

New Web Application

Steps

1. Choose Project
2. **Name and Location**
3. Server and Settings
4. Frameworks

Name and Location

Project Name:

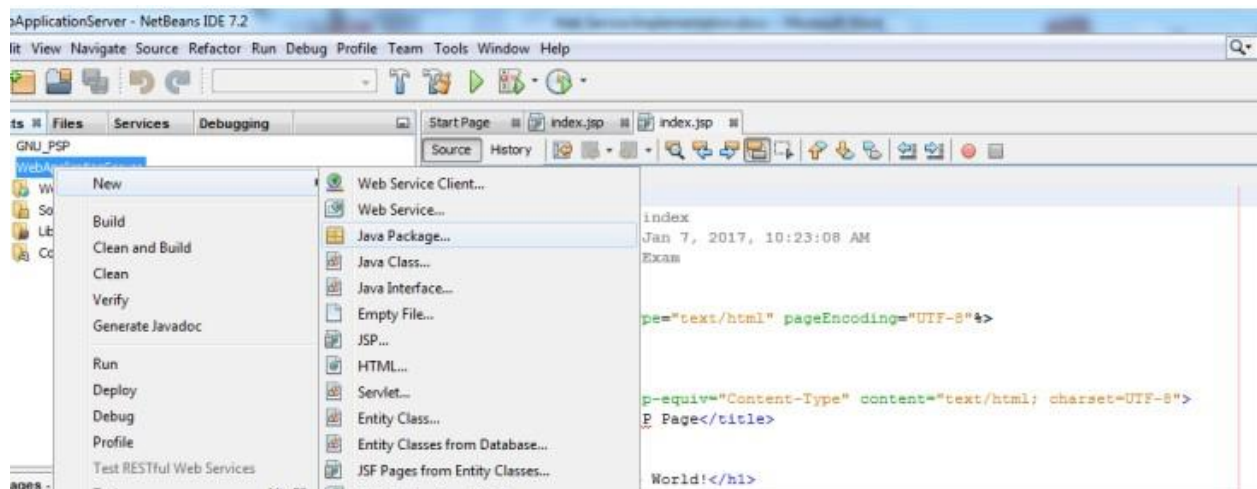
Project Location:

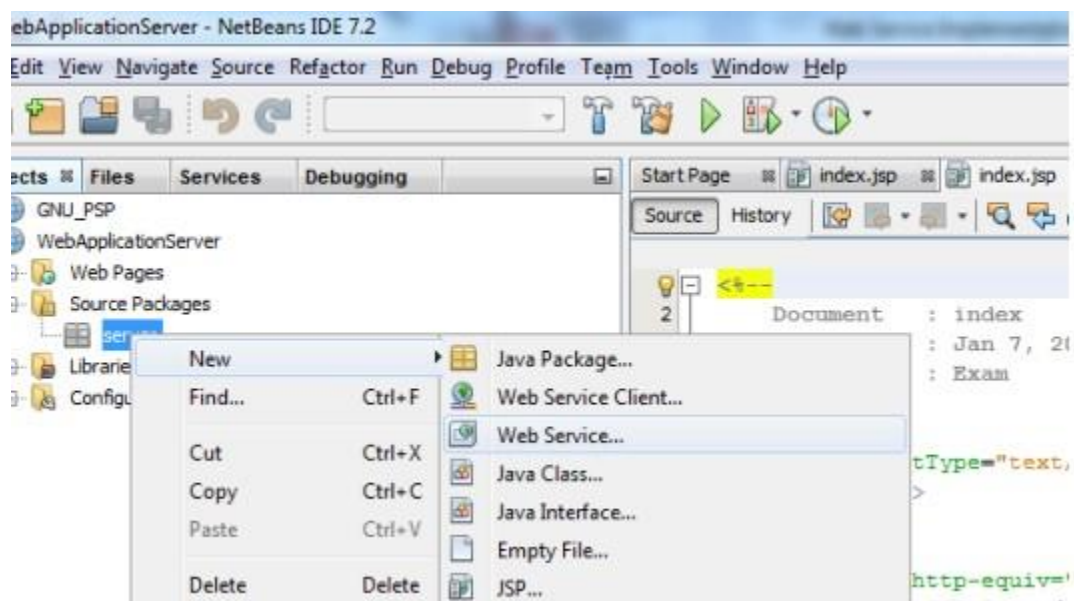
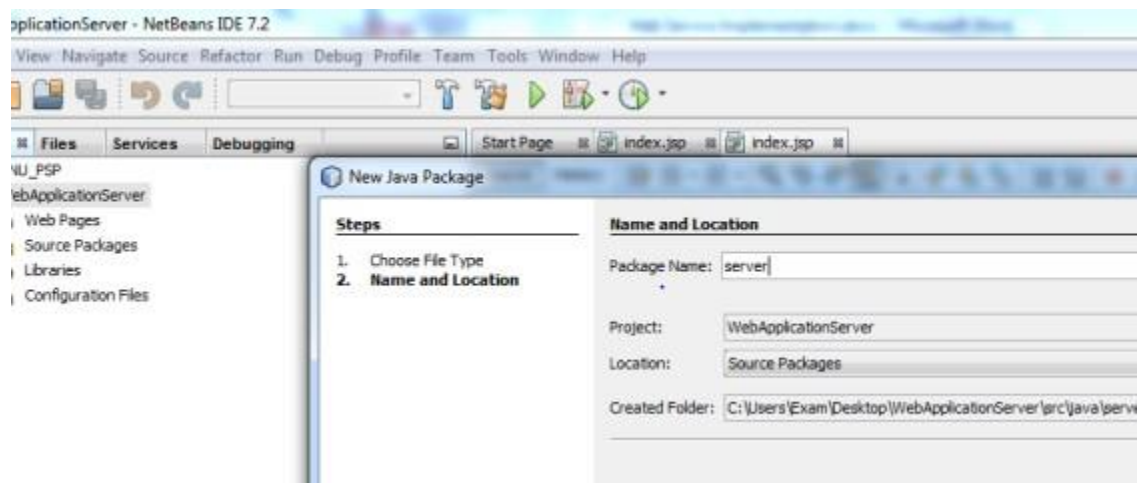
Project Folder:

☐ Use Dedicated Folder for Storing Libraries

Libraries Folder:

Different users and projects can share the same compilation libraries (see Help for details).





1. Choose File Type
2. **Name and Location**

Web Service Name:

Project:

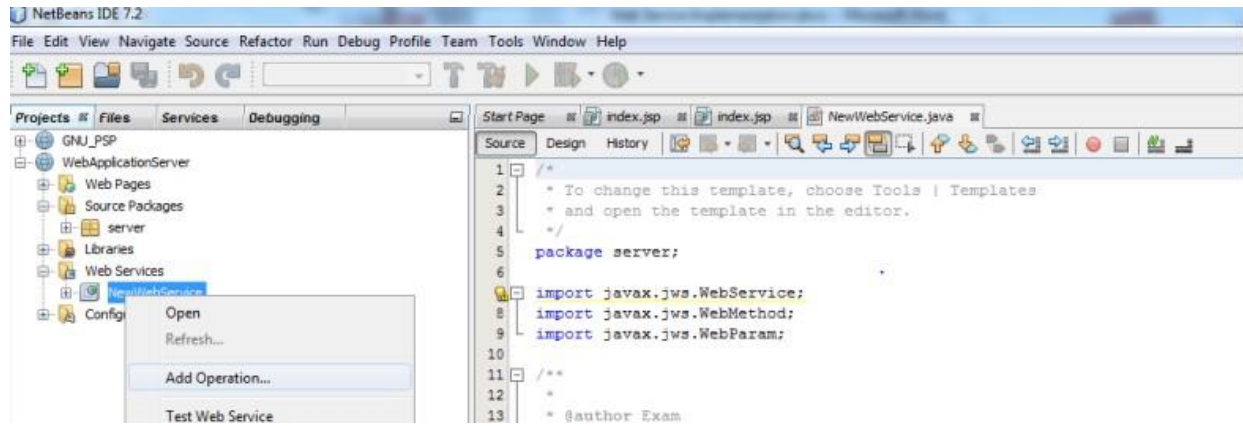
Location:

Package:

- ☒ Create Web Service from Scratch
☐ Create Web Service from Existing Session Bean

Enterprise Bean:

☐ Implement Web Service as Stateless Session Bean



Add Operation

Name:

Return Type:

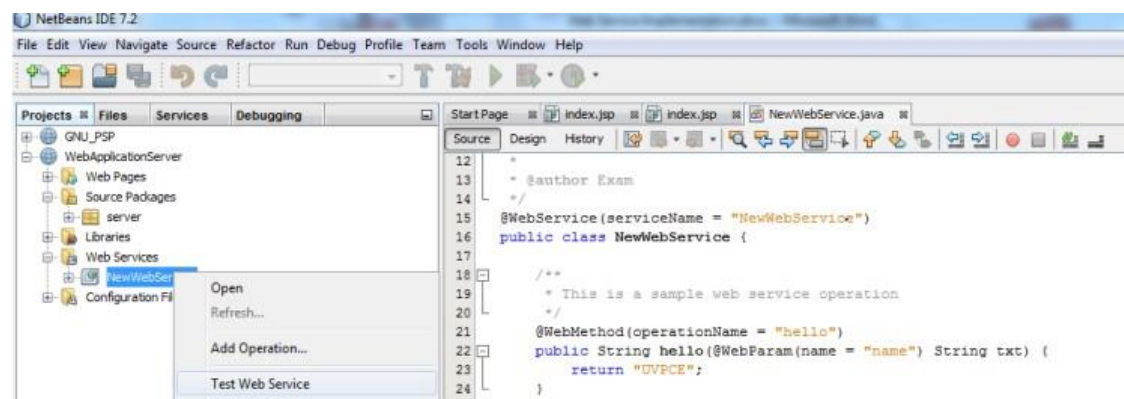
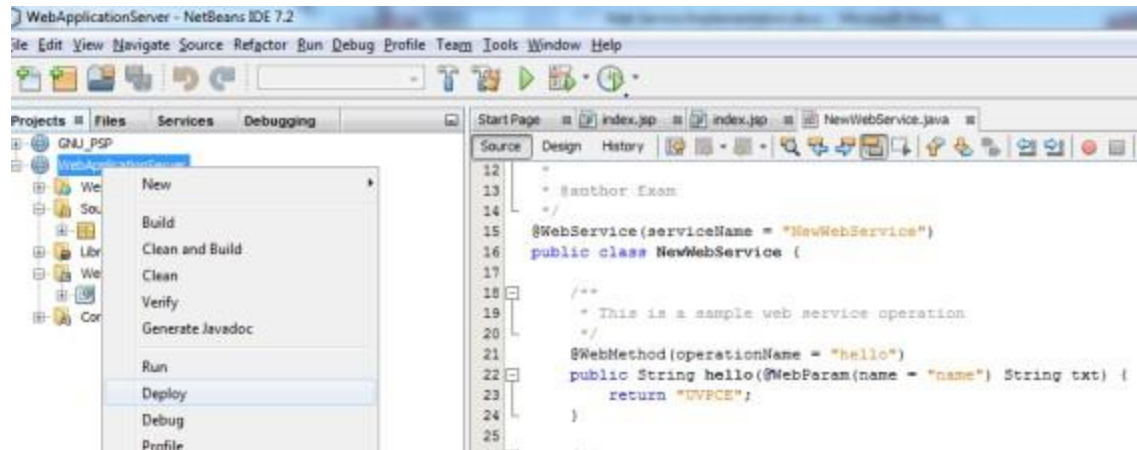
Parameters ☒ Exceptions ☐

Name	Type	Final
a	int	<input type="checkbox"/>
b	int	<input type="checkbox"/>

```

12  *
13  * @author Exam
14  */
15  @WebService(serviceName = "NewWebService")
16  public class NewWebService {
17
18      /**
19       * This is a sample web service operation
20       */
21      @WebMethod(operationName = "hello")
22      public String hello(@WebParam(name = "name") String txt) {
23          return "UVPCE";
24      }
25
26      /**
27       * Web service operation
28       */
29      @WebMethod(operationName = "sum")
30      public int sum(@WebParam(name = "a") int a, @WebParam(name = "b") int b) {
31          //TODO write your implementation code here;

