**WEEK-2**

**TDD Using Junit5 and Mockito: Mockito Exercises**

**Exercise 1: Mocking and Stubbing**

**1.ExternalApi.java:**

package mainpkg;

public interface ExternalApi {

    String getData();

}

**2.MyService.java:**

package mainpkg;

public class MyService {

    private ExternalApi api;

    public MyService(ExternalApi api) {

        this.api = api;

    }

    public String fetchData() {

        return api.getData();

    }

}

**3.MyServiceTest.java:**

package testpkg;

import mainpkg.ExternalApi;

import mainpkg.MyService;

import static org.mockito.Mockito.\*;

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

import org.junit.jupiter.api.Test;

import org.mockito.Mockito;

public class MyServiceTest {

    @Test

    public void testExternalApi() {

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

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

        MyService service = new MyService(mockApi);

        String result = service.fetchData();

        assertEquals("Mock Data", result);

    }

}

Output:

