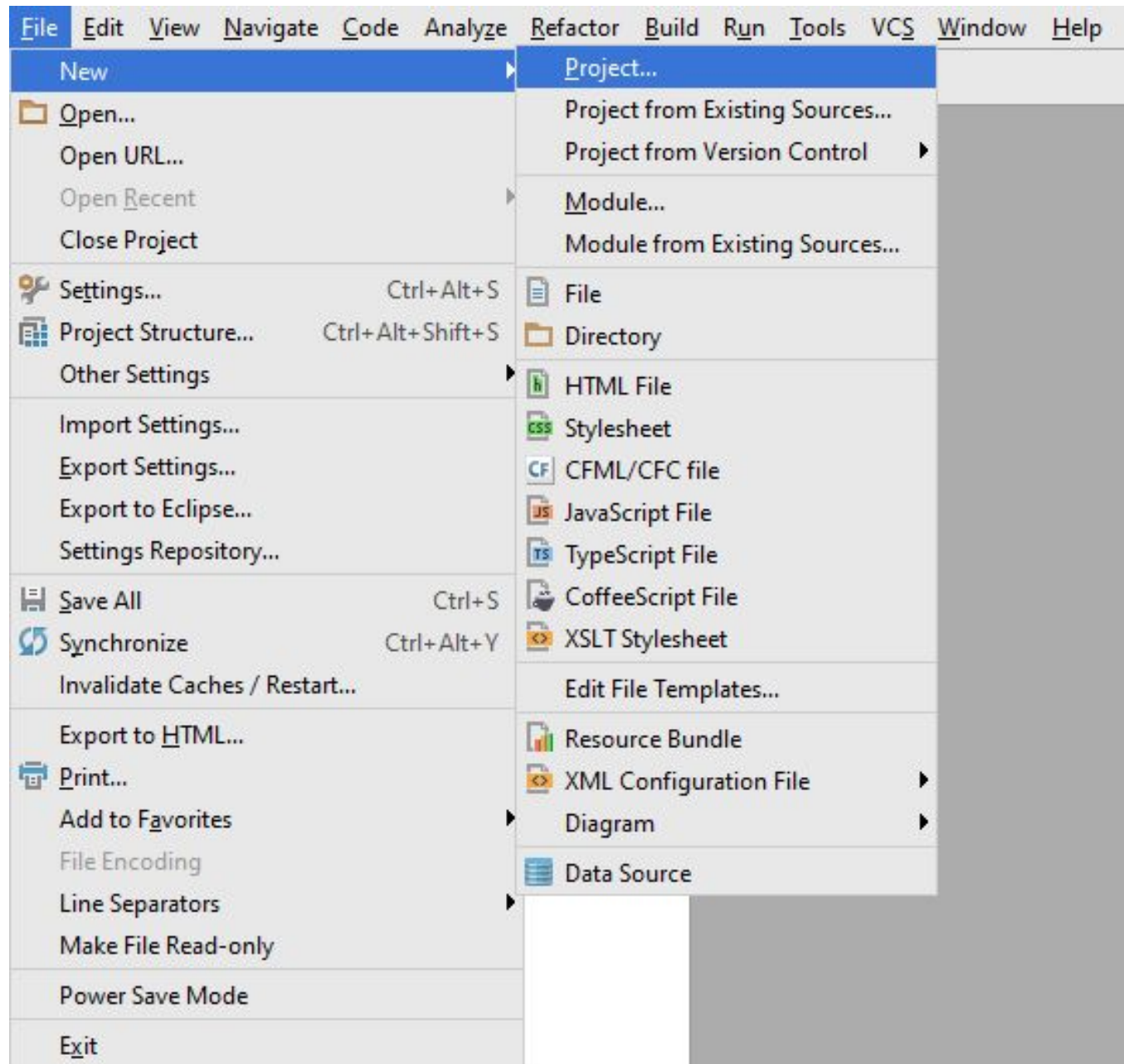
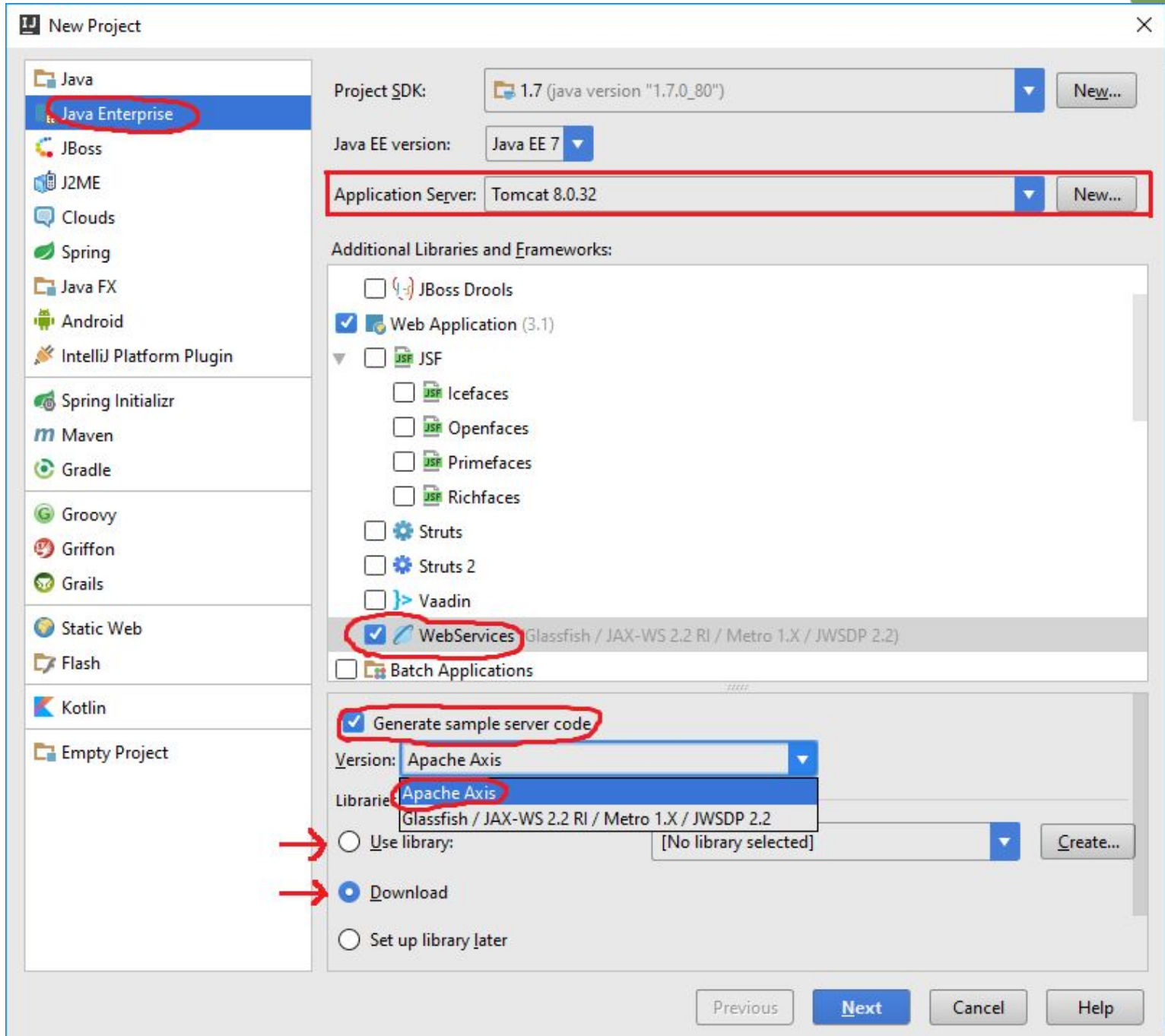


# Створення сервісів в Intellij IDEA

підготував студент 502м групи  
Сорочан Олександр





New Project

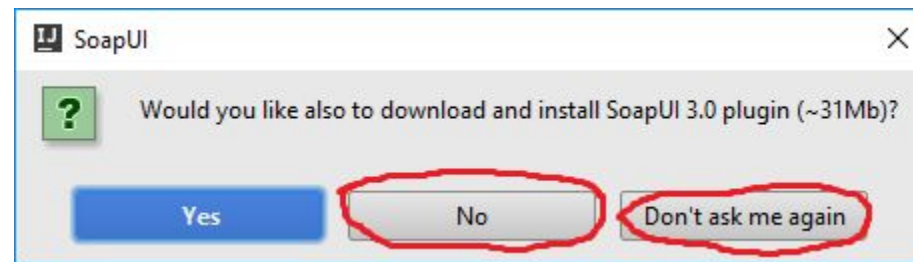
Project name: testServer

Project location: D:\2 term\Java\problem4\testServer

More Settings

Previous Finish Cancel Help

SoapUI 3.0 не сумісний з IntelliJ IDEA 13.0 і вище, тому від його встановлення можна відмовитися.



testServer

Project

testServer D:\2 term\Java\problem4\testServer

- ▶ .idea
- ▼ lib
  - axis.jar
  - commons-discovery-0.2.jar
  - commons-logging-1.0.4.jar
  - jaxrpc.jar
  - log4j-1.2.8.jar
  - saaj.jar
  - wsdl4j-1.5.1.jar
- ▶ out
- ▼ src
  - ▶ example
    - HelloWorld
- ▼ web
  - ▼ WEB-INF
    - server-config.wsdd
    - web.xml
  - index.jsp
- testServer.iml
- ▶ External Libraries

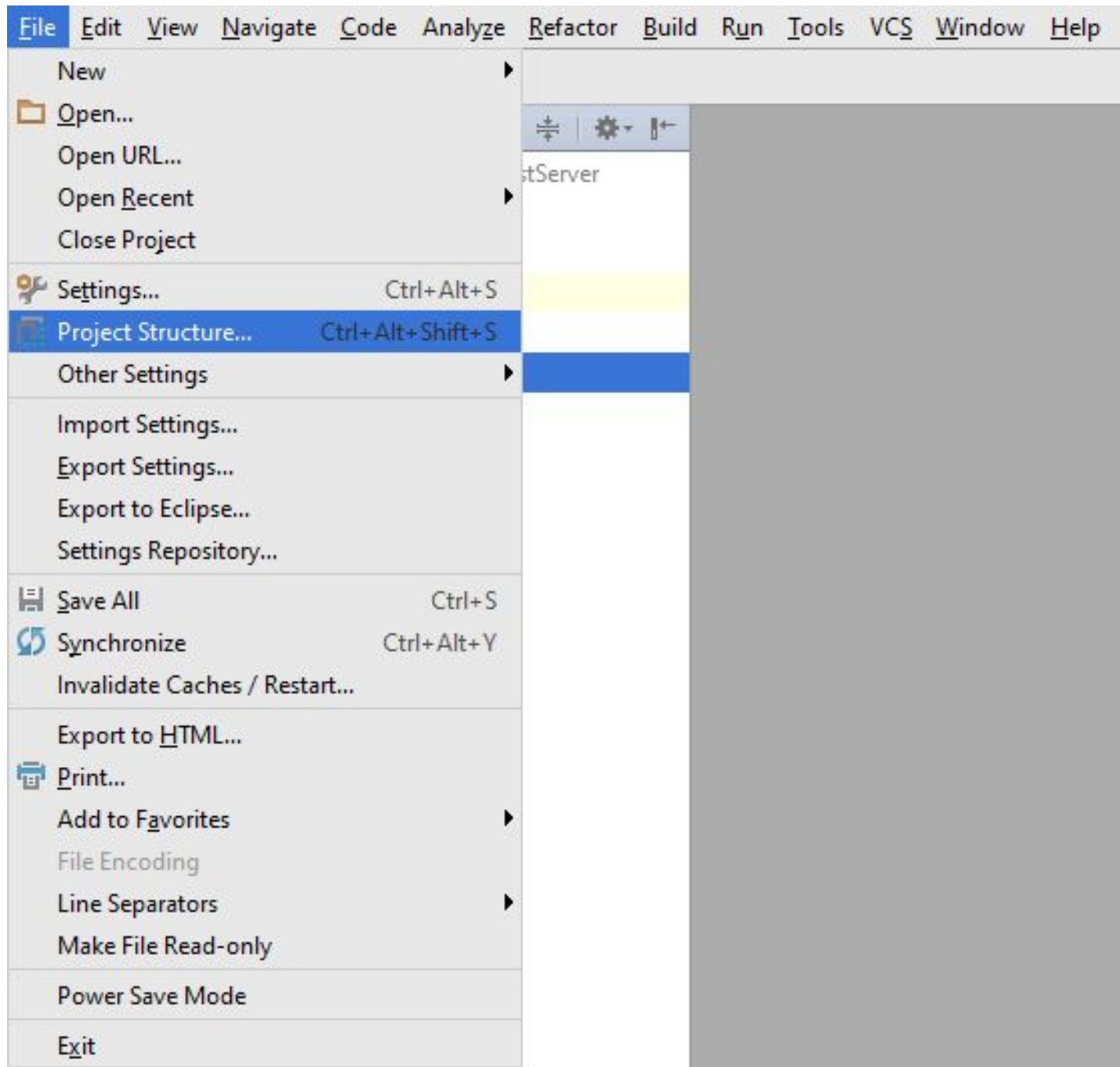
Search Everywhere [Double Shift](#)

Go to File [Ctrl+Shift+N](#)

Recent Files [Ctrl+E](#)

Navigation Bar [Alt+Home](#)

Drop files here to open



Project Structure

Project Settings

- Project
- Modules
- Libraries
- Facets
- Artifacts

Platform Settings

- SDKs
- Global Libraries

**Problems** 1

1. Artifact testServer:war exploded: library 'JAX-WS-Apache Axis' required for module 'testServer' is missing from the artifact [Fix]

- Add 'JAX-WS-Apache Axis' to the artifact
- Change 'JAX-WS-Apache Axis' scope to 'Test'
- Change 'JAX-WS-Apache Axis' scope to 'Provided'

OK Cancel Apply Help



Project

- testServer D:\2 term\Java\problem4\testServer
  - .idea
  - lib
  - out
  - src
    - example
      - HelloWorld
    - web
    - testServer.iml
  - External Libraries

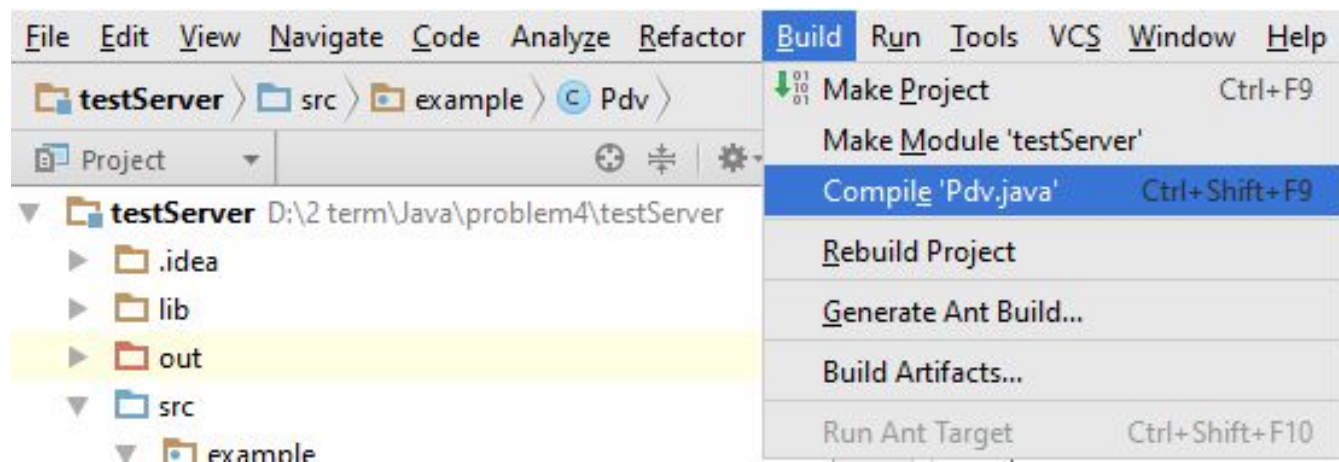
```
package example;/**  
 * Created by sorochanaalex on 03.05.2016.  
 */  
public class HelloWorld {  
    public String sayHelloWorldFrom(String from) {  
        String result = "Hello, world, from " + from;  
        System.out.println(result);  
        return result;  
    }  
}
```

Project

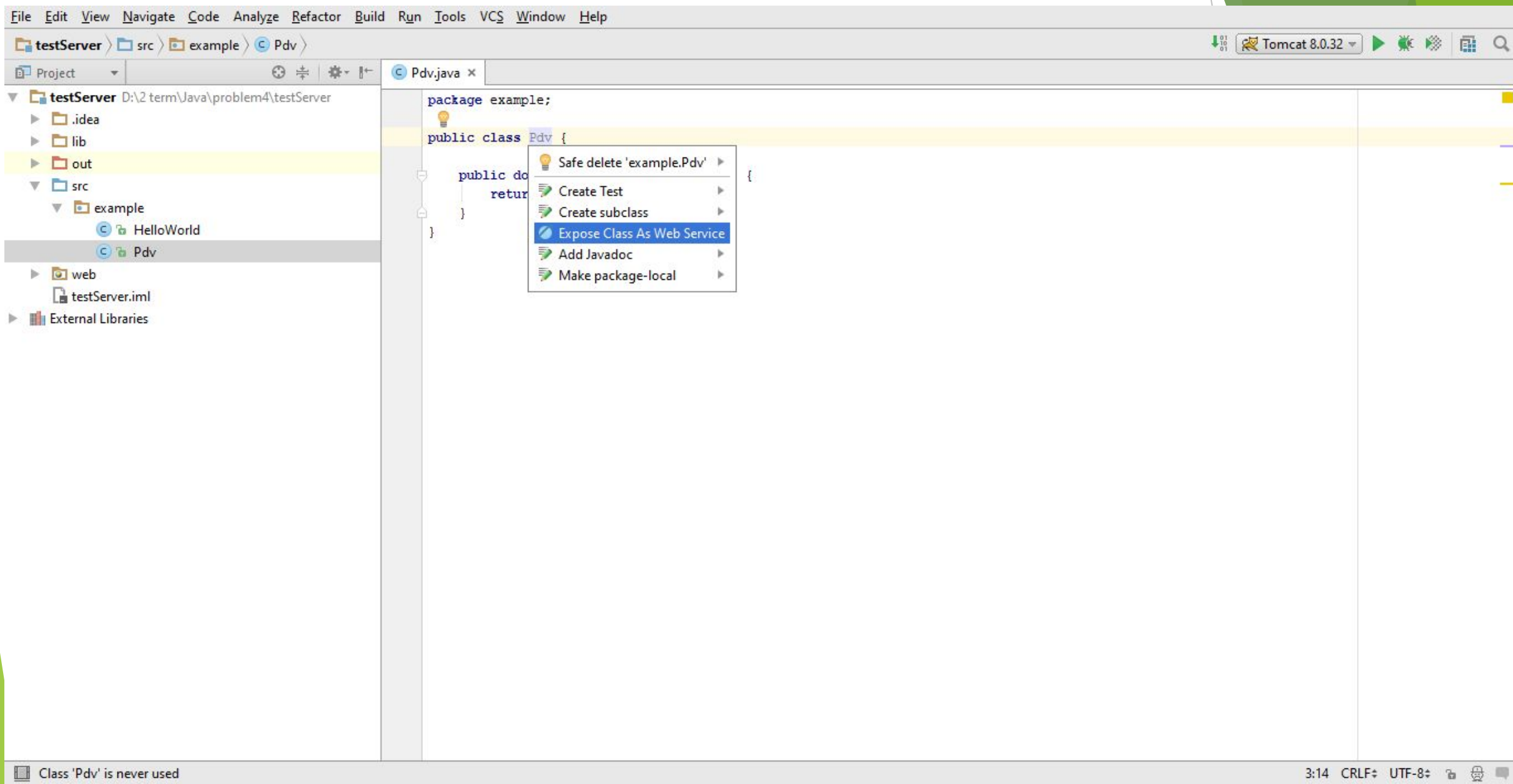
- testServer D:\2 term\Java\problem4\testServer
  - .idea
  - lib
  - out
  - src
    - example
      - HelloWorld
      - Pdv
    - web
  - testServer.iml
  - External Libraries


```
package example;  
  
public class Pdv {  
  
    public double pdv_result(double sum) {  
        return sum * 1.2;  
    }  
}
```

Для подальшої роботи написаний клас необхідно скомпілювати.



Потім треба натиснути Alt + Enter, після чого вибрати пункт «Expose Class As Web Service».



 Expose Class As Web Service ✕

Service Name:

Service Class Name:

Service Namespace:

Service style:

Use of items:

Target Module:

Project

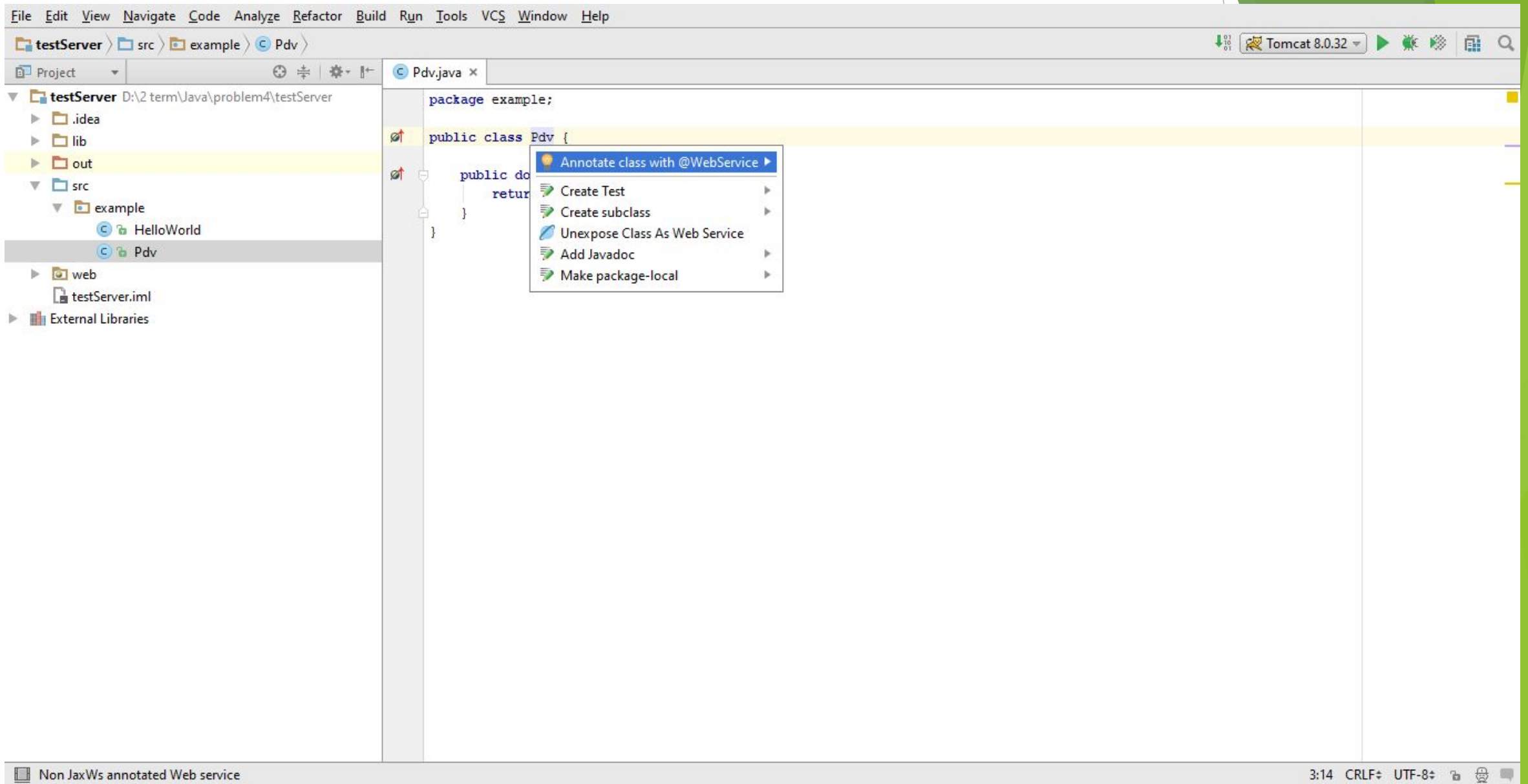
- testServer D:\2 term\Java\problem4\testServer
  - .idea
  - lib
  - out
  - src
    - example
      - HelloWorld
      - Pdv
    - web
  - testServer.iml
  - External Libraries

```
package example;

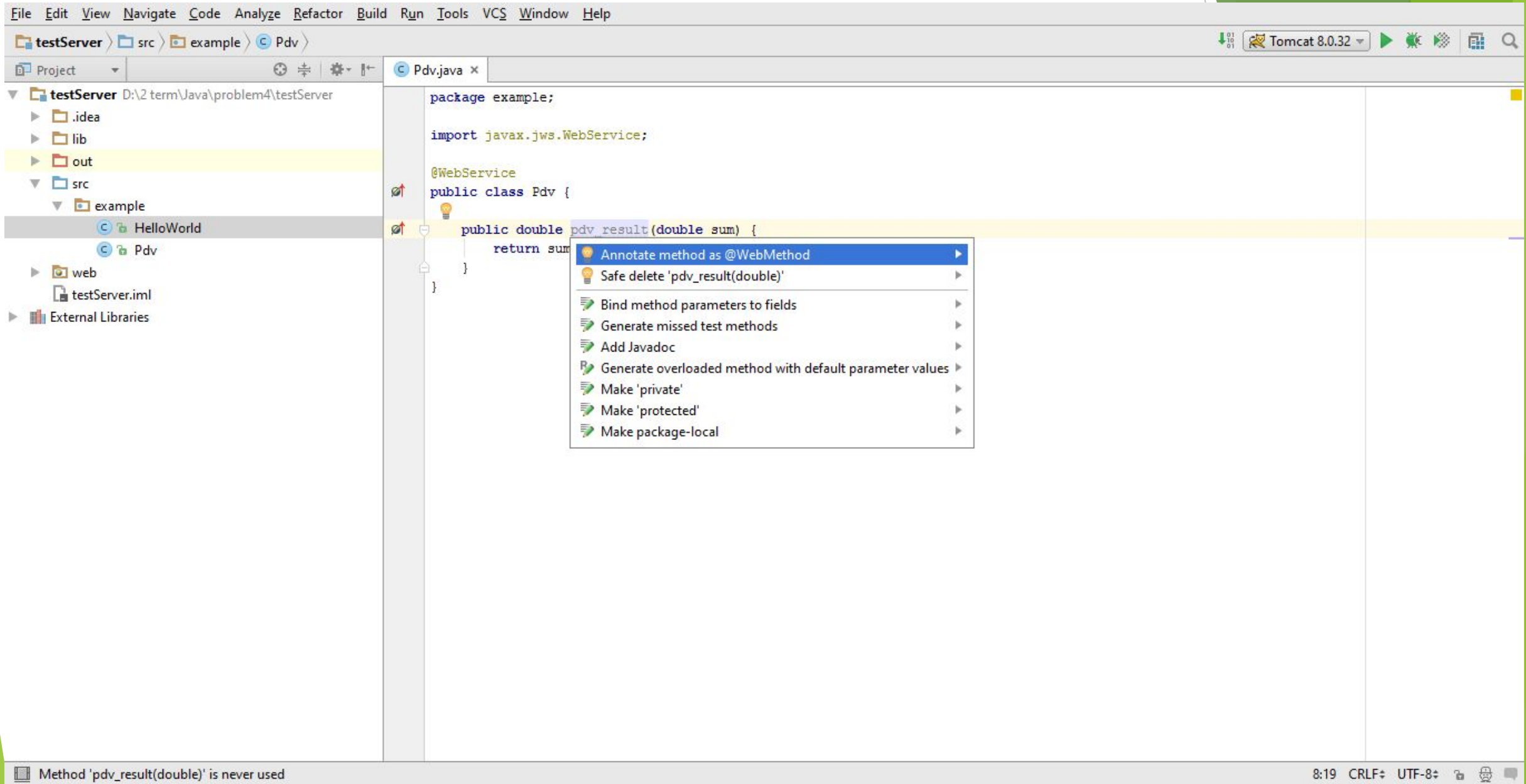
public class Pdv {

    public double pdv_result(double sum) {
        return sum * 1.2;
    }
}
```

Також бажано принагідно вказати, що даний клас є веб-сервісом. Для цього треба натиснути Alt + Enter і вибрати пункт «Annotate class with @WebService».



Аналогічно можна вказати, що функція `pdv_result()` є веб-методом.



The screenshot shows an IDE window for a project named 'testServer'. The file explorer on the left shows the project structure, including 'src/example/Pdv'. The main editor displays the code for 'Pdv.java':

```
package example;

import javax.jws.WebService;

@WebService
public class Pdv {

    public double pdv_result(double sum) {
        return sum;
    }
}
```

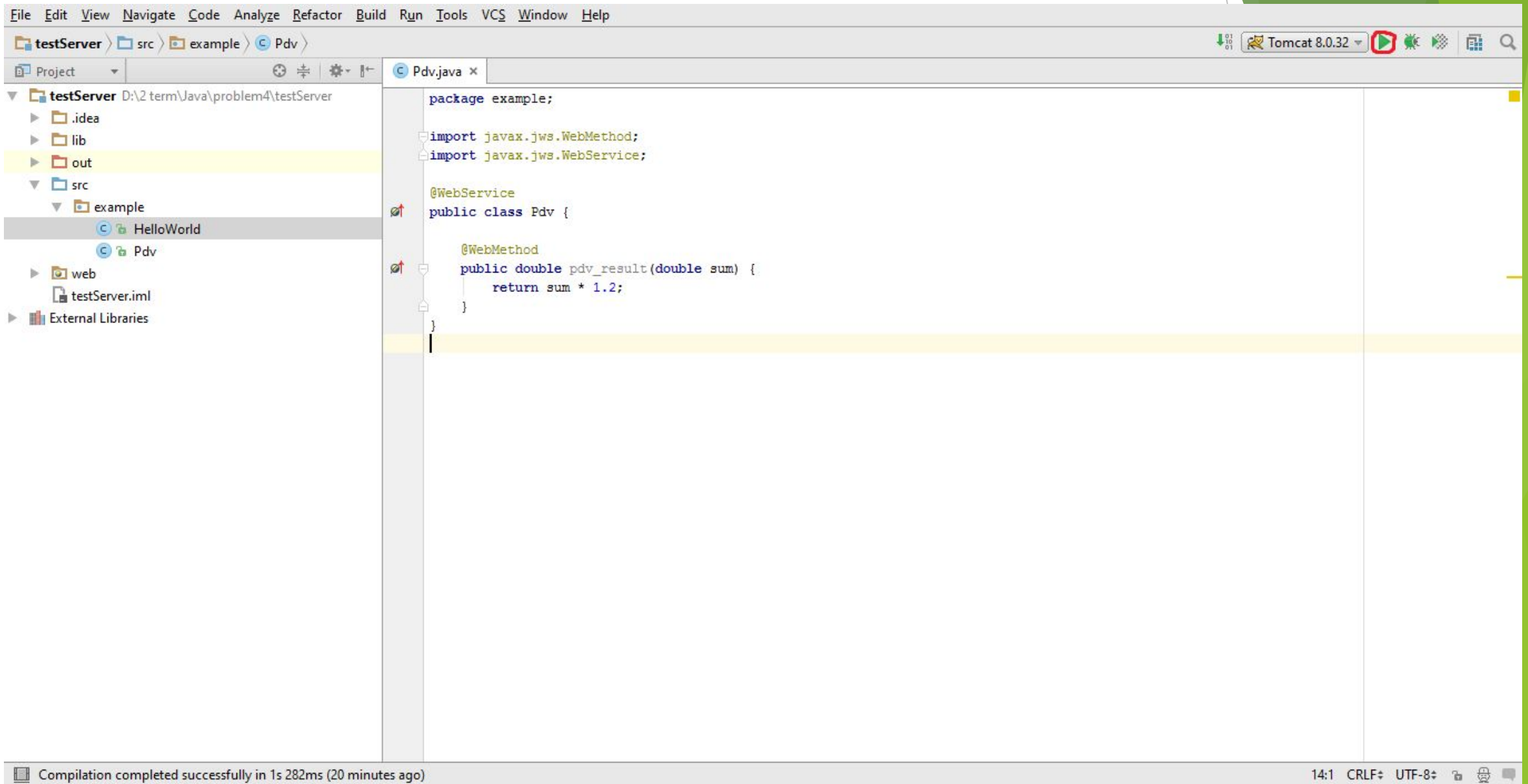
A context menu is open over the `pdv_result` method signature, with the following options:

- Annotate method as `@WebMethod` (selected)
- Safe delete 'pdv\_result(double)'
- Bind method parameters to fields
- Generate missed test methods
- Add Javadoc
- Generate overloaded method with default parameter values
- Make 'private'
- Make 'protected'
- Make package-local

The status bar at the bottom left indicates: "Method 'pdv\_result(double)' is never used". The status bar at the bottom right shows: "8:19 CRLF+ UTF-8+".



Запуск проекту відбувається натисканням на кнопку з зеленим трикутником або комбінацією клавіш Shift + F10



The screenshot displays an IDE window for a project named 'testServer'. The breadcrumb navigation shows the path: testServer > src > example > Pdv. The left sidebar shows the project structure with folders like .idea, lib, out, src, and example. The main editor shows the code for Pdv.java:

```
package example;

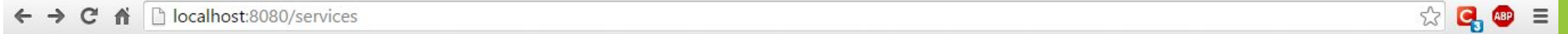
import javax.jws.WebMethod;
import javax.jws.WebService;

@WebService
public class Pdv {

    @WebMethod
    public double pdv_result(double sum) {
        return sum * 1.2;
    }
}
```

The status bar at the bottom indicates 'Compilation completed successfully in 1s 282ms (20 minutes ago)'. The system tray shows the time as 14:1 and the encoding as CRLF UTF-8.

Список усіх сервісів буде доступний за адресою <http://localhost:8080/services>



## And now... Some Services

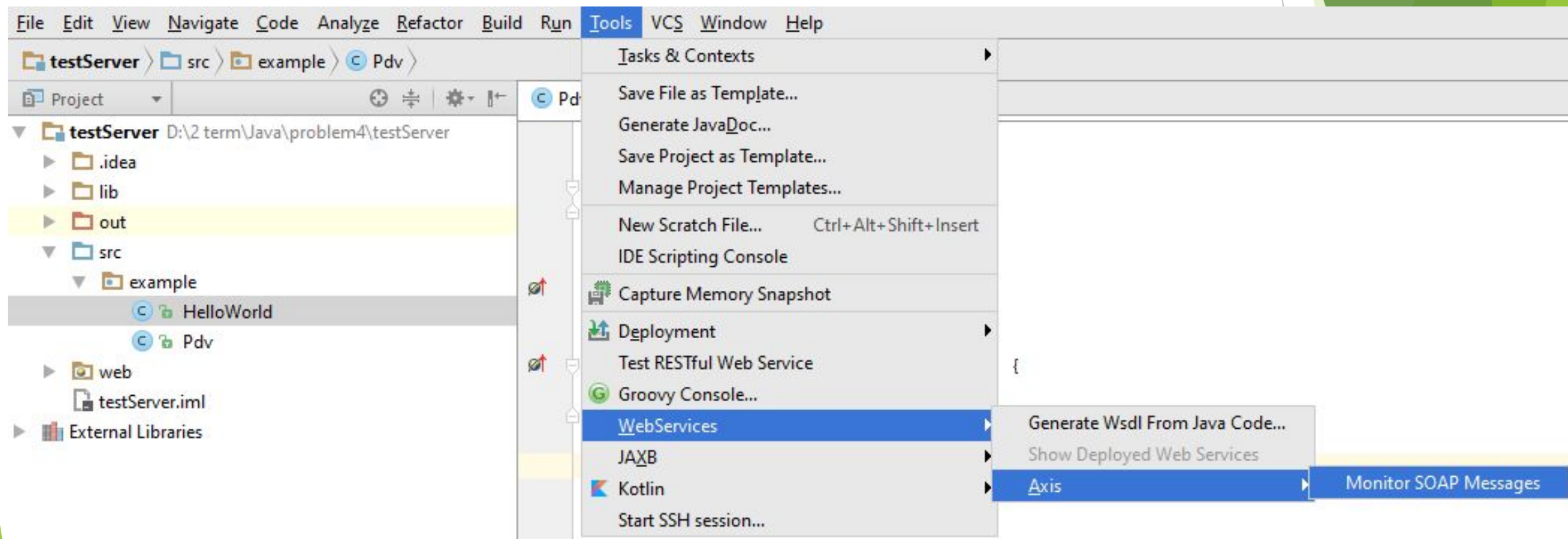
- AdminService ([wsdl](#))
  - AdminService
- Version ([wsdl](#))
  - getVersion
- SOAPMonitorService ([wsdl](#))
  - publishMessage
- Pdv ([wsdl](#))
  - pdv\_result

Натиснувши на гіперпосилання, ми отримуємо WSDL цього сервісу.



```
<?xml version="1.0" encoding="UTF-8" ?>
<wsdl:definitions xmlns:apachesoap="http://xml.apache.org/xml-soap" xmlns:impl="http://example" xmlns:intf="http://example" xmlns:wsdl="http://schemas.xmlsoap.org/wsdl/"
xmlns:wsdlsoap="http://schemas.xmlsoap.org/wsdl/soap/" xmlns:xsd="http://www.w3.org/2001/XMLSchema" targetNamespace="http://example">
  <!--
    WSDL created by Apache Axis version: 1.4
    Built on Apr 22, 2006 (06:55:48 PDT)
  -->
  <wsdl:types>
    <schema xmlns="http://www.w3.org/2001/XMLSchema" elementFormDefault="qualified" targetNamespace="http://example">
      <element name="sum" type="xsd:double"/>
      <element name="pdv_resultReturn" type="xsd:double"/>
    </schema>
  </wsdl:types>
  <wsdl:message name="pdv_resultResponse">
    <wsdl:part element="impl:pdv_resultReturn" name="pdv_resultReturn"/>
  </wsdl:message>
  <wsdl:message name="pdv_resultRequest">
    <wsdl:part element="impl:sum" name="sum"/>
  </wsdl:message>
  <wsdl:portType name="Pdv">
    <wsdl:operation name="pdv_result" parameterOrder="sum">
      <wsdl:input message="impl:pdv_resultRequest" name="pdv_resultRequest"/>
      <wsdl:output message="impl:pdv_resultResponse" name="pdv_resultResponse"/>
    </wsdl:operation>
  </wsdl:portType>
  <wsdl:binding name="PdvSoapBinding" type="impl:Pdv">
    <wsdlsoap:binding style="document" transport="http://schemas.xmlsoap.org/soap/http"/>
    <wsdl:operation name="pdv_result">
      <wsdlsoap:operation soapAction=""/>
      <wsdl:input name="pdv_resultRequest">
        <wsdlsoap:body use="literal"/>
      </wsdl:input>
      <wsdl:output name="pdv_resultResponse">
        <wsdlsoap:body use="literal"/>
      </wsdl:output>
    </wsdl:operation>
  </wsdl:binding>
  <wsdl:service name="PdvService">
    <wsdl:port binding="impl:PdvSoapBinding" name="Pdv">
      <wsdlsoap:address location="http://localhost:8080/services/Pdv"/>
    </wsdl:port>
  </wsdl:service>
</wsdl:definitions>
```

Моніторинг SOAP-повідомлень можна ввімкнути через меню.



Monitor SOAP Messages

Context name:

Monitoring port: 5101

OK Cancel Help

По здійсненні сеансу ми побачимо, якими повідомленнями обмінювалися клієнт та сервер.

The screenshot shows the Soap Messages application interface. At the top, there is a tab labeled 'localhost'. Below it is a table with three columns: 'Time', 'Target Service', and 'Status'. The table contains one row with the following data:

Time	Target Service	Status
17:58:07	Pdv	Complete

Below the table are three buttons: 'Remove', 'Remove All', and 'Filter ...'. A horizontal separator line is present. Below the separator, there is a detailed view of the message exchange with the following fields:

- Time: 17:58:07
- Target Service: Pdv
- Status: Complete

The detailed view is split into two panes: 'SOAP Request' and 'SOAP Response'. Both panes show the following XML content:

```
<?xml version="1.0" encoding="UTF-8"?><soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"></soapenv:Envelope>
```

Below the XML panes are two buttons: 'Reflow XML text' (with an unchecked checkbox) and 'Switch Layout'. At the bottom of the application, there are 'Start' and 'Stop' buttons, and a status message: 'The SOAP Monitor is started.'

Дякую за увагу!