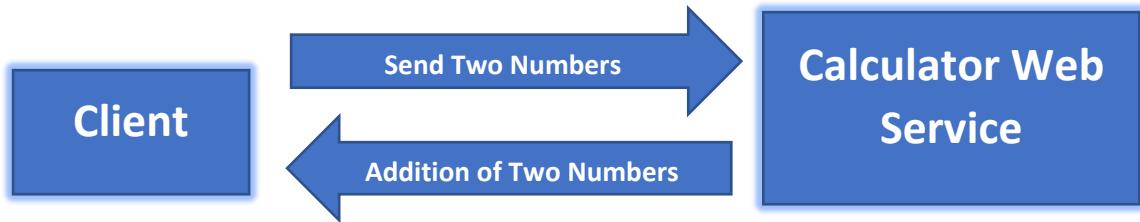
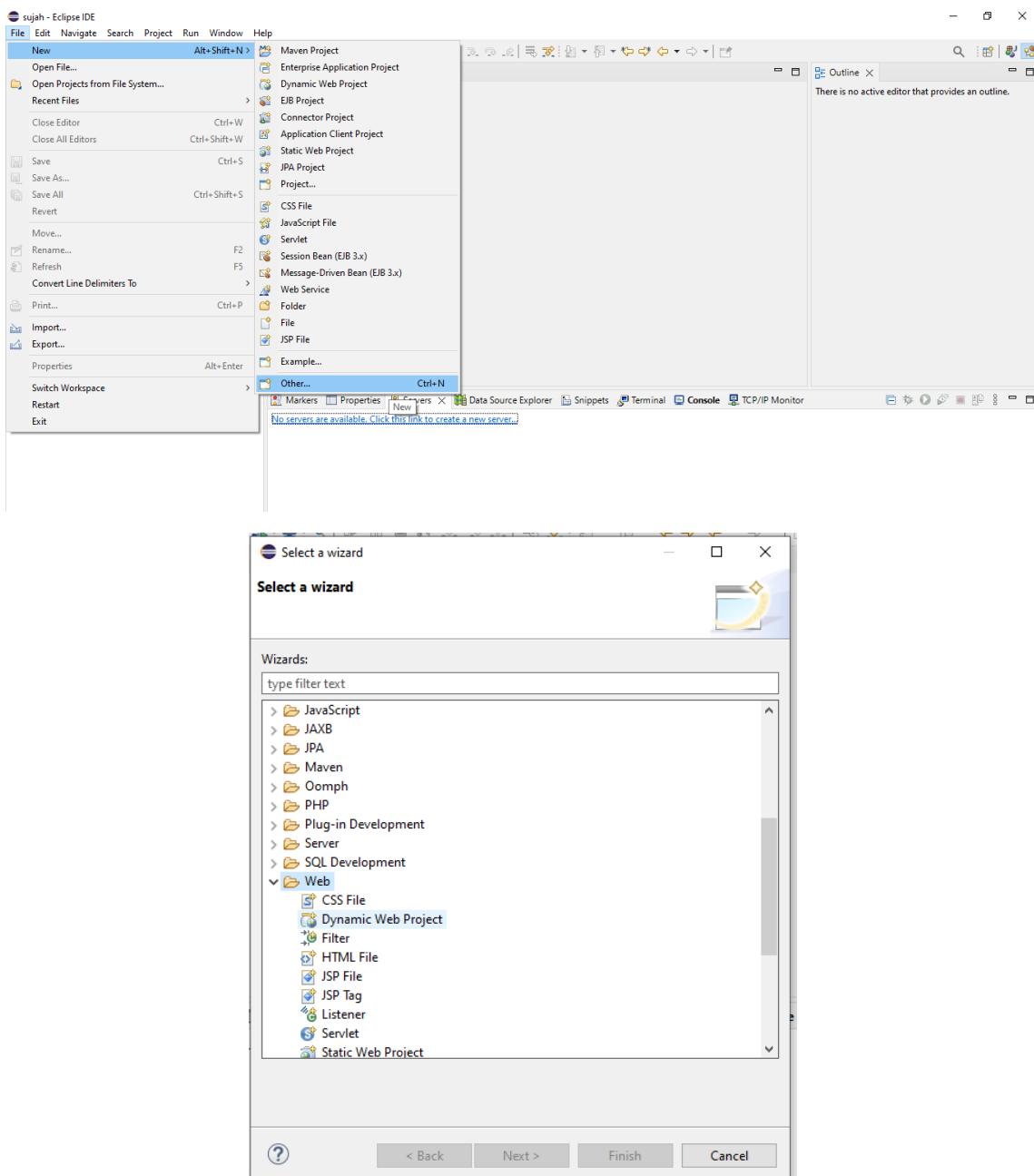


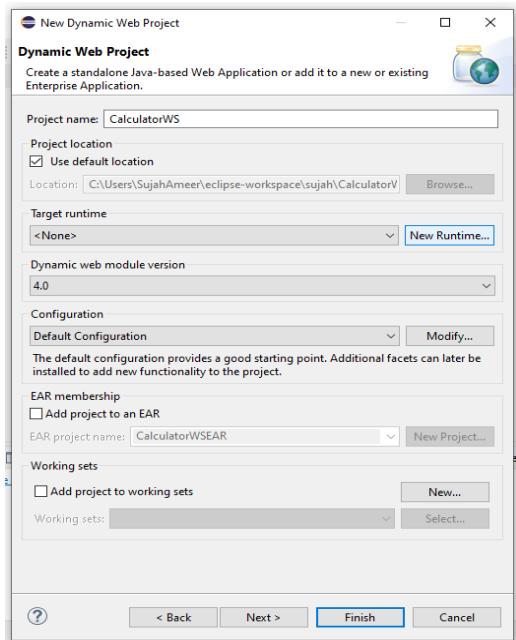
Title: Create SOAP web services using Java with Eclipse IDE.

Create Calculator Web Service



- Open the Eclipse IDE > Click File > New > Others > Web > Dynamic Web Project.





