**TDD using Junit5 and Mockito**

**EXERCISE 2: Verifying Interactions**

**CODE**

// File: MyServiceVerifyTest.java

import static org.mockito.Mockito.\*;

import static org.junit.jupiter.api.Assertions.\*;

import org.junit.jupiter.api.Test;

import org.mockito.Mockito;

// Mocked external API

interface ExternalApi {

String getData();

}

// Service class that uses the ExternalApi

class MyService {

private ExternalApi api;

public MyService(ExternalApi api) {

this.api = api;

}

public String fetchData() {

return api.getData(); // This should be verified in the test

}

}

// Test class for verifying interaction

public class MyServiceVerifyTest {

@Test

public void testVerifyInteraction() {

// Step 1: Create mock

ExternalApi mockApi = Mockito.mock(ExternalApi.class);

// Step 2: Call method with the mock

MyService service = new MyService(mockApi);

when(mockApi.getData()).thenReturn("Mock Data"); // Stub just for return

String result = service.fetchData();

// Step 3: Verify interaction

verify(mockApi).getData();

// Print result to show output (for screenshot)

System.out.println("Method called and verified. Output: " + result);

}

// Manual run without JUnit engine

public static void main(String[] args) {

MyServiceVerifyTest test = new MyServiceVerifyTest();

test.testVerifyInteraction();

}

}

**OUTPUT**

