

LAB 3 – KIỂM THỬ NÂNG CAO

Môn: SOF3041 – Kiểm thử nâng cao

Sinh viên: Trần Anh Kiệt

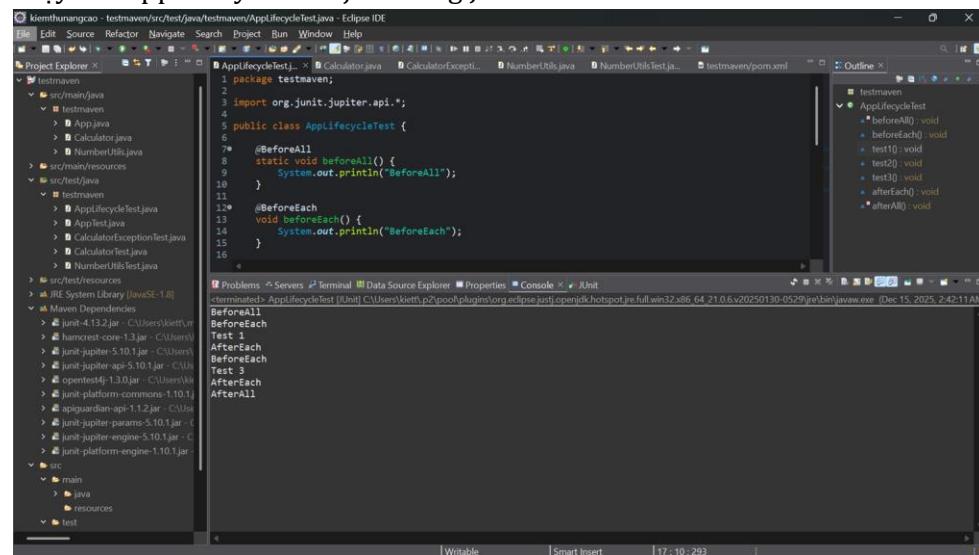
MSSV: PS30369

MỤC TIÊU

- Hiểu vòng đời thực thi của JUnit
- Kiểm thử và xử lý ngoại lệ
- Sử dụng Parameterized Test trong JUnit 5
- Thực hành viết Unit Test

BÀI 1: VÒNG ĐỜI JUNIT

Chạy file AppLifecycleTest.java bằng JUnit Test.



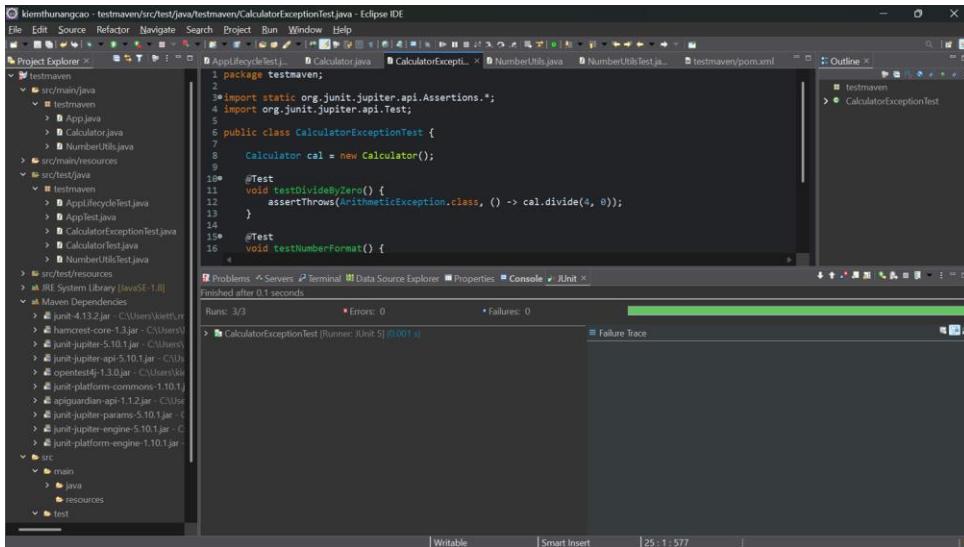
The screenshot shows the Eclipse IDE interface with the following details:

- Project Explorer:** Shows the project structure with src/main/java, src/test/java, and src/test/resources.
- Code Editor:** Displays the Java code for `AppLifecycleTest`. The code includes annotations for `@BeforeAll`, `@BeforeEach`, and three test methods (`test1`, `test2`, `test3`). It also contains static code blocks for `beforeAll` and `beforeEach`.
- Outline View:** Shows the class structure with methods `beforeAll`, `beforeEach`, `test1`, `test2`, `test3`, `afterEach`, and `afterAll`.
- Bottom Status Bar:** Shows "Writable", "Smart Insert", and the timestamp "17 : 10 : 293".

BÀI 2: KIỂM THỬ NGOẠI LỆ

Chạy file CalculatorExceptionTest.java bằng JUnit Test.

BÀI 3:

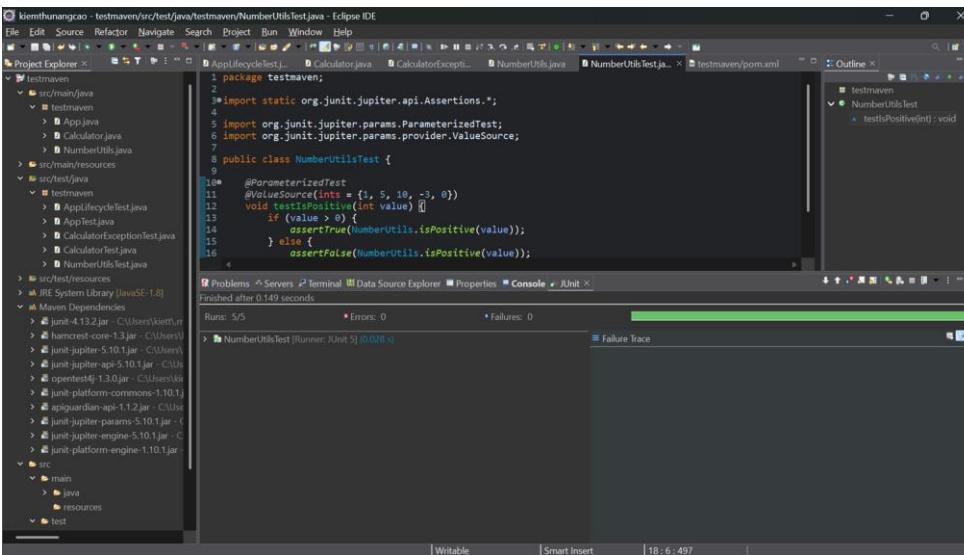


The screenshot shows the Eclipse IDE interface with the following details:

- Project Explorer:** Shows the project structure with packages `src/main/java`, `src/test/java`, and `src/test/resources`. Under `src/main/java`, there are `App.java`, `Calculator.java`, and `NumberUtils.java`. Under `src/test/java`, there are `AppLifecycleTest.java`, `CalculatorExceptionTest.java`, `CalculatorTest.java`, and `NumberUtilsTest.java`.
- Code Editor:** Displays the `CalculatorExceptionTest.java` file with two test methods: `testDivideByZero()` and `testNumberFormatException()`.
- Console:** Shows the output of the test run: "Finished after 0.1 seconds". It lists 3 runs, 0 errors, and 0 failures.
- Outline:** Shows the class `CalculatorExceptionTest` and its methods.

PARAMETERIZED TEST

Chạy file NumberUtilsTest.java bằng JUnit Test.



The screenshot shows the Eclipse IDE interface with the following details:

- Project Explorer:** Shows the project structure with packages `src/main/java`, `src/test/java`, and `src/test/resources`. Under `src/main/java`, there are `App.java`, `Calculator.java`, and `NumberUtils.java`. Under `src/test/java`, there are `AppLifecycleTest.java`, `CalculatorExceptionTest.java`, `CalculatorTest.java`, and `NumberUtilsTest.java`.
- Code Editor:** Displays the `NumberUtilsTest.java` file with a parameterized test method `testIsPositive(int)`.
- Console:** Shows the output of the test run: "Finished after 0.149 seconds". It lists 5 runs, 0 errors, and 0 failures.
- Outline:** Shows the class `NumberUtilsTest` and its method `testIsPositive(int)`.