

URL to GitHub Repository: <https://github.com/aliustunyer/Unit-Tests.git>

URL to Youtube Video : <https://youtu.be/JfXblXPc02o>

```
import java.util.Random;

public class TestDemo {

    public int addPositive(int a, int b) {

        if (a>0 && b>0) {

            return a+b;

        }

        else throw new IllegalArgumentException ("Both parameters must be
        positive!" );

    }

    public int randomNumberSquared() {

        int randomInt = getRandomInt();

        return randomInt * randomInt;

    }

    int getRandomInt() {

        Random random = new Random();

        return random.nextInt(10) + 1;

    }

}

import static org.assertj.core.api.Assertions.assertThat;
import static org.assertj.core.api.Assertions.assertThatThrownBy;
import static org.junit.jupiter.api.Assertions.*;
import static org.mockito.Mockito.doReturn;
import static org.mockito.Mockito.spy;
import java.util.Random;
import java.util.stream.Stream;
import org.junit.jupiter.api.BeforeEach;
import org.junit.jupiter.api.Test;
import org.junit.jupiter.params.ParameterizedTest;
import org.junit.jupiter.params.provider.Arguments;
import org.junit.jupiter.params.provider.MethodSource;

class TestDemoTest {
```

```

private TestDemo testDemo;

@BeforeEach
void setUp() throws Exception {
    testDemo = new TestDemo();
}

@ParameterizedTest
@MethodSource("TestDemoTest#argumentsForAddPositive")
void assertThatTwoPositiveNumbersAreAddedCorrectly(int a, int b, int
expected, boolean expectException) {
    if (!expectException) {
        int result = testDemo.addPositive(a, b);
        assertThat(result).isEqualTo(expected);
    } else {
        assertThatThrownBy(() -> testDemo.addPositive(a, b))
            .assertInstanceOf(IllegalArgumentException.class)
            .hasMessage("Both parameters must be positive!");
    }
}

public static Stream<Arguments> argumentsForAddPositive() {
    return Stream.of(
        Arguments.arguments(2, 3, 5, false),
        Arguments.arguments(5, 3, 8, false),
        Arguments.arguments(2, 0, 0, true),
        Arguments.arguments(-2, 3, 0, true),
        Arguments.arguments(2, -3, 0, true)
    );
}

@Test
void assertThatNumberSquaredIsCorrect() {
    TestDemo mockDemo = spy(new TestDemo());
    doReturn(5).when(mockDemo).getRandomInt();
    int fiveSquared = mockDemo.randomNumberSquared();
    assertThat(fiveSquared).isEqualTo(25);
}
}

```