- Type the project name as **CalculatorWS** and need to select the **Target Runtime**.
- Then need to download the Apache Tomcat Server 9.0.
- Search in Google “Tomcat 9.0”
- Go to the Link

<https://tomcat.apache.org/download-90.cgi>

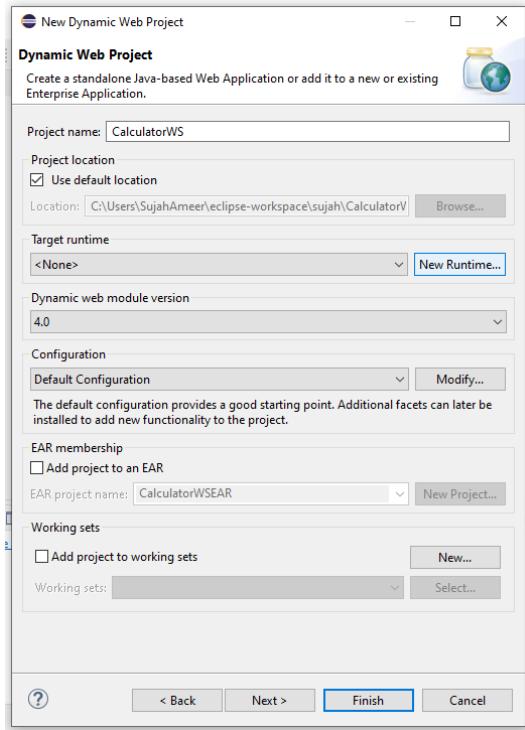
9.0.72

Please see the [README](#) file for packaging information. It explains what every distribution contains.

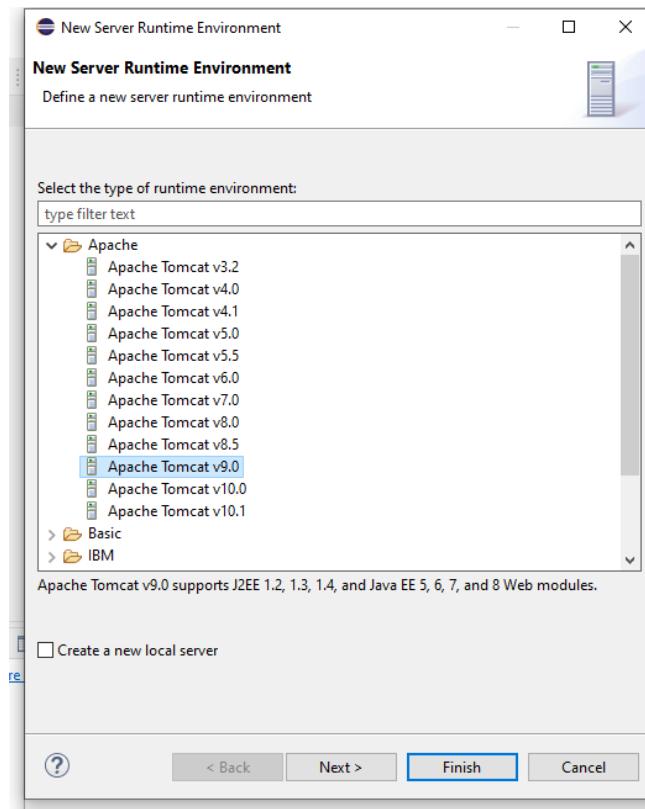
Binary Distributions

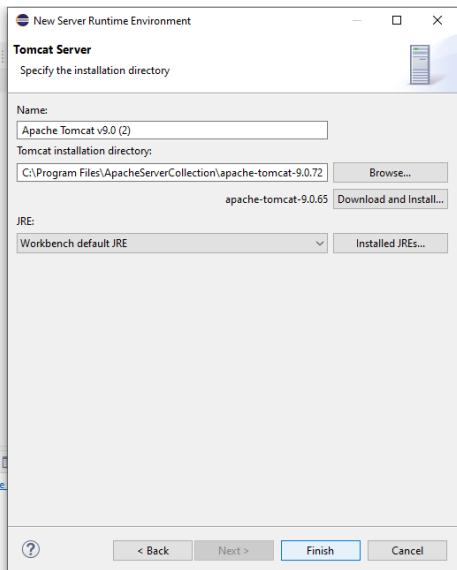
- Core:
 - [zip \(pgp, sha512\)](#) (arrow pointing here)
 - [tar.gz \(pgp, sha512\)](#)
 - [32-bit Windows zip \(pgp, sha512\)](#)
 - [64-bit Windows zip \(pgp, sha512\)](#)
 - [32-bit/64-bit Windows Service Installer \(pgp, sha512\)](#)
- Full documentation:
 - [tar.gz \(pgp, sha512\)](#)
- Deployer:
 - [zip \(pgp, sha512\)](#)
 - [tar.gz \(pgp, sha512\)](#)
- Embedded:
 - [tar.gz \(pgp, sha512\)](#)
 - [zip \(pgp, sha512\)](#)

- Download the Zip
- Then extract the file and copy the location.
- Now Click the **New Run Time**

