

PROGRAM:

```
import java.util.*;
class Rational
{
    int num,den;
    public Rational()
    {
    }
    public Rational(int x,int y)
    {
        num=x;
        den=y;
    }
    public void sum(Rational r1,Rational r2)
    {
        num=r1.num*r2.den+r2.num*r1.den;
        den=r1.den*r2.den;
    }
    public void show()
    {
        System.out.println(num+"/"+den);
    }
}
class RationalMain
{
    public static void main(String args[])
    {
        Scanner s=new Scanner(System.in);
        int x1,y1;
        System.out.println("Enter the numerator and denominator of the first rational number:");
        x1=s.nextInt();
        y1=s.nextInt();
        Rational r1=new Rational(x1,y1);
        int x2,y2;
        System.out.println("Enter the numerator and denominator of the second rational number:");
        x2=s.nextInt();
        y2=s.nextInt();
        Rational r2=new Rational(x2,y2);
        Rational r3=new Rational();
        r3.sum(r1,r2);
        System.out.println("Sum of rational numbers:");
        r3.show();
    }
}
```

OUTPUT:

```
D:\Aniket JAVA>javac RationalMain.java
D:\Aniket JAVA>java RationalMain
```

Enter the numerator and denominator of the first rational number:

2 7

Enter the numerator and denominator of the second rational number:

3 8

Sum of rational numbers:

37/56