

//Calculator Class

```
public class Calculator {  
    int num1, num2, res, rem;  
  
    public int getNum1() {  
        return num1;  
    }  
  
    public void setNum1(int num1) {  
        this.num1 = num1;  
    }  
  
    public int getNum2() {  
        return num2;  
    }  
  
    public void setNum2(int num2) {  
        this.num2 = num2;  
    }  
  
    public int getRes() {  
        return res;  
    }  
  
    int add() {  
        res = num1 + num2;  
        return res;  
    }  
  
    int subtract() {  
        res = num1 - num2;  
        return res;  
    }  
  
    int prod() {  
        res = num1 * num2;  
        return res;  
    }  
  
    int divide() {  
        res = num1 / num2;  
        rem = num1 % num2;  
        return res;  
    }  
}
```

```

    }

    public int getrem() {
        return rem;
    }
}

// Calculator Test Class
import org.junit.Test;
import static org.junit.Assert.assertEquals;

public class CalculatorTest {
    int result;
    Calculator c = new Calculator();

    @Test
    public void testadd() {
        c.setNum1(50);
        c.setNum2(5);
        result = c.add();
        assertEquals(55, result);
    }

    @Test
    public void testsub() {
        c.setNum1(50);
        c.setNum2(5);
        result = c.subtract();
        assertEquals(45, result);
    }

    @Test
    public void testmultiply() {
        c.setNum1(50);
        c.setNum2(5);
        result = c.prod();
        assertEquals(250, result);
    }

    @Test
    public void testdiv() {
        c.setNum1(50);

```

```
        c.setNum2(5);
        result = c.divide();
        double remainder = c.getrem();
        assertEquals(10, result);
        assertEquals(0, remainder, 0.0);
    }
}
```

// Test Runner Class

```
import org.junit.runner.JUnitCore;
import org.junit.runner.Result;
import org.junit.runner.notification.Failure;

public class TestRunner {
    public static void main(String[] args) {
        Result result = JUnitCore.runClasses(CalculatorTest.class);

        for (Failure failure : result.getFailures()) {
            System.out.println(failure.toString());
        }

        System.out.println(result.wasSuccessful());
    }
}
```