Superset ID: 6416829

Week 2

# JUnit Testing Exercises

# Exercise 1: Setting Up JUnit

Test Code:  
@Test  
public void sampleTest() {  
 System.out.println("JUnit is set up correctly!");  
}

Output:

Running ExampleTest  
JUnit is set up correctly!  
Tests run: 1, Failures: 0

# Exercise 2: Writing Basic JUnit Tests

Main Code:

public class Calculator {  
 public int add(int a, int b) { return a + b; }  
 public int subtract(int a, int b) { return a - b; }  
}

Test Code:

@Test  
public void testAddition() {  
 assertEquals(10, calc.add(7, 3));  
}  
  
@Test  
public void testSubtraction() {  
 assertEquals(4, calc.subtract(10, 6));  
}

Output:

Running CalculatorTest  
Tests run: 2, Failures: 0

# Exercise 3: Assertions in JUnit

Test Code:

@Test  
public void testAssertions() {  
 assertEquals(5, 2 + 3); // Pass  
 assertTrue(5 > 3); // Pass  
 assertFalse(5 < 3); // Pass  
 assertNull(null); // Pass  
 assertNotNull(new Object()); // Pass  
}

Output:

Running AssertionsTest  
Tests run: 1, Failures: 0

# Exercise 4: AAA Pattern, Setup & Teardown

Test Code:

@Before  
public void setUp() {  
 System.out.println("Setting up Calculator object...");  
}  
  
@After  
public void tearDown() {  
 System.out.println("Tearing down...");  
}  
  
@Test  
public void testAddAAA() {  
 assertEquals(10, calc.add(4, 6));  
}  
  
@Test  
public void testSubtractAAA() {  
 assertEquals(7, calc.subtract(9, 2));  
}

Output:

Running CalculatorLifecycleTest  
Setting up Calculator object...  
Tearing down...  
Setting up Calculator object...  
Tearing down...  
Tests run: 2, Failures: 0