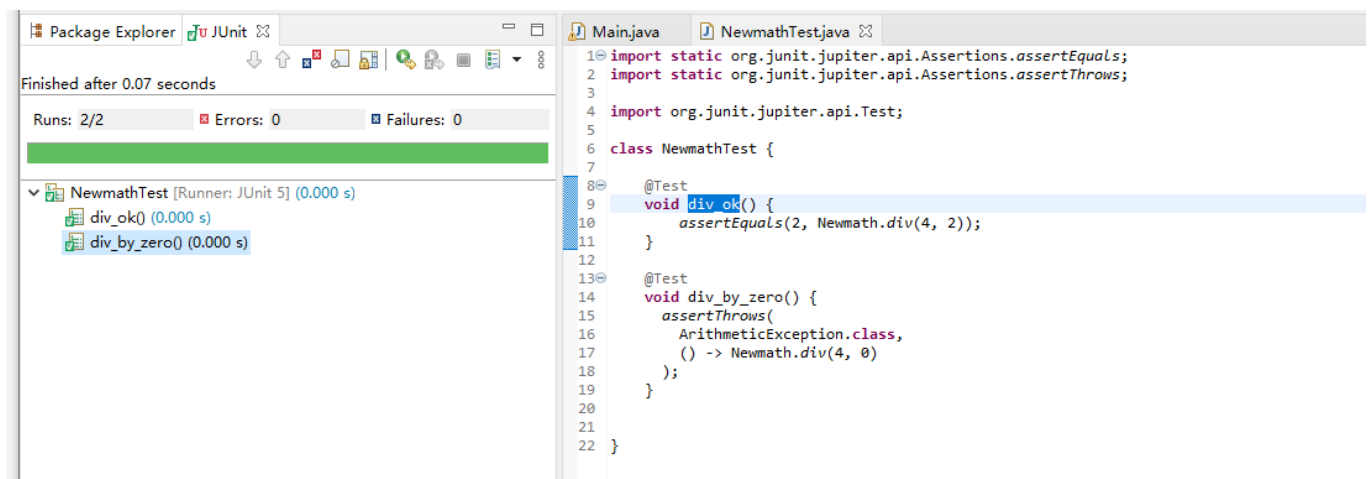


Java

```
Windows PowerShell

PS F:\3103\newmath_java\src> javac Main.java
PS F:\3103\newmath_java\src> java Main.java
Newmath (type 'exit' to exit program)
Numerator: 1
Demoninator: 2
1 / 2 = 0
Numerator: 10
Demoninator: 5
10 / 5 = 2
Numerator: 20
Demoninator: 3
20 / 3 = 6
Numerator: exit
```

Junit5



The screenshot shows an IDE with two main panels. The left panel displays the JUnit 5 test results for the `NewmathTest` class. It indicates that the tests finished after 0.07 seconds, with 2/2 runs, 0 errors, and 0 failures. The test results list shows two tests: `div_ok()` (0.000 s) and `div_by_zero()` (0.000 s), both of which passed. The right panel shows the source code for `NewmathTest.java`. The code includes imports for JUnit 5 assertions and a test class `NewmathTest` with two test methods: `div_ok()` and `div_by_zero()`. The `div_ok()` method asserts that `Newmath.div(4, 2)` equals 2. The `div_by_zero()` method asserts that `Newmath.div(4, 0)` throws an `ArithmeticException`.

```
Package Explorer  JUnit 5
Finished after 0.07 seconds
Runs: 2/2  Errors: 0  Failures: 0
NewmathTest [Runner: JUnit 5] (0.000 s)
  div_ok() (0.000 s)
  div_by_zero() (0.000 s)

Main.java  NewmathTest.java
1 import static org.junit.jupiter.api.Assertions.assertEquals;
2 import static org.junit.jupiter.api.Assertions.assertThrows;
3
4 import org.junit.jupiter.api.Test;
5
6 class NewmathTest {
7
8     @Test
9     void div_ok() {
10         assertEquals(2, Newmath.div(4, 2));
11     }
12
13     @Test
14     void div_by_zero() {
15         assertThrows(
16             ArithmeticException.class,
17             () -> Newmath.div(4, 0)
18         );
19     }
20
21 }
22 }
```

elixir

```
F:\3103\newmath_ex>iex lib/newmath_ex.ex
Interactive Elixir (1.11.4) - press Ctrl+C to exit (type h() ENTER for help)
iex(1)> NewmathEx.div(5,2)
{:ok, 2.5}
iex(2)> NewmathEx.div(5,0)
{:error, "Cannot divide by zero"}
iex(3)> _
```

exunit

```
F:\3103\newmath_ex>mix test
Compiling 1 file (.ex)
Generated newmath_ex app
...

Finished in 0.01 seconds
1 doctest, 2 tests, 0 failures

Randomized with seed 917000

F:\3103\newmath_ex>
```