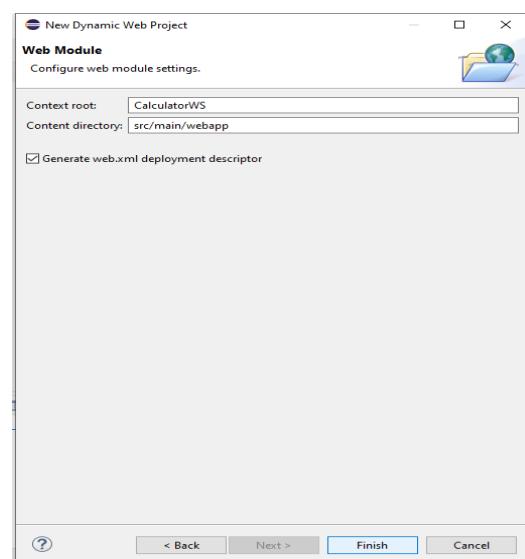
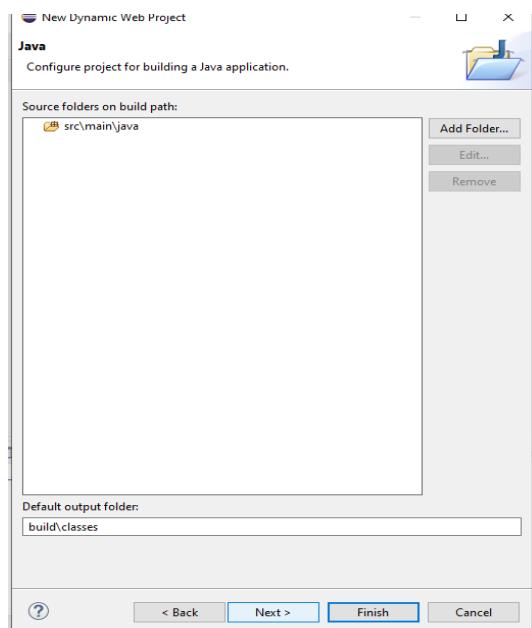


- Select Apache Tomcat v9.0 and enter the copied path and click finish. Look at the given images.

