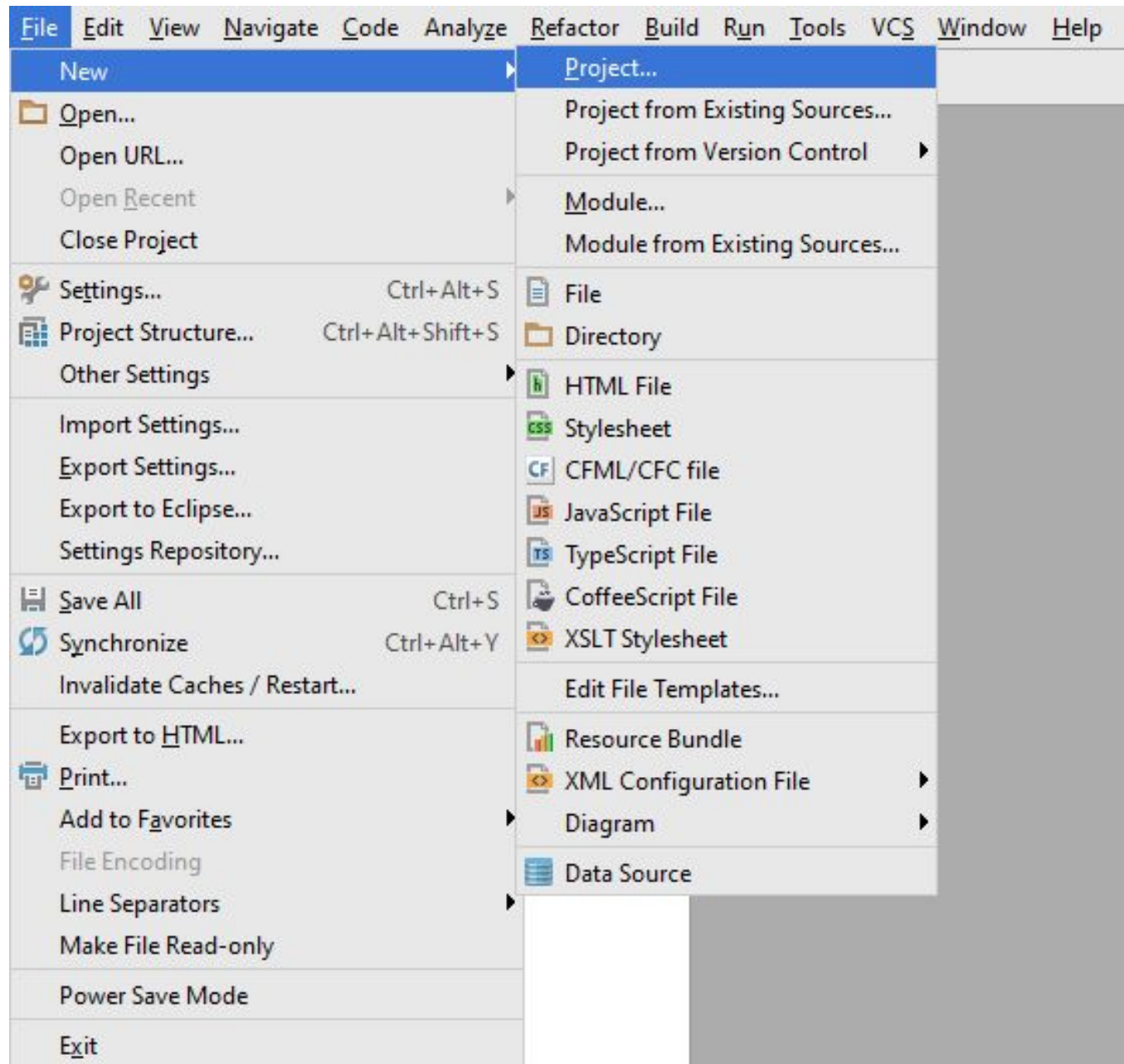
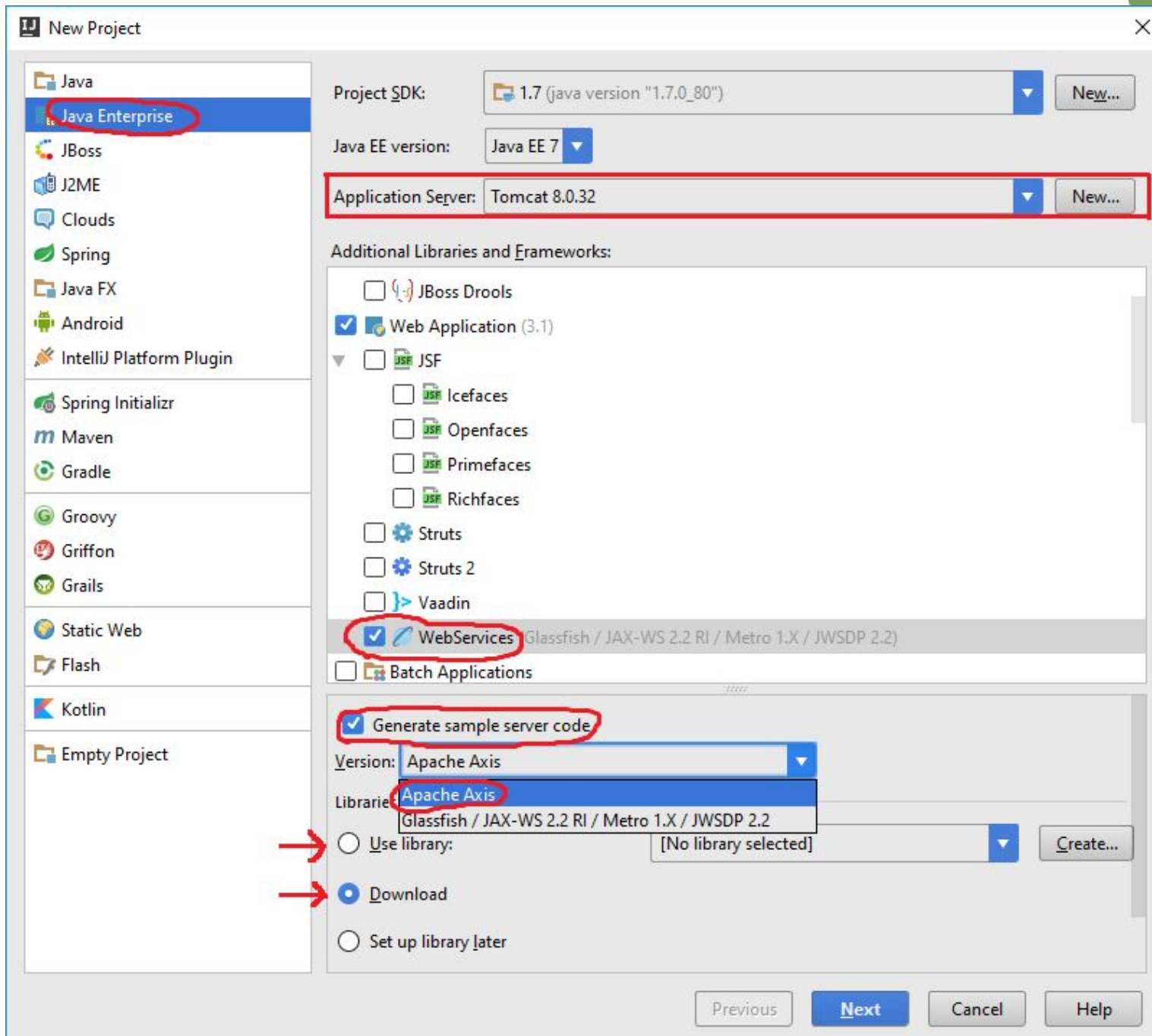


Створення сервісів в Intellij IDEA

підготував студент 502м групи
Сорочан Олександр





New Project

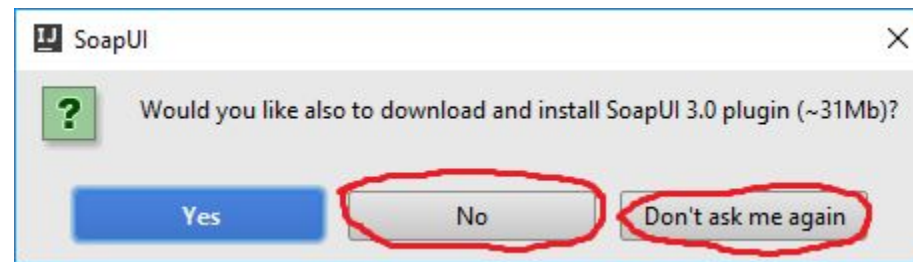
Project name: testServer

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.



- ▶ .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

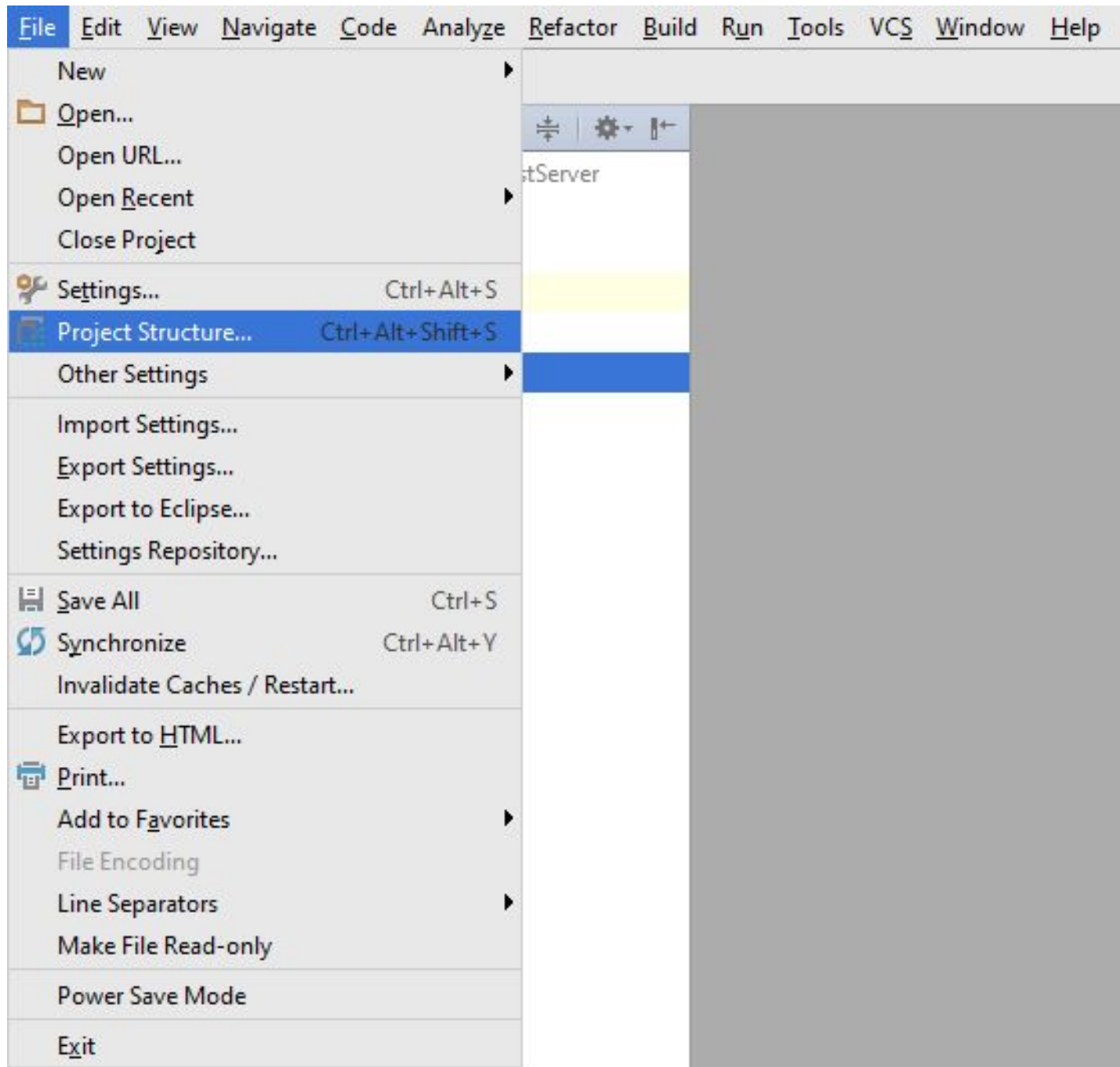
Search Everywhere [Double Shift](#)

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

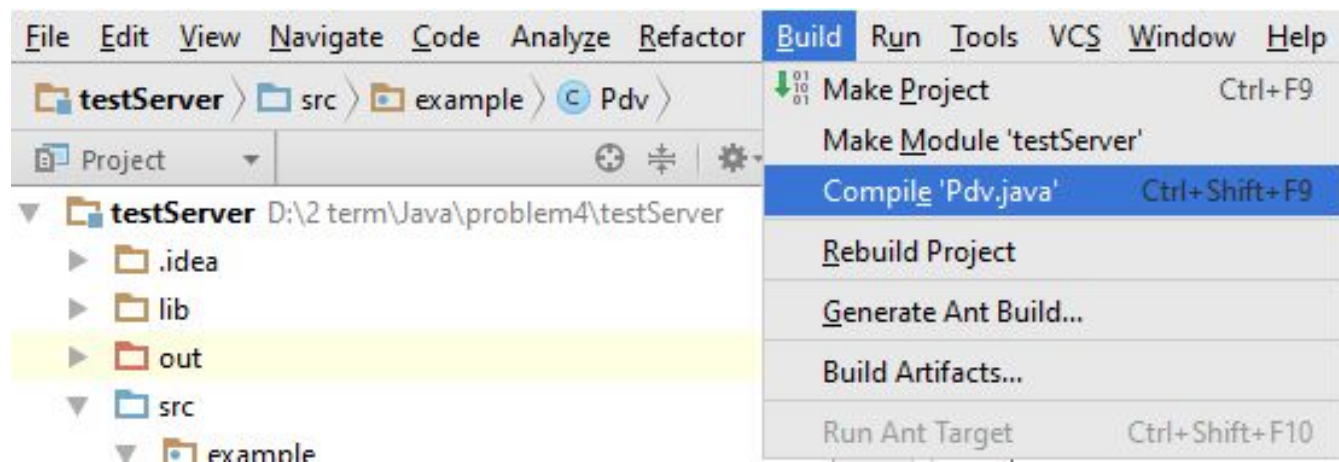
```
package example;/**  
 * Created by sorochanaalex on 03.05.2016.  
 */  
public class HelloWorld {  
    public String sayHelloWorldFrom(String from) {  
        String result = "Hello, world, from " + from;  
        System.out.println(result);  
        return result;  
    }  
}
```

Project

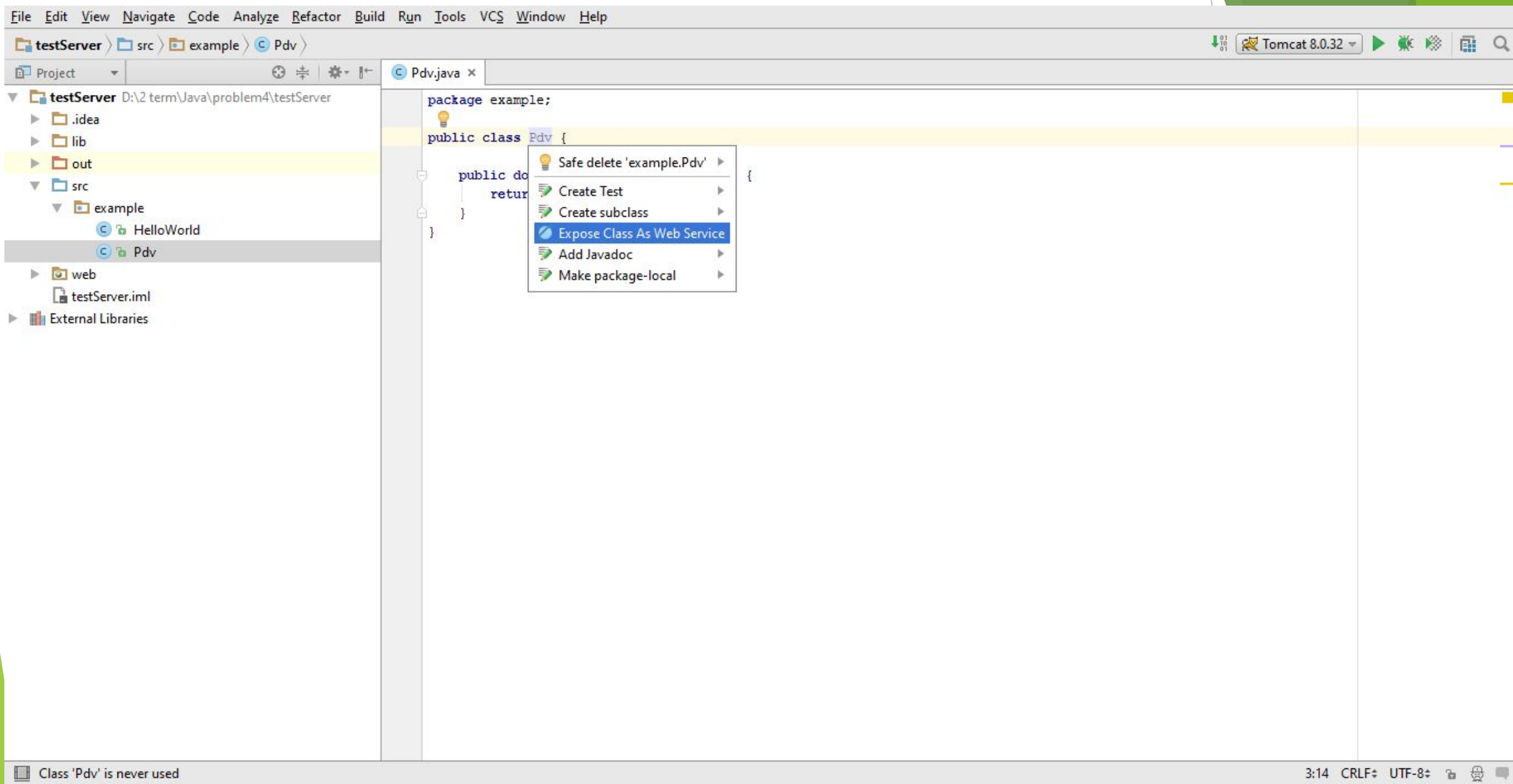
- testServer D:\2 term\Java\problem4\testServer
 - .idea
 - lib
 - out
 - src
 - example
 - HelloWorld
 - Pdv
 - web
 - testServer.iml
 - External Libraries


```
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: ▼

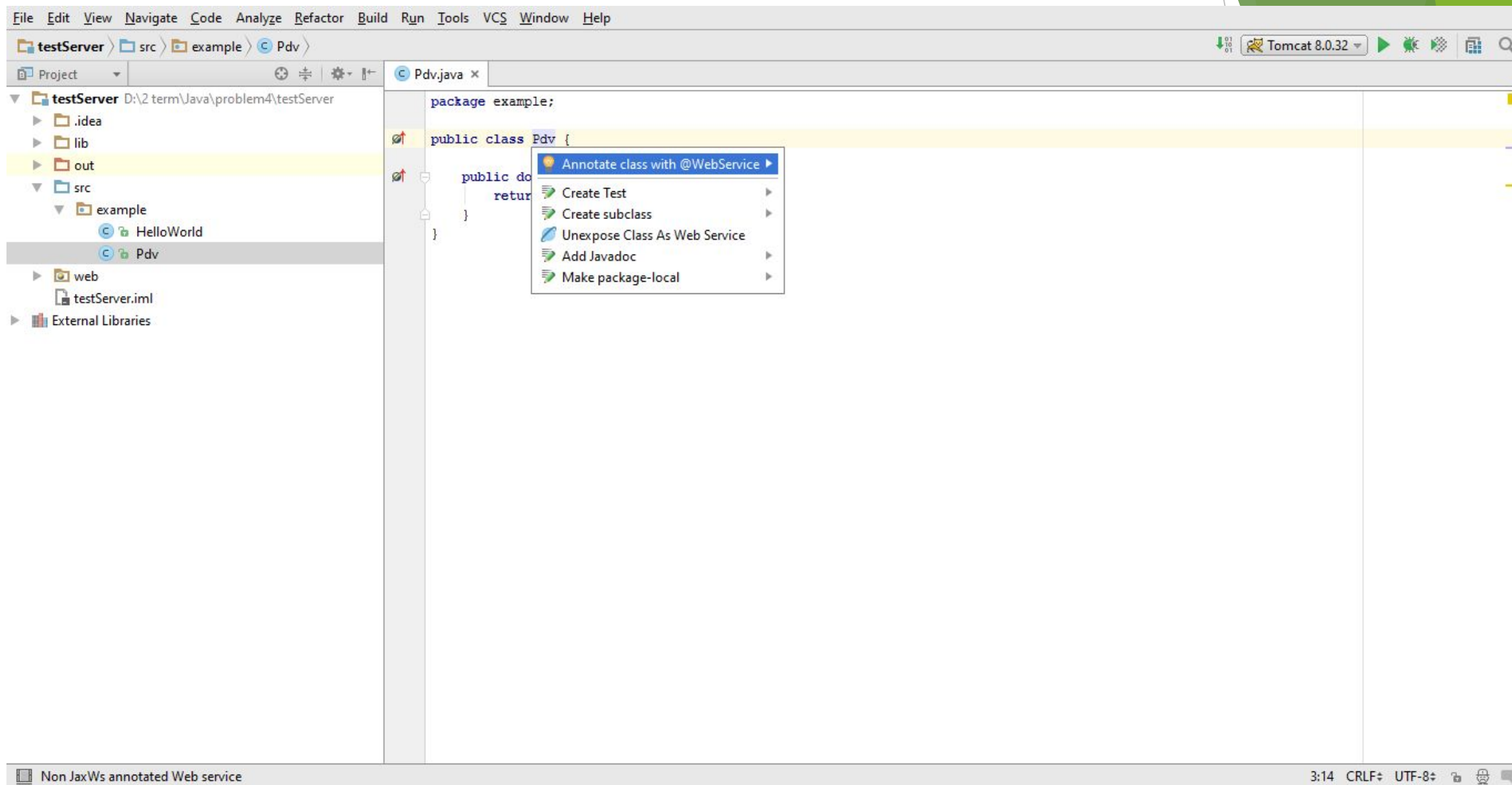
Target Module: ▼

Project

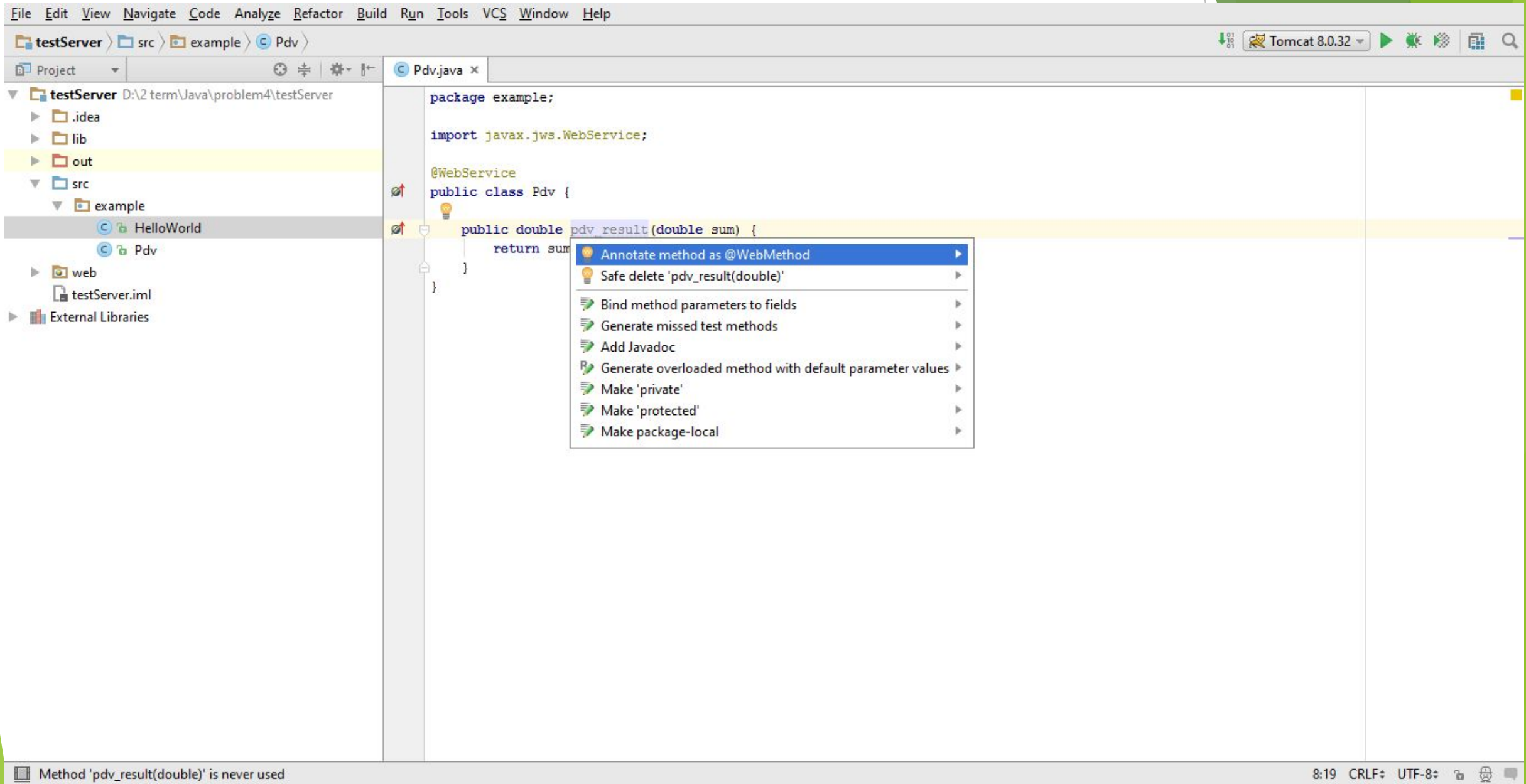
- testServer D:\2 term\Java\problem4\testServer
 - .idea
 - lib
 - out
 - src
 - example
 - HelloWorld
 - Pdv
 - web
 - testServer.iml
 - External Libraries

```
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' and 'example' folders. The main editor displays the code for 'Pdv.java'.

```
package example;

import javax.jws.WebService;

@WebService
public class Pdv {

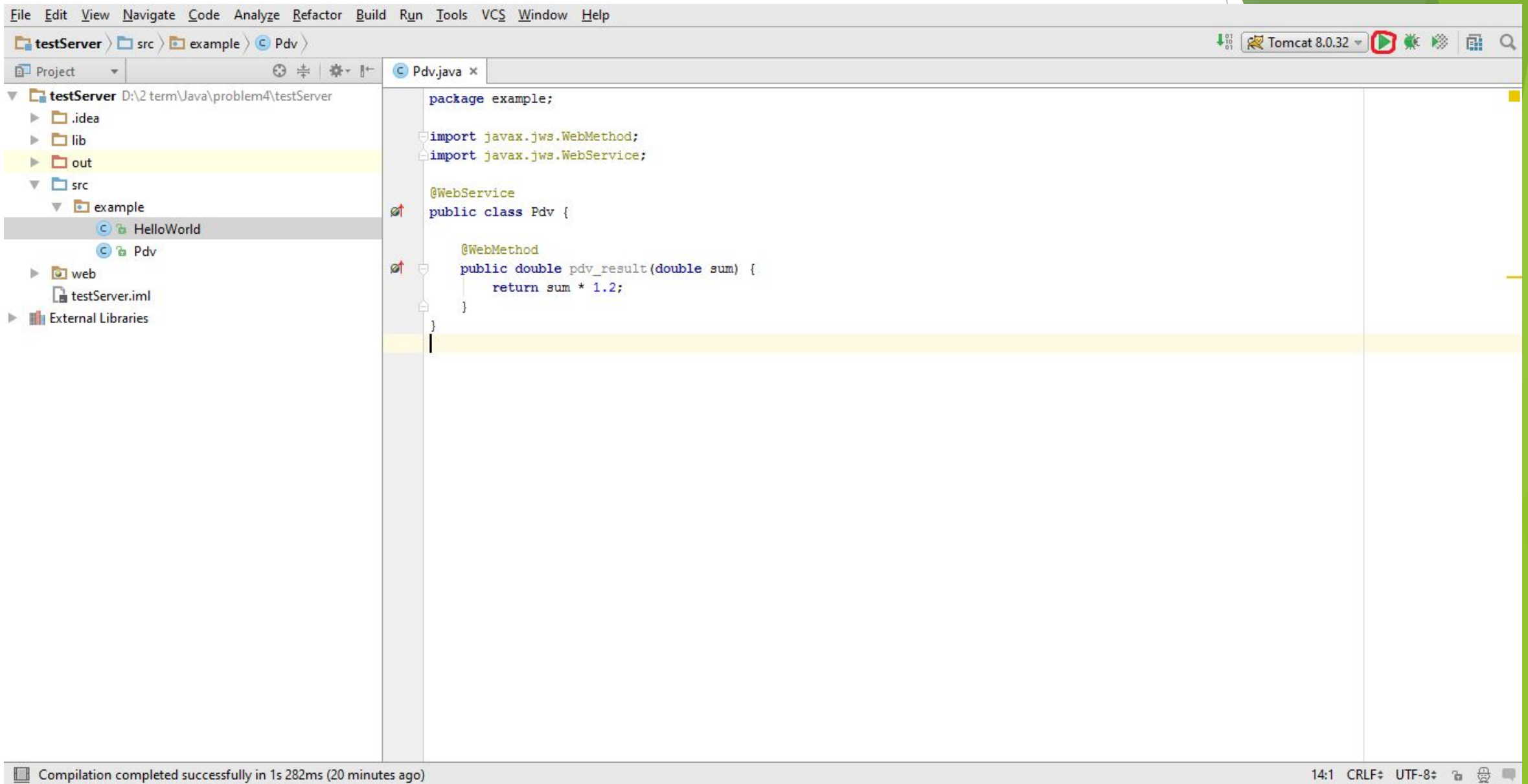
    public double pdv_result(double sum) {
        return sum;
    }
}
```

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 shows an IDE window for a project named 'testServer'. The project structure on the left includes folders for '.idea', 'lib', 'out', 'src', and 'web', along with files 'HelloWorld', 'Pdv', and 'testServer.iml'. The main editor displays the code for 'Pdv.java' in the 'example' package. The code defines a web service class with a single method 'pdv_result' that multiplies the input sum by 1.2. A status bar at the bottom indicates a successful compilation.

```
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;
    }
}
```

Compilation completed successfully in 1s 282ms (20 minutes ago) 14:1 CRLF UTF-8

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

← → ↻ 🏠 localhost:8080/services ☆ 📄 ABP ☰

And now... Some Services

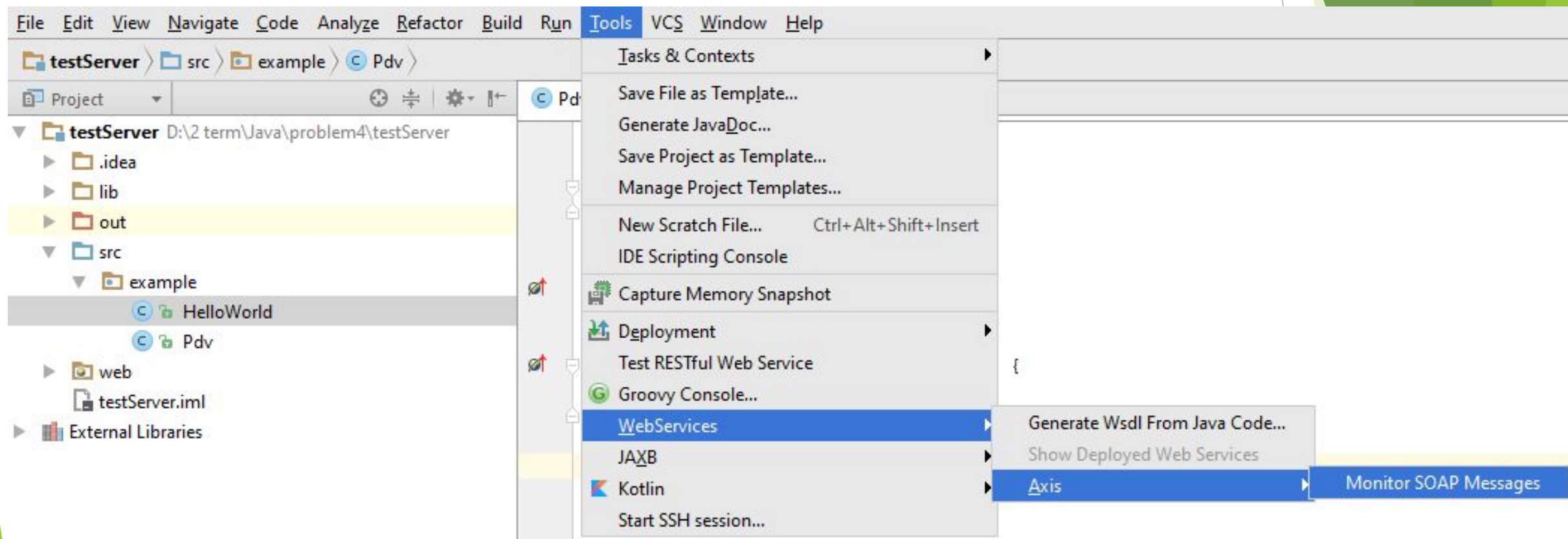
- AdminService ([wsdl](#))
 - AdminService
- Version ([wsdl](#))
 - getVersion
- SOAPMonitorService ([wsdl](#))
 - publishMessage
- Pdv ([wsdl](#))
 - pdv_result

Натиснувши на гіперпосилання, ми отримуємо WSDL цього сервісу.



```
<?xml version="1.0" encoding="UTF-8" style="display:none" />
<wsc: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>
</wsc: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 columns 'Time', 'Target Service', and 'Status'. The table contains one entry: '17:58:07', 'Pdv', and 'Complete'. Below the table are buttons for 'Remove', 'Remove All', and 'Filter ...'. A separator line is followed by a detailed view of the message exchange. It shows 'Time: 17:58:07', 'Target Service: Pdv', and 'Status: Complete'. The 'SOAP Request' and 'SOAP Response' sections both contain the XML header: '<?xml version="1.0" encoding="UTF-8"?><soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org...'. At the bottom, there are 'Start' and 'Stop' buttons, and a status message: 'The SOAP Monitor is started.' There is also a checkbox for 'Reflow XML text' and a 'Switch Layout' button.

Time	Target Service	Status
17:58:07	Pdv	Complete

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

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

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

Reflow XML text Switch Layout

Start Stop The SOAP Monitor is started.

Дякую за увагу!