

Fraction class

Generate a Kotlin class which implements fractional arithmetic. If you've forgotten what they taught you in school about fractions, check [this](#) out.

In this exercise we practice TDD (Test Driven Development). Your implementation should pass the following JUnit -tests:

```
internal class FractionMutableTest {

    @Test
    fun testCons() {
        val a = FractionMutable(2,4,-1)
        assert(a.toString() == "-1/2")
    }

    @Test
    fun testToString() {
        val a = FractionMutable(1,2,-1)
        assert(a.toString() == "-1/2")
    }

    @Test
    fun negate() {
        val a = FractionMutable(1,2, -1)
        a.negate()
        assert(a.toString() == "1/2")
    }

    @Test
    fun addPos1() {
        val a = FractionMutable(1,2)
        a.add(FractionMutable(1,3))
        assert(a.toString() == "5/6")
    }

    @Test
    fun addPosNeg1() {
        val a = FractionMutable(1,2)
        a.add(FractionMutable(1,3, -1))
        assert(a.toString() == "1/6")
    }

    @Test
    fun multPos() {
```

```
        val a = FractionMutable(1,2)
        a.mult(FractionMutable(1,3))
        assert(a.toString() == "1/6")
    }

    @Test
    fun multPosNeg1() {
        val a = FractionMutable(1,2)
        a.mult(FractionMutable(1,3, -1))
        assert(a.toString() == "-1/6")
    }

    @Test
    fun div() {
        val a = FractionMutable(8,3)
        a.div(FractionMutable(4,6))
        assert(a.toString() == "4/1")
    }

    @Test
    fun intPart() {
        val a = FractionMutable(8,3)
        assert(a.intPart() == 2)
    }
}
```

Phase 1

From the JUnit tests you are able to find out the methods needed and their parameters. You can first try your implementation with this simple main-function.

```
fun main() {
    val a = FractionMutable(1,2,-1)
    a.add(FractionMutable(1,3))
    println(a)
    a.mult(FractionMutable(5,2, -1))
    println(a)
    a.div(FractionMutable(2,1))
    println(a)
}
```

The output should be something like this:

-1/6

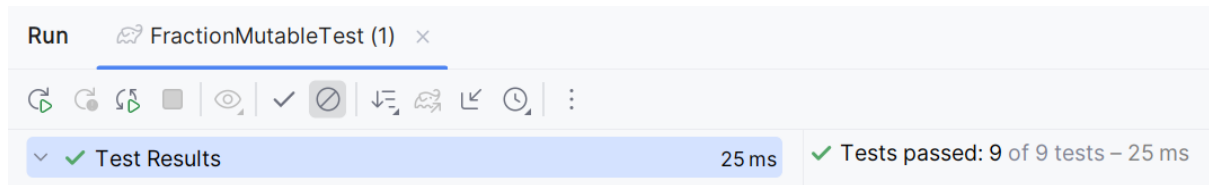
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Process finished with exit code 0

Phase 2

Then should run the given JUnit tests, and improve the implementation until you get all tests passed. How to use JUnit with Kotlin, look at [this](#).



Phase 3

Return source code and screenshot from the results of JUnit test.