**JUNIT BASIC TESTING EXERCISES**

**Calculator.java**

package com.example;

public class Calculator {

    public int add(int a, int b) { return a + b; }

    public int subtract(int a, int b) { return a - b; }

}

**CalculatorTest.java**

package com.example;

import static org.junit.Assert.\*;

import org.junit.Test;

public class CalculatorTest {

    @Test

    public void testAdd() {

        Calculator calc = new Calculator();

        assertEquals(5, calc.add(2, 3));

    }

    @Test

    public void testSubtract() {

        Calculator calc = new Calculator();

        assertEquals(1, calc.subtract(4, 3));

    }

}

**AssertionsTest.java**

package com.example;

import static org.junit.Assert.\*;

import org.junit.Test;

public class AssertionsTest {

    @Test

    public void testAssertions() {

        assertEquals(5, 2 + 3);

        assertTrue(5 > 3);

        assertFalse(5 < 3);

        assertNull(null);

        assertNotNull(new Object());

    }

}

**CalculatorWithSetupTest.java**

package com.example;

import static org.junit.Assert.\*;

import org.junit.Before;

import org.junit.After;

import org.junit.Test;

public class CalculatorWithSetupTest {

    private Calculator calc;

    @Before

    public void setUp() {

        calc = new Calculator();

        System.out.println("Setup done");

    }

    @After

    public void tearDown() {

        System.out.println("Teardown done");

    }

    @Test

    public void testAdd() {

        assertEquals(15, calc.add(10, 5));

    }

    @Test

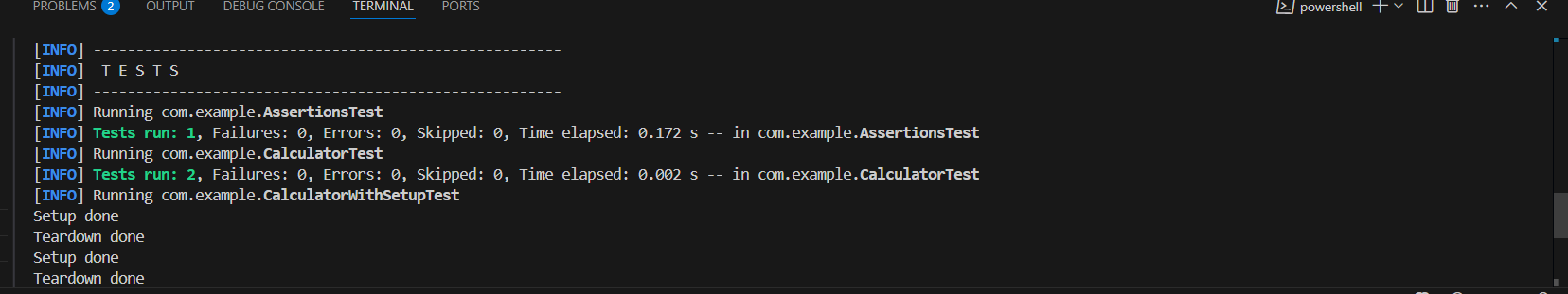
    public void testSubtract() {

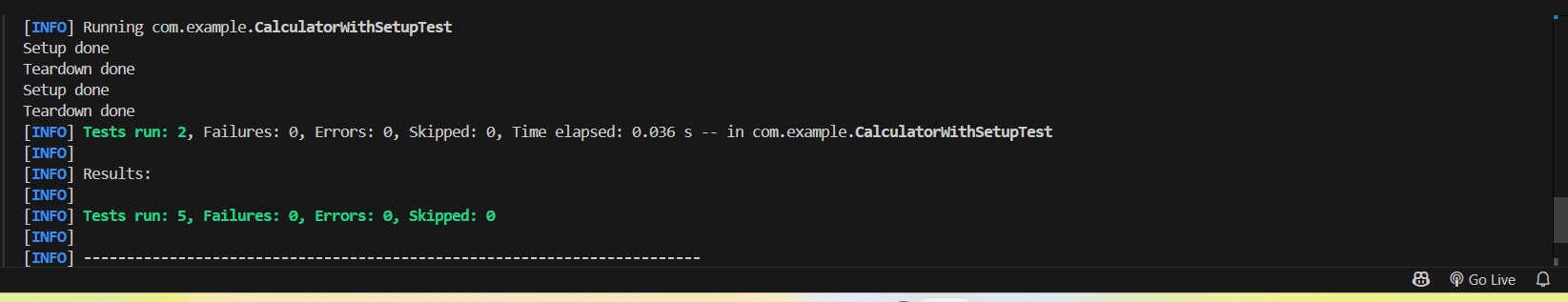
        assertEquals(12, calc.subtract(20, 8));

    }

}

**OUTPUT:**

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