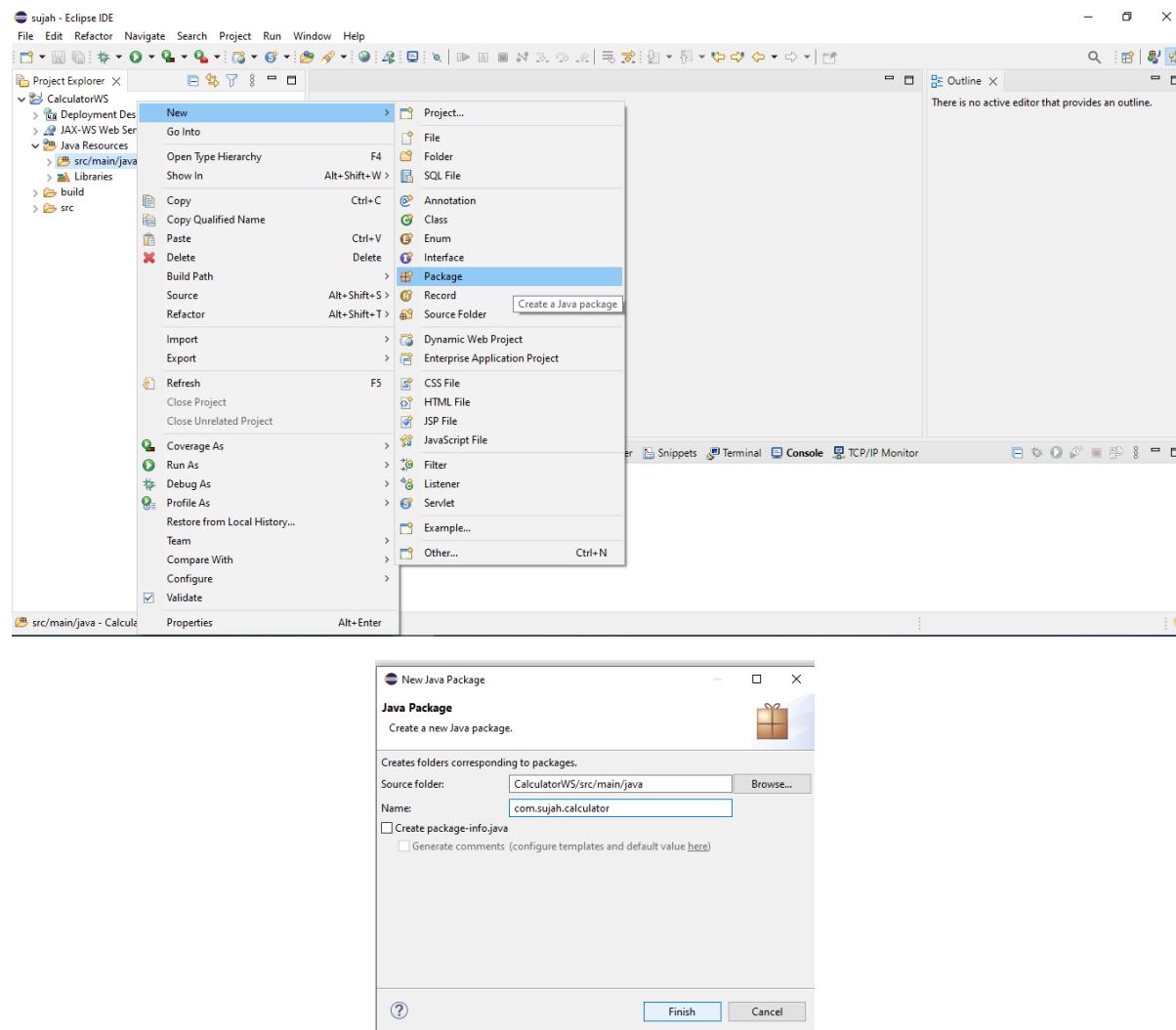




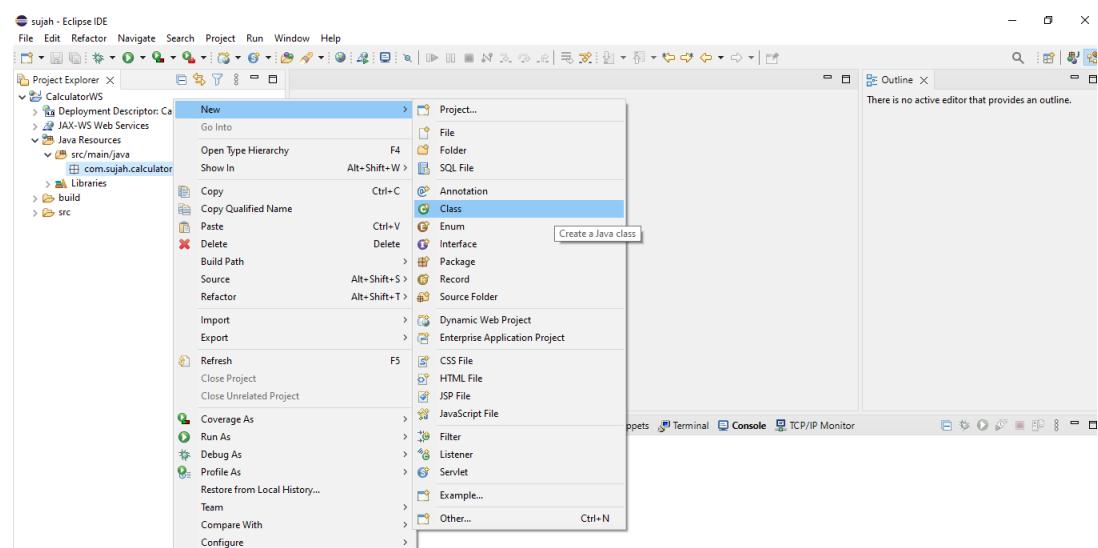
- Then click next and finish the project setup.

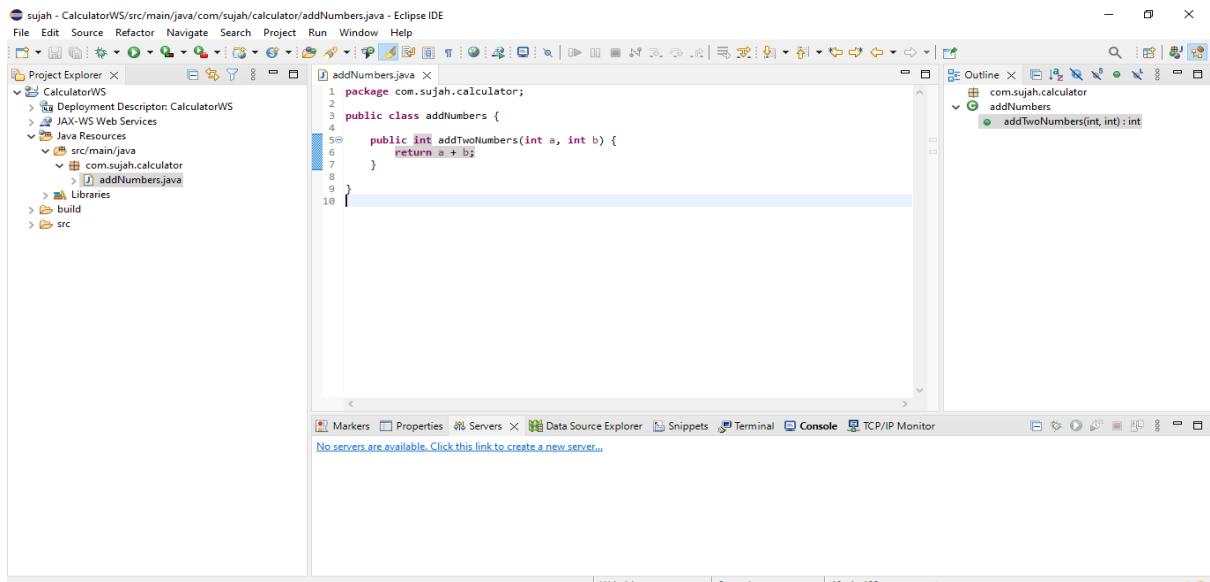
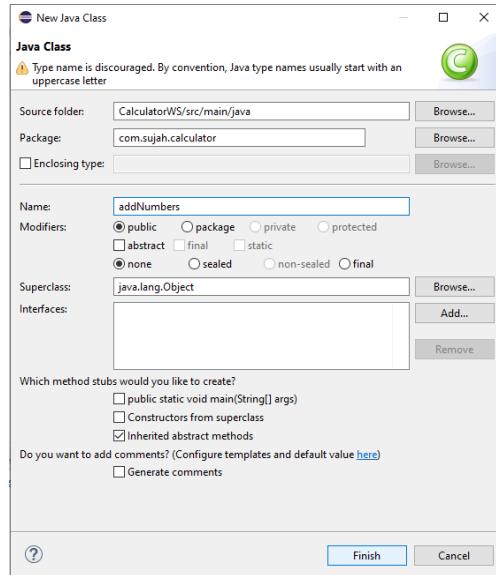


- Create New Package (Example: com.sujah.calculator)

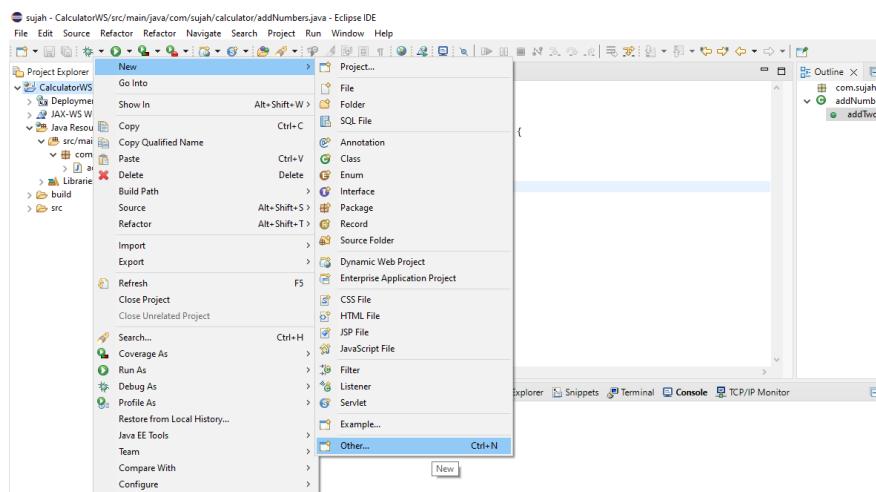


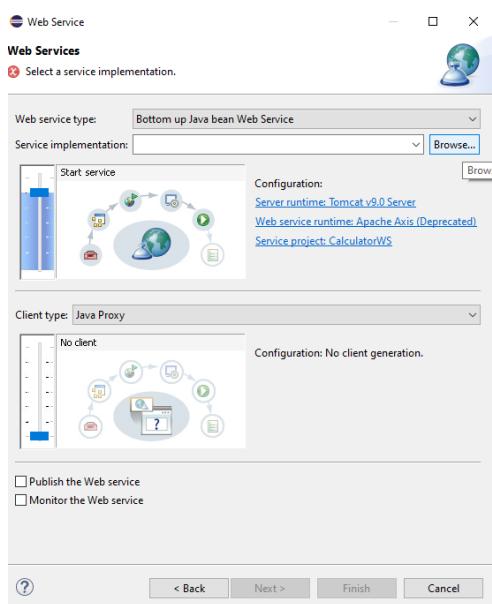
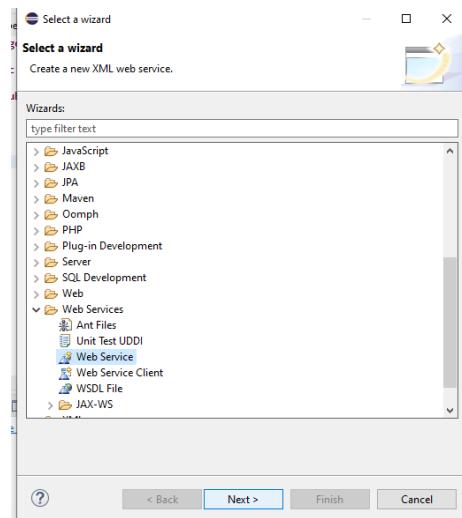
- Create new class and create a method for add two numbers.



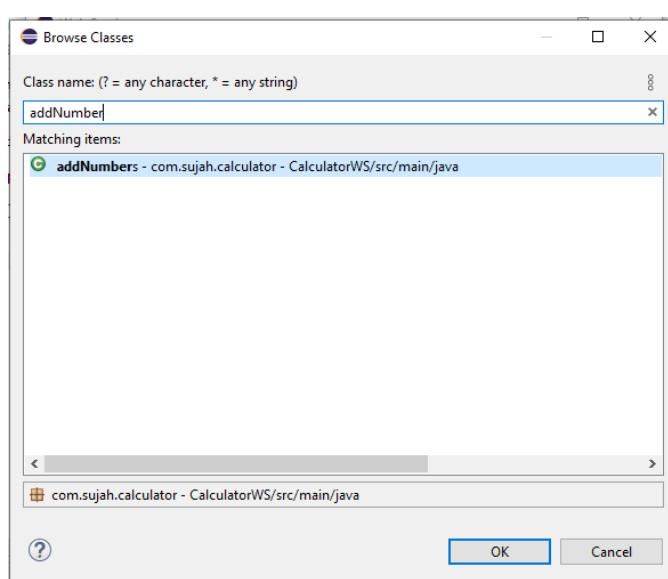


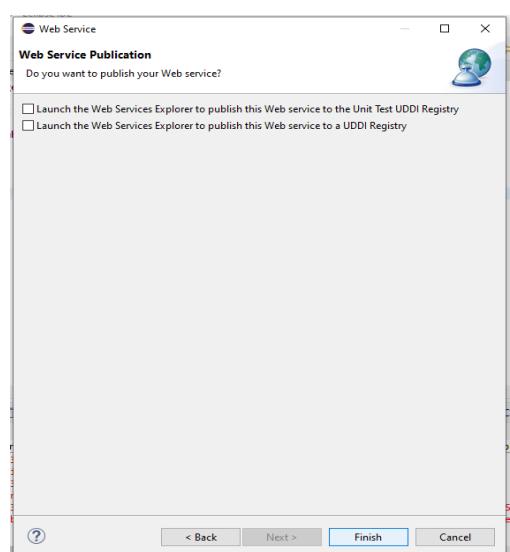
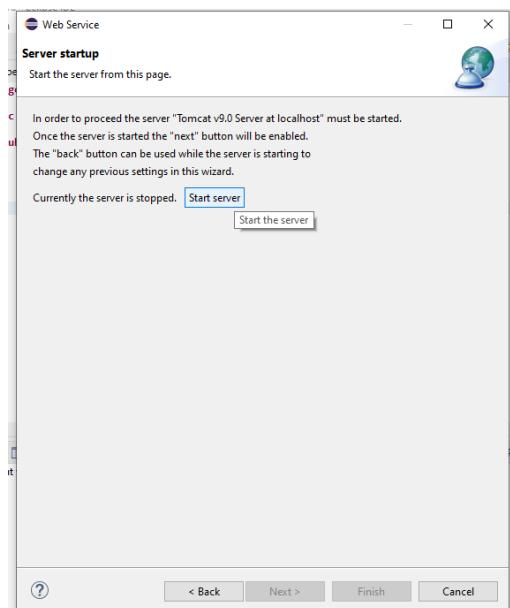
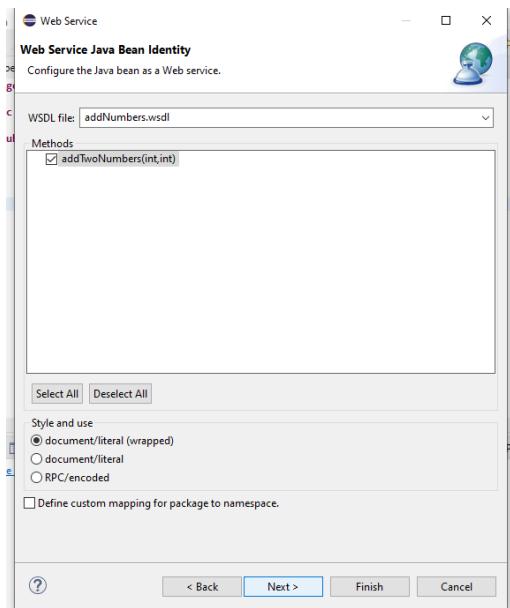
- Then need to create a web server to run the project.
- Right Click on the Project > New > Others > Web Services > Web Service
- Click Next.





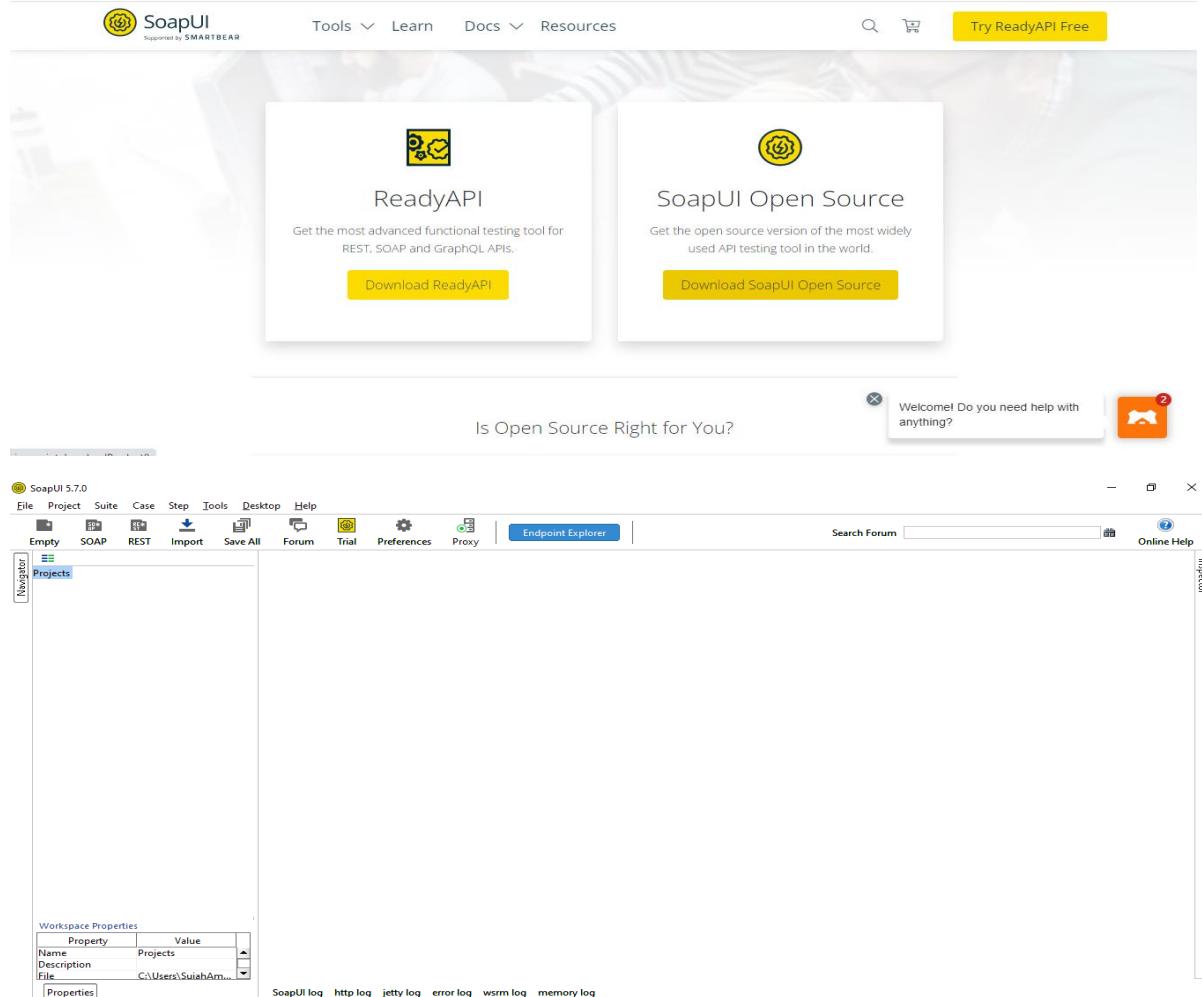
- Browse and select the server implementation file and click next and start the server and click finish.



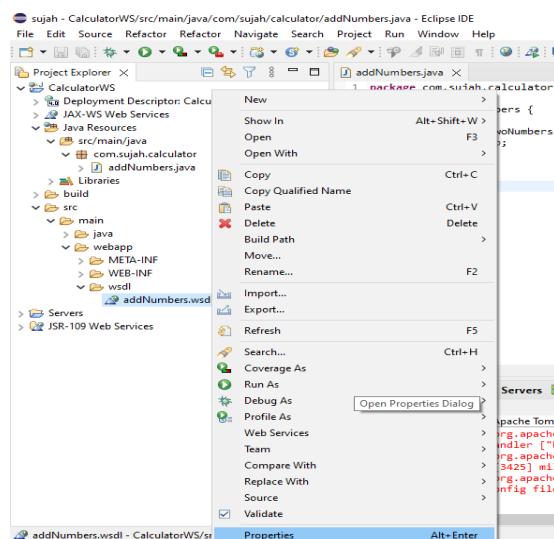


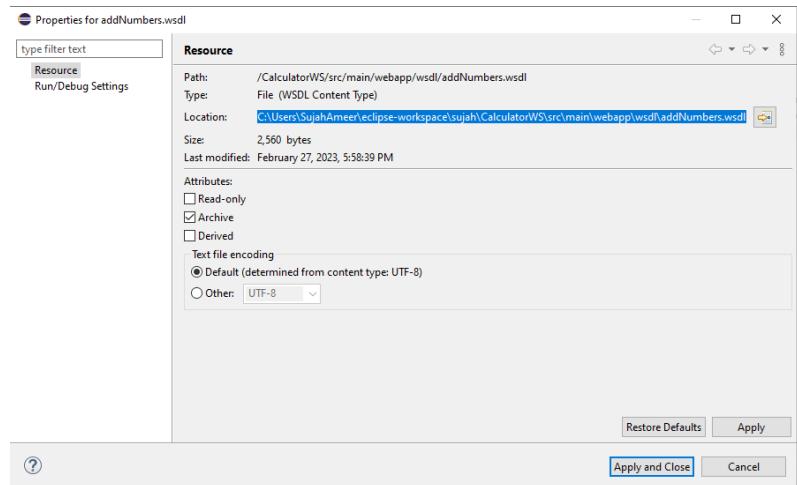
- Download the SOAP UI to create our client.
- Go to the Link and click download.

<https://www.soapui.org/downloads/soapui/>

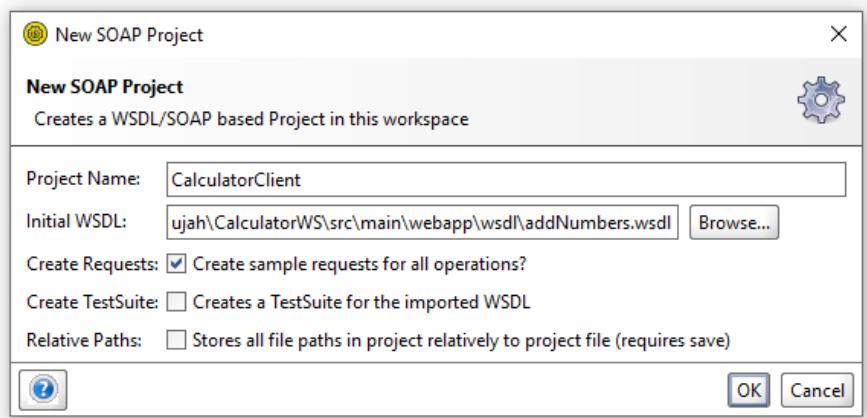
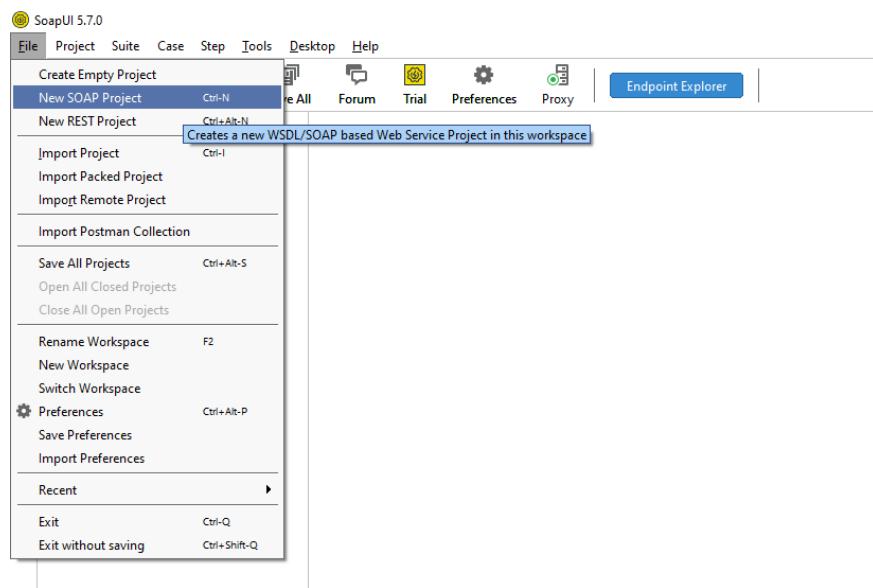


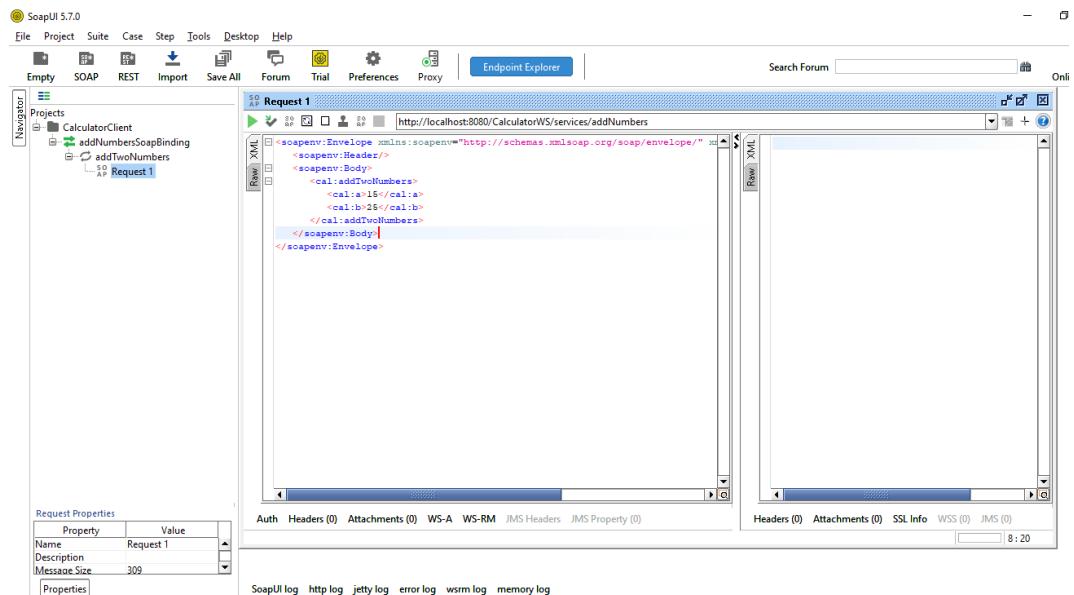
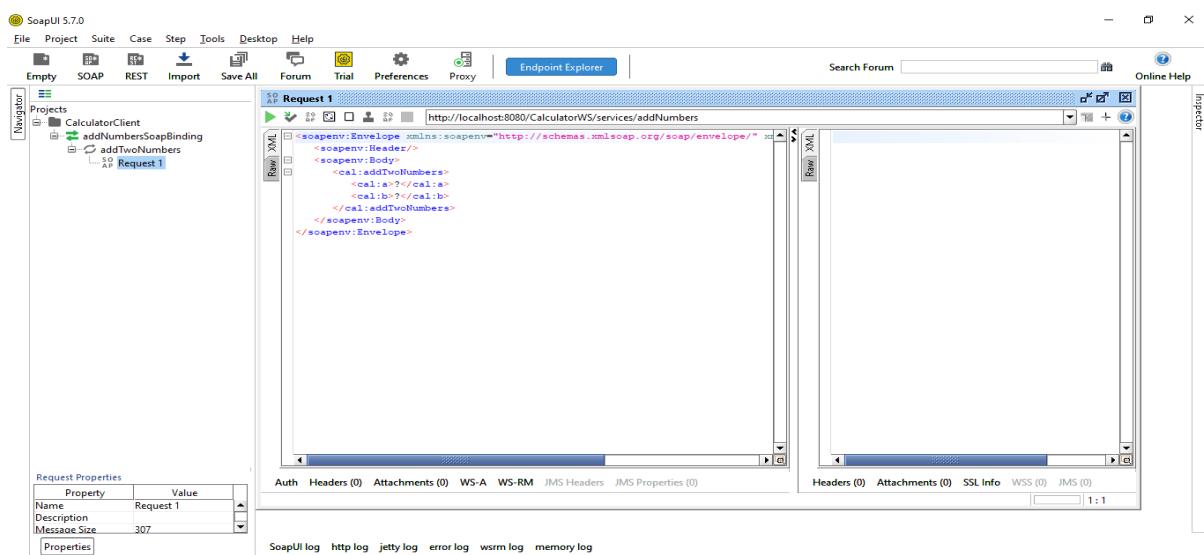
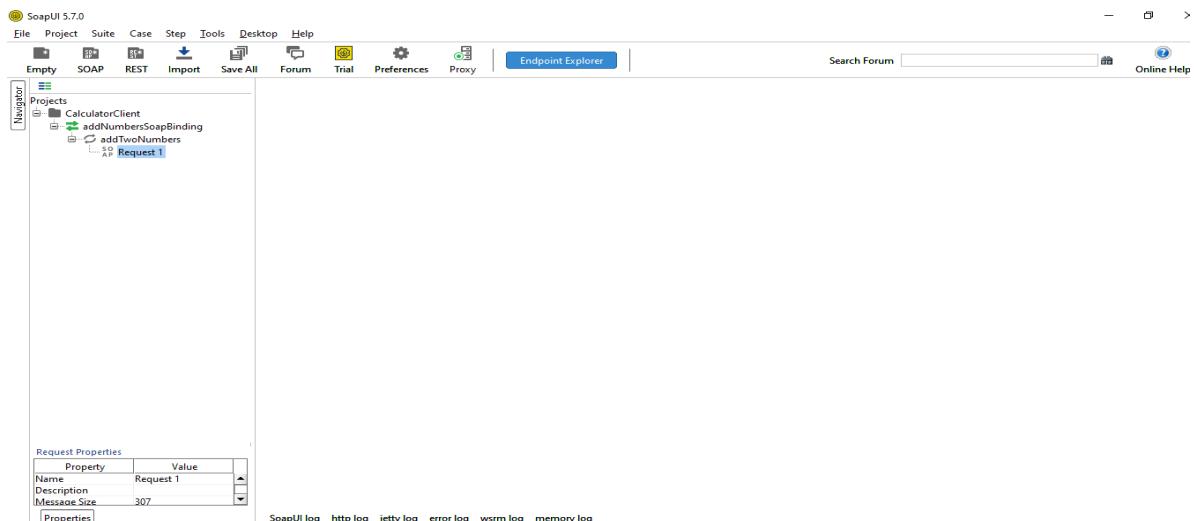
- Then go to the wsdl folder in your project and right click and click the properties. Finally, Copy the location.





- Now open the SOAP UI and File > New SOAP Project > Give a name for your project and paste the URL.





SoapUI 5.7.0

File Project Suite Case Step Tools Desktop Help

Empty SOAP REST Import Save All Forum Trial Preferences Proxy Endpoint Explorer Search Forum Online

Projects CalculatorClient addNumbersSoapBinding addTwoNumbers Request 1

Request 1 http://localhost:8080/CalculatorWS/services/addNumbers

Raw XML <soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"><soapenv:Header/><soapenv:Body><cal:addTwoNumbers><cal:a>15</cal:a><cal:b>25</cal:b></cal:addTwoNumbers></soapenv:Body></soapenv:Envelope>

Raw XML HTTP/1.1 200 Content-Type: text/xml;charset=utf-8 Transfer-Encoding: chunked Date: Mon, 27 Feb 2023 12:43:50 GMT Keep-Alive: timeout=20 Connection: keep-alive

<?xml version="1.0" encoding="UTF-8"?><soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"><soapenv:Header/><soapenv:Body><addTwoNumbersResponse xmlns="http://calculator.sujah.com"><addTwoNumbersReturn>40</addTwoNumbersReturn></addTwoNumbersResponse></soapenv:Body></soapenv:Envelope>

The actual content of the last received response

Request Properties

Property	Value
Name	Request 1
Description	
Message Size	309

Auth Headers (0) Attachments (0) WS-A WS-RM JMS Headers JMS Property (0)

response time: 90ms (389 bytes)

SSL Info WSS (0) 8:20

SopUI log http log jetty log error log wsrm log memory log

SoapUI 5.7.0

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Empty SOAP REST Import Save All Forum Trial Preferences Proxy Endpoint Explorer Search Forum Online Help

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Headers (6) Attachments (0) SSL Info WSS (0) JMS (0) 1:1

Request Properties

Property	Value
Name	Request 1
Description	
Message Size	309

SopUI log http log jetty log error log wsrm log memory log