```java
 1 package org.example;
 2
 3 import org.junit.Before;
 4 import org.junit.After;
 5 import org.junit.Test;
 6 import static org.junit.Assert.*;
 7
 8 public class CalculatorLifecycleTest {
 9
10     private Calculator calculator;
11
12     // Setup method: runs before each @Test
13     @Before
14     public void setUp() {
15         calculator = new Calculator(); // Arrange
16         System.out.println("Setup: Calculator is
   initialized.");
17     }
18
19     // Teardown method: runs after each @Test
20     @After
21     public void tearDown() {
22         calculator = null;
23         System.out.println("Teardown: Calculator is
   cleaned up.");
24     }
25
26     @Test
27     public void testAddition() {
28         // Act
29         int result = calculator.add(3, 4);
30
31         // Assert
32         assertEquals(7, result);
33     }
34
35     @Test
36     public void testAdditionWithNegative() {
37         int result = calculator.add(-2, 5);
38         assertEquals(3, result);
39     }
```

```
40 }
41
```