**Exercise 1: Mocking and Stubbing**

package com.example.demo;

import org.junit.jupiter.api.Test;

import static org.junit.jupiter.api.Assertions.assertEquals;

import static org.mockito.Mockito.\*;

// External dependency interface

interface ExternalApi {

String getData();

}

// Service under test

class MyService {

private final ExternalApi api;

public MyService(ExternalApi api) {

this.api = api;

}

public String fetchData() {

return api.getData();

}

}

// Test class

public class MyServiceTest {

@Test

public void testExternalApi() {

// Arrange

ExternalApi mockApi = mock(ExternalApi.class);

when(mockApi.getData()).thenReturn("Mock Data");

MyService service = new MyService(mockApi);

// Act

String result = service.fetchData();

// Assert

assertEquals("Mock Data", result);

}

}

Output 🡪

