**Exercise 6: Verifying Interaction Order**

**ExternalApi.java**

package mypackage;

public interface ExternalApi {

String getData();

void sendMessage(String message);

void logAction(String action);

void connect();

void disconnect();

}

**MyService.java**

package mypackage;

public class MyService {

private final ExternalApi api;

public MyService(ExternalApi api) {

this.api = api;

}

public void fetchDataInOrder() {

api.connect();

api.sendMessage("Fetching Data...");

api.disconnect();

}

}

**MyServiceTest.java**

package mypackage;

import static org.mockito.Mockito.\*;

import org.junit.jupiter.api.Test;

import org.mockito.InOrder;

public class MyServiceTest {

@Test

public void testInteractionOrder() {

ExternalApi mockApi = mock(ExternalApi.class);

MyService service = new MyService(mockApi);

service.fetchDataInOrder();

InOrder inOrder = inOrder(mockApi);

inOrder.verify(mockApi).connect();

inOrder.verify(mockApi).sendMessage("Fetching Data...");

inOrder.verify(mockApi).disconnect();

System.out.println(" Methods were called in the correct order: connect → sendMessage → disconnect");

}

}



