**WEEK-2**

**Exercise 1: Mocking and Stubbing Scenario**

You need to test a service that depends on an external API. Use Mockito to mock the external API and stub its methods.

1. Create a mock object for the external API.

2. Stub the methods to return predefined values.

3. Write a test case that uses the mock object.

**ExternalApi.java**

package mockitotest;

public interface ExternalApi {

String getData();

}

**MyService.java**

package mockitotest;

public class MyService {

private ExternalApi api;

public MyService(ExternalApi api) {

this.api = api;

}

public String fetchData() {

return api.getData();

}

}

**MyServiceTest.java**

package mockitotest;

import static org.mockito.Mockito.*mock*;

import static org.mockito.Mockito.*when*;

import org.junit.jupiter.api.Test;

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

public class MyServiceTest {

*@Test*

public void testExternalApi() {

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

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

MyService service = new MyService(mockApi);

String result = service.fetchData();

*assertEquals*("Mock Data", result);

}

}

OUTPUT

