.get(0);
    y1 = arr.get(1);
    x2 = arr.get(2);
    y2 = arr.get(3);

    x3 = (x1 * y2) + (x2 * y1);
    y3 = (y1 * y2);

    int temp;
    if (x3 > y3) {
        temp = x3;

    } else {
        temp = y3;
    }

    for (int i=temp;i>0;i--)
    {
        if(x3%i==0 && y3%i==0)
        {
            x3=x3/i;
            y3=y3/i;
        }
    }
    System.out.println(x3 + "/" + y3);

  }
}
```

Output: