

```

1 //Task_2, part_1
2 class Rational(n: Int, d: Int) {
3     require(d != 0)
4     val numer: Int = n
5     val denom: Int = d
6
7     def this(n: Int) = this(n, 1)
8     override def toString = numer + "/" + denom
9
10    def + (that: Rational): Rational =
11        new Rational(
12            numer * that.denom + that.numer * denom,
13            denom * that.denom
14        )
15
16    def - (that: Rational): Rational =
17        new Rational(
18            numer * that.denom - that.numer * denom,
19            denom * that.denom
20        )
21
22    def * (that: Rational): Rational =
23        new Rational(
24            numer * that.numer,
25            denom * that.denom
26        )
27
28    def / (that: Rational): Rational =
29        new Rational(
30            numer * that.denom,
31            denom * that.numer
32        )
33
34    def gcd(a: Int, b: Int): Int =
35        if (b == 0) a else gcd(b, a % b)
36 }
37

```