

Task : Calculator to work with Rational Numbers

```
class Rational(n: Int, d: Int) {

  def this(x: Int) = this(x, 1)
  private def gcd(x: Int, y: Int): Int = {
    if (x == 0) y
    else if (x < 0) gcd(-x, y)
    else if (y < 0) -gcd(x, -y)
    else gcd(y % x, x)
  }
  private val g = gcd(n, d)
  val numer: Int = n/g
  val denom: Int = d/g
  def +(that: Rational) =
    new Rational(numer * that.denom + that.numer * denom,
      denom * that.denom)
  def -(that: Rational) =
    new Rational(numer * that.denom - that.numer * denom,
      denom * that.denom)
  def *(that: Rational) =
    new Rational(numer * that.numer, denom * that.denom)
  def /(that: Rational) =
    new Rational(numer * that.denom, denom * that.numer)
}

object MyApp{
  def main(args: Array[String]): Unit = {

    //rational numbers
    var x = new Rational(1, 2)
    var y=new Rational(1,2);
    var z=x+y;
    println("'" + z.numer + "/" + z.denom)

    //whole numbers
    var aa=new Rational(21);
    var bb=new Rational(22);
    z=aa+bb;
    println("'" + z.numer + "/" + z.denom)

  }
}
```

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Problems Tasks Console

<terminated> MyApp\$ [Scala Application] C:\Program Files\Ja
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