```



sum Method invocation

Method parameter(s)

Type	Value
int	5
int	7

Method returned

java.lang.Integer : "12"

SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?><S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <S:Body>
    <ns2:SUM xmlns:ns2="http://CAL_/">
      <a>5</a>
      <b>7</b>
    </ns2:SUM>
  </S:Body>
</S:Envelope>
```

SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?><S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <S:Body>
    <ns2:SUMResponse xmlns:ns2="http://CAL_/">
      <return>12</return>
    </ns2:SUMResponse>
  </S:Body>
</S:Envelope>
```


multiplication Method invocation

Method parameter(s)

Type	Value
int	2
int	3

Method returned

ava.lang.Integer : "6"

SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?><S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <S:Body>
    <ns2:multiplication xmlns:ns2="http://CAL_/">
      <a>2</a>
      <b>3</b>
    </ns2:multiplication>
  </S:Body>
</S:Envelope>
```

SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?><S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <S:Body>
    <ns2:multiplicationResponse xmlns:ns2="http://CAL_/">
      <return>6</return>
    </ns2:multiplicationResponse>
  </S:Body>
</S:Envelope>
```

subtraction Method invocation

Method parameter(s)

Type	Value
float	5
float	2

Method returned

java.lang.Float : "3.0"

SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?><S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <S:Body>
    <ns2:subtraction xmlns:ns2="http://CAL_/">
      <a>5.0</a>
      <b>2.0</b>
    </ns2:subtraction>
  </S:Body>
</S:Envelope>
```

SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?><S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <SOAP-ENV:Header/>
  <S:Body>
    <ns2:subtractionResponse xmlns:ns2="http://CAL_/">
      <return>3.0</return>
    </ns2:subtractionResponse>
  </S:Body>
</S:Envelope>
```

CAL Web Service Tester

This form will allow you to test your web service implementation ([WSDL File](#))

To invoke an operation, fill the method parameter(s) input boxes and click on the

Methods :

public abstract java.lang.Integer cal_CAL.sum(int,int)

sum (,)

public abstract java.lang.String cal_CAL.hello(java.lang.String)

hello ()

public abstract java.lang.Float cal_CAL.division(int,int)

division (,)

public abstract java.lang.Integer cal_CAL.multiplication(int,int)

multiplication (,)

public abstract java.lang.Float cal_CAL.substraction(float,float)

substraction (,)

c2F Method invocation

Method parameter(s)

Type	Value
double	32

Method returned

java.lang.Double : "64.0"

SOAP Request

```
<?xml version="1.0" encoding="UTF-8"?><S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:SOAP-ENV="
  <SOAP-ENV:Header/>
  <S:Body>
    <ns2:c2f xmlns:ns2="http://temp_ser/">
      <c>32.0</c>
    </ns2:c2f>
  </S:Body>
</S:Envelope>
```

SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?><S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/" xmlns:SOAP-ENV="
  <SOAP-ENV:Header/>
  <S:Body>
    <ns2:c2fResponse xmlns:ns2="http://temp_ser/">
      <return>64.0</return>
    </ns2:c2fResponse>
  </S:Body>
</S:Envelope>
```

f2C Method invocation

Method parameter(s)

Type	Value
double	32

Method returned

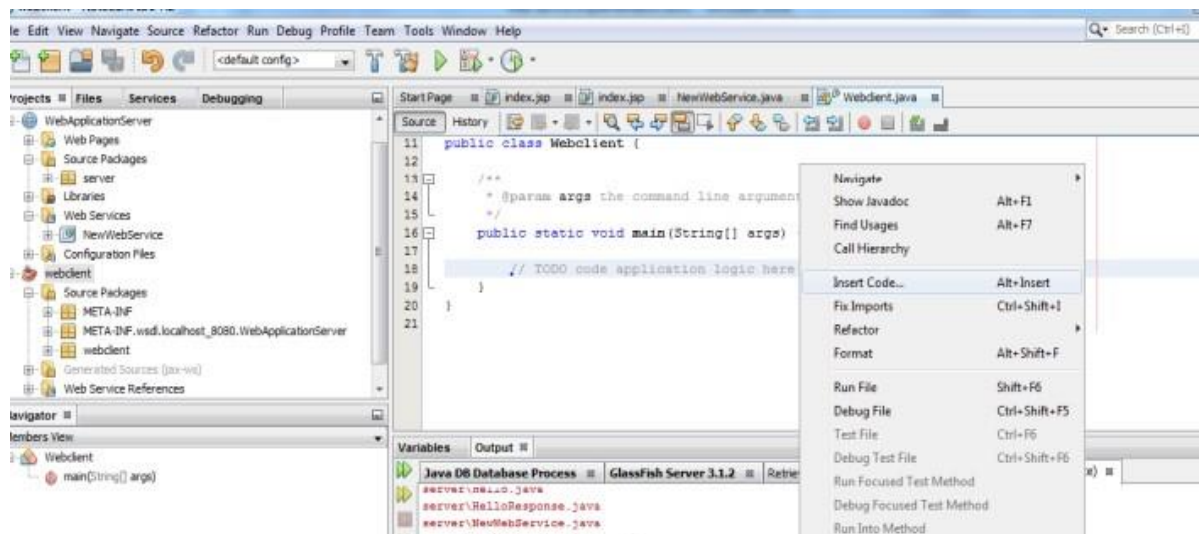
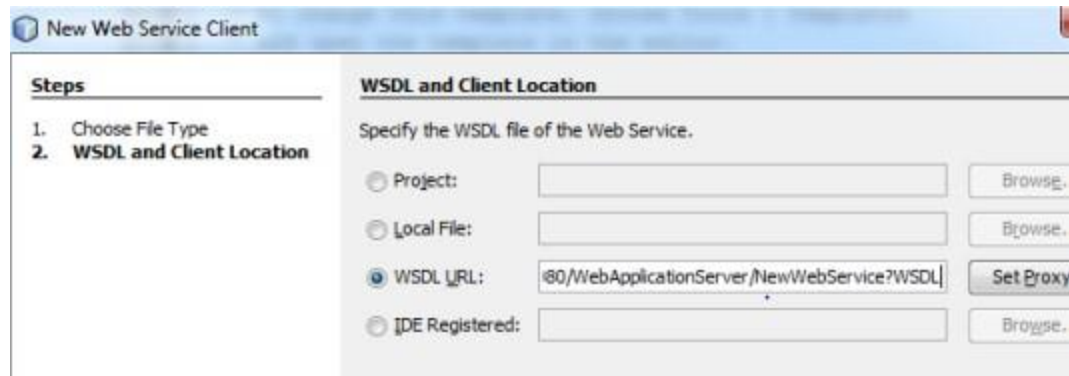
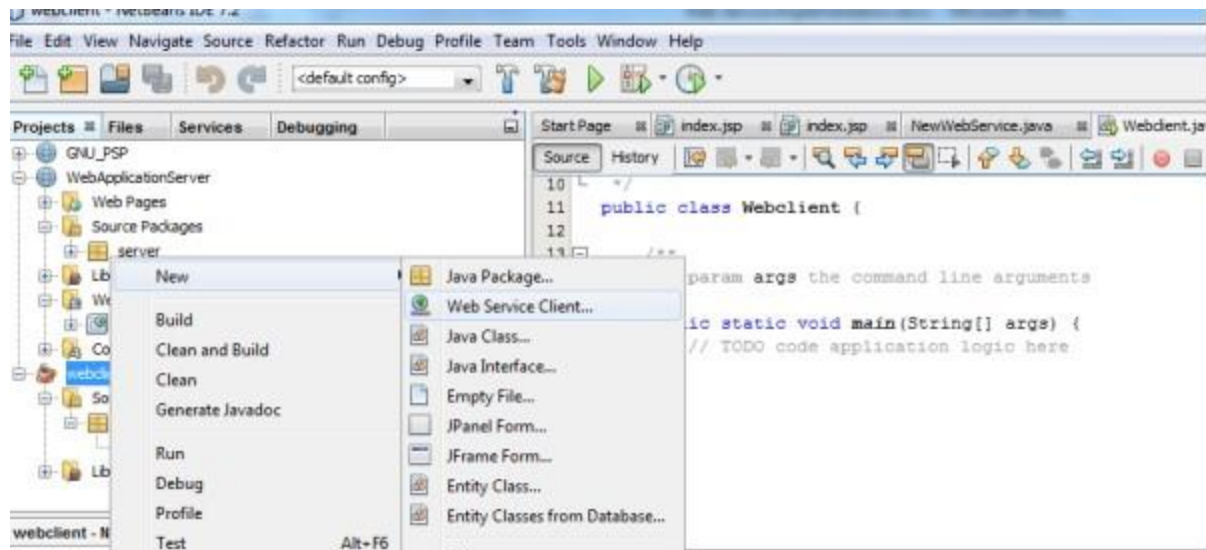
java.lang.Double : "0.0"

SOAP Request

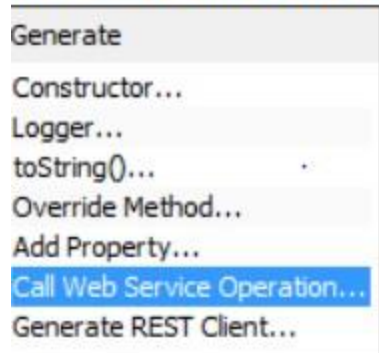
```
<?xml version="1.0" encoding="UTF-8"?><S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envel
  <SOAP-ENV:Header/>
  <S:Body>
    <ns2:f2c xmlns:ns2="http://temp_ser/">
      <f>32.0</f>
    </ns2:f2c>
  </S:Body>
</S:Envelope>
```

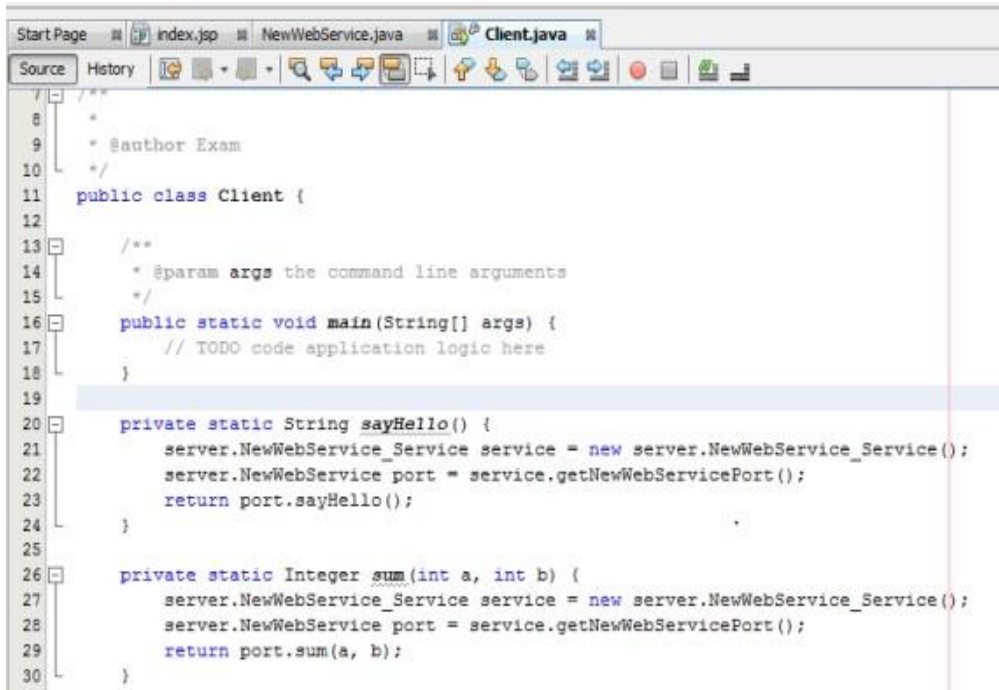
SOAP Response

```
<?xml version="1.0" encoding="UTF-8"?><S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envel
  <SOAP-ENV:Header/>
  <S:Body>
    <ns2:f2cResponse xmlns:ns2="http://temp_ser/">
      <return>0.0</return>
    </ns2:f2cResponse>
  </S:Body>
</S:Envelope>
```



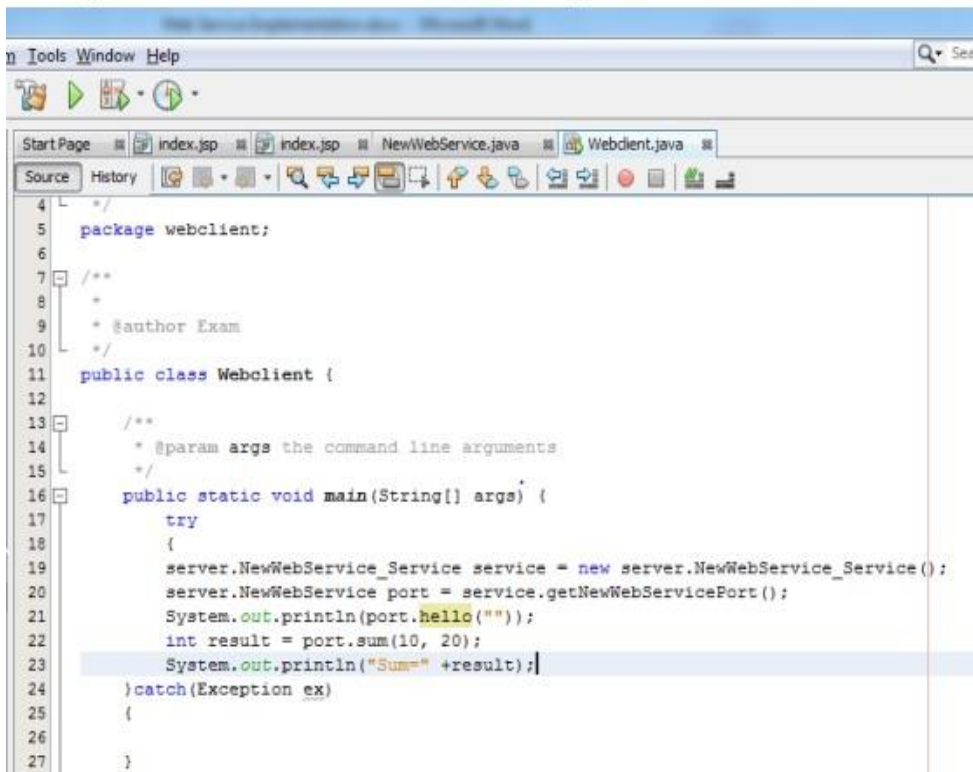
then select call web service





The screenshot shows an IDE window with the file `Client.java` open. The code defines a `Client` class with a `main` method and two static methods: `sayHello` and `sum`. The `main` method is currently selected.

```
1  /**
2   *
3   * @author Exam
4   */
5  public class Client {
6
7      /**
8       * @param args the command line arguments
9       */
10     public static void main(String[] args) {
11         // TODO code application logic here
12     }
13
14     private static String sayHello() {
15         server.NewWebService_Service service = new server.NewWebService_Service();
16         server.NewWebService port = service.getNewWebServicePort();
17         return port.sayHello();
18     }
19
20     private static Integer sum(int a, int b) {
21         server.NewWebService_Service service = new server.NewWebService_Service();
22         server.NewWebService port = service.getNewWebServicePort();
23         return port.sum(a, b);
24     }
25 }
```



The screenshot shows an IDE window with the file `Webclient.java` open. The code defines a `Webclient` class with a `main` method that uses the `Client` class's `sayHello` and `sum` methods. The line `System.out.println("Sum=" + result);` is currently selected.

```
1  /**
2   *
3   * @author Exam
4   */
5  package webclient;
6
7  /**
8   * @param args the command line arguments
9   */
10 public class Webclient {
11
12     /**
13      * @param args the command line arguments
14      */
15     public static void main(String[] args) {
16         try
17         {
18             server.NewWebService_Service service = new server.NewWebService_Service();
19             server.NewWebService port = service.getNewWebServicePort();
20             System.out.println(port.hello(""));
21             int result = port.sum(10, 20);
22             System.out.println("Sum=" + result);
23         } catch (Exception ex)
24         {
25
26         }
27     }
28 }
```