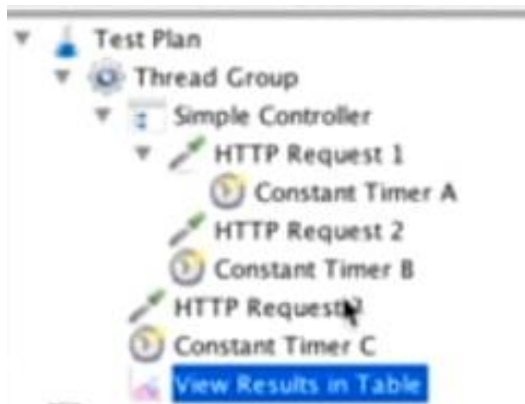


Demo: Simple Controller & Timers

Add the Simple Controllers & Constant Timer as shown in the hierarchy of TestPlan.

Set the Thread Delay for Timer A : 3000 ms. Timer B : 5000 ms. Timer C : 7000 ms



Therefore, HTTP Request1 runs after 15 sec; HTTP Request 2 runs after 5 sec after HTTP Req. 1 & HTTP Request 3 runs after 7 sec after HTTP Request 2.

TO DO: Use Uniform Random Timer

Demo: Adding additional Plugins

You can check the various plugins available for Jmeter on the url : <https://jmeter-plugins.org/>

The screenshot shows the jmeter-plugins.org website with the following plugins listed:

- jmeter - Various Core Components**: Ships a lot of various components for JMeter, including Debug Sampler. ID: jmeter-components. Users: 67250.
- JMS Send and Receive Sampler**: If you are using JMS (Java Message Service) to send and receive messages between two or more clients, we have created a sampler which enables you to send and receive messages. ID: jpgc-jms. Users: 2168.
- BlazeMeter Step-by-step Debugger**: This plugin enables step-by-step debugging of JMeter scripts. ID: blazemeter-debugger. Users: 4782.
- Flexible File Writer**: Flexible File Writer plugin allows writing test results in flexible format, specified via GUI. ID: jpgc-ffw. Users: 22493.

At the bottom, there is a link: [97 more plugins...](#)

If you want to add any new jmeter plugins, follow the steps:

METHOD 1 :

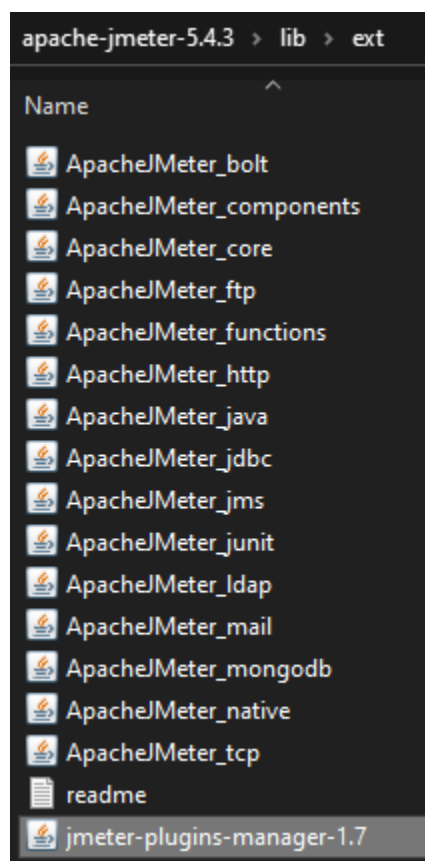
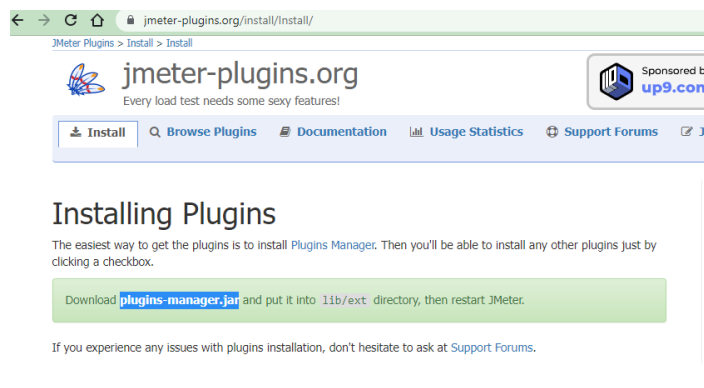
Install jar file of any plugin u want to add

Paste it in \apache-jmeter-5.4.3\lib\ext\place the jar file here.

Restart your jmeter to apply the changes

METHOD 2 : Quick & easy way – using Jmeter Plugin Manager

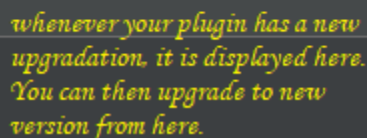
Download plugin manager jar and add to lib\ext folder from the url : <https://jmeter-plugins.org/install/Install/> and paste it in \apache-jmeter—5.4.3\lib\ext\



Restart the Jmeter.

You will see 'PLUGINS MANAGER' under OPTIONS menu getting added.

Displays plugins currently available but not installed. Select any of these and click 'Apply changes & Restart' button.



You can make use of Available Plugins to add any new plugins instead of every time downloading jar files from for every plugin that you want to add.

Adding Plugins Manager will be one time activity and then just and then select plugins that you want to add and apply.

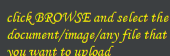
Demo: File Upload Testing

Test Plan – Thread Group – HTTP Request Sampler

Add listener - ViewResult Tree

You can use this url to check FileUpload testing : https://www.ilovepdf.com/word_to_pdf

Refer to this url for checking MIME types : <https://freeformatter.com/mime-types-list.html>



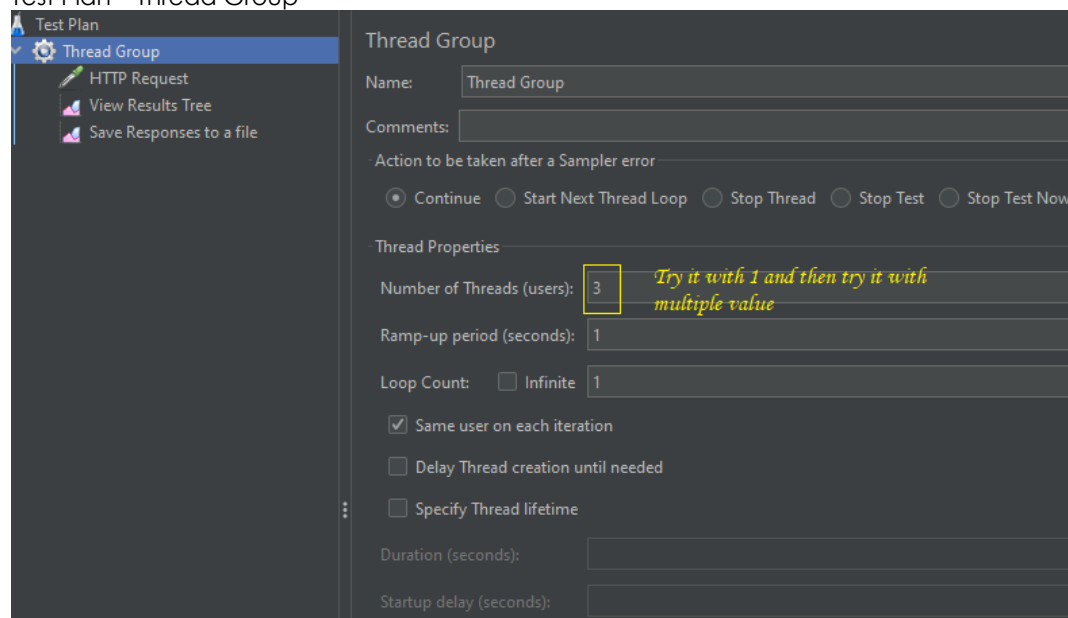
go to the url, - INSPECT fileupload button - copy the NAME or ID value here.

You can check the suitable MIME type on this url and paste it here <https://freematter.com/mime-types-list.html>

Demo: FTP Request Sampler :: File Download Testing

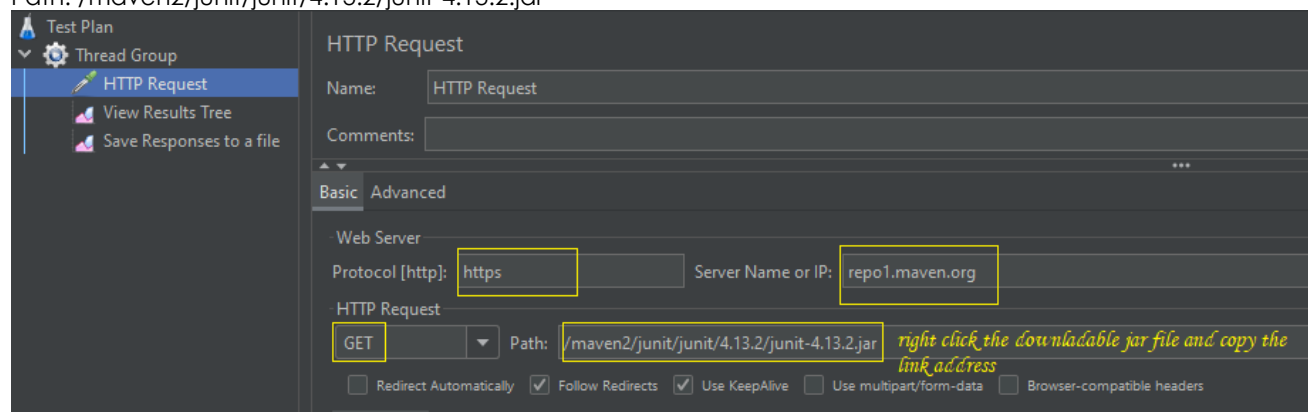
You can use this FTP url for file download: <ftp://speedtest.tele2.net/> //if you are able to access (or) use [MAVEN REPOSITORY](#) to download jar files.

Create a folder in some path to download the files
Test Plan – Thread Group



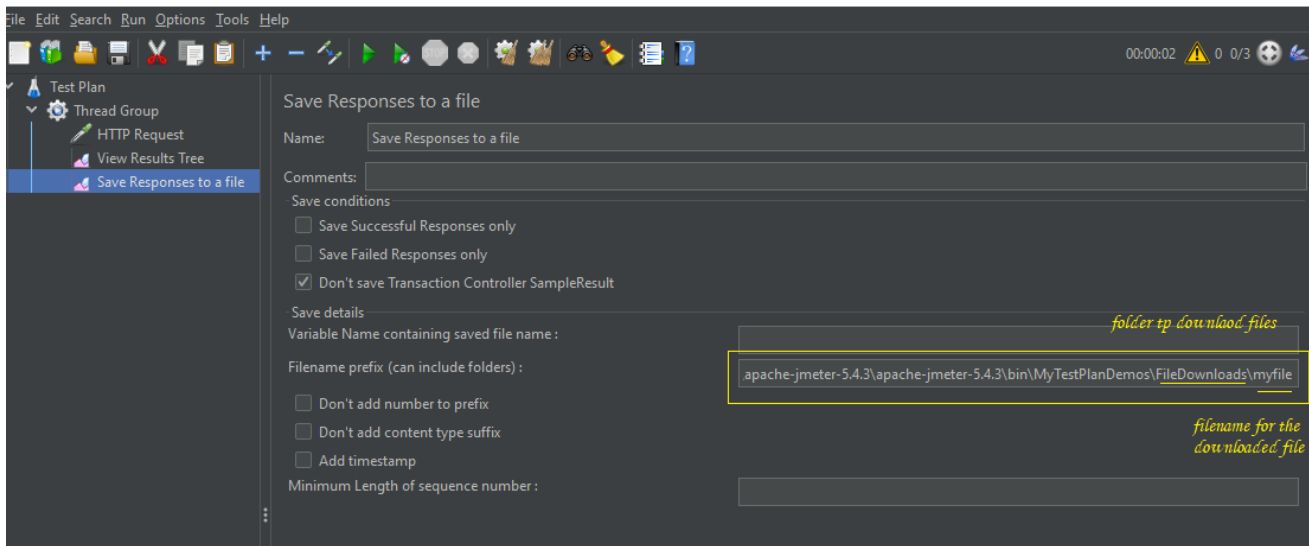
Add FTP/HTTP Request Sampler

Protocol: https //usually we don't write this but since this site is strictly secured, write it.
Server Name or IP: repo1.maven.org
Path: /maven2/junit/junit/4.13.2/junit-4.13.2.jar



Add listener - ViewResult Tree

Add listener – Save Response to a file



Run

Demo: REST API Testing

API - Application Programming Interface

REST API - JSON,XML

SOAP API - XML

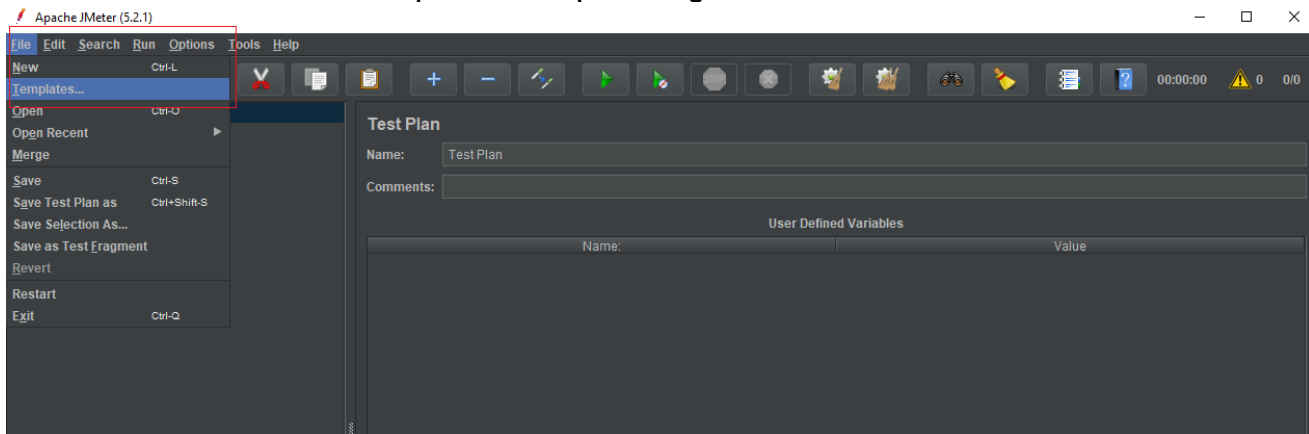
P1 interface P2

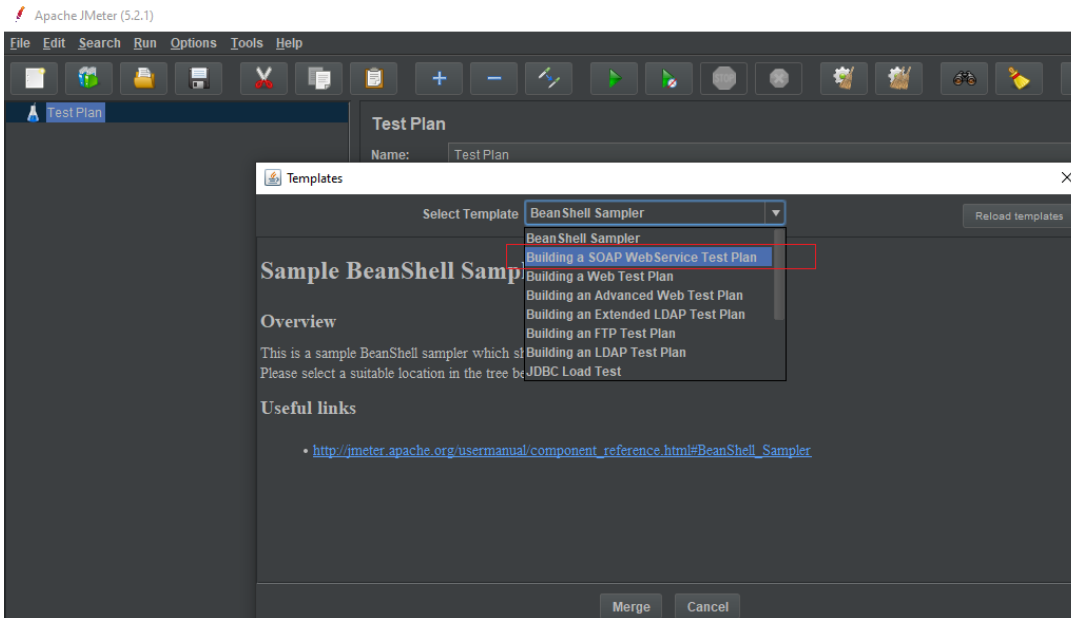
Customer WAITER Kitchen

Client API Server

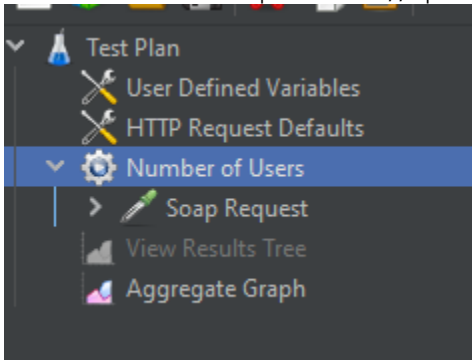
MMT API GoFirst, SpiceJEt, Indigo

open Templates (right side top under 'File')--> Select Template Dropdown--> Building a SOAP Webservice Test Plan ->Click on Create --> The Sample SOAP test plan with get created.

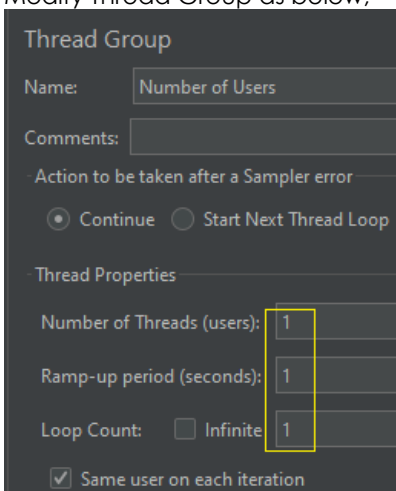




Under Number of Users -->HTTP Request(SOAP Request) sample will get created as below;
Rename it as REST Request //optional since we are focusing on REST API Testing here.



Modify Thread Group as below;



Delete any unwanted Response assertion data added under Soap Request sampler

Use REST API url: <https://regres.in/>

Test Plan

- User Defined Variables
- HTTP Request Defaults
- Number of Users
- Soap Request
- HTTP Header Manager
- View Results Tree
- Response Assertion
- Assertion Results
- View Results Tree
- Aggregate Graph

HTTP Request

Name: Soap Request

Comments:

Basic Advanced

Web Server

Protocol (http): Server Name or IP: reqres.in Port Number:

HTTP Request

Method: GET Path: /api/users/2 Content type:

☐ Redirect Automatically ☒ Follow Redirects ☒ Use KeepAlive ☐ Use multipart/form-data ☐ Browser-compatible headers

Parameters Body Data Files Upload

Send Parameters With the Request:

Name	Value	URL Encode?	Content-Type
first_name	Janet	<input type="checkbox"/>	text/plain

Detail Add Add from Clipboard Delete Up Down

Add Response Assertion

Test Plan

- User Defined Variables
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- Number of Users
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- HTTP Header Manager
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- Response Assertion
- Assertion Results
- RestAPI sampler
- View Results Tree
- Aggregate Graph

Response Assertion

Name: Response Assertion

Comments:

Apply to:

☐ Main sample and sub-samples ☒ Main sample only ☐ Sub-samples only ☐ JMeter Variable Name to use

Field to Test

☒ Text Response ☐ Response Code ☐ Response Message

☐ Request Headers ☐ URL Sampled ☐ Document (text)

☐ Request Data

Pattern Matching Rules

☒ Contains ☐ Matches ☐ Equals ☐ Substring ☐ Not

Patterns to Test

Patterns to Test
1 weaver

Add Add from Clipboard Delete

Run :

Check : Result Tree & Assertion Result

Test Plan

- User Defined Variables
- HTTP Request Defaults
- Number of Users
- Soap Request
- HTTP Header Manager
- View Results Tree
- Response Assertion
- Assertion Results
- RestAPI sampler
- View Results Tree
- Aggregate Graph

View Results Tree

Name: View Results Tree

Comments:

Write results to file / Read from file

Filename: Browse... Log/Display Only: ☐ Errors ☐ Successes ☐ Cont

Search: ☐ Case sensitive ☐ Regular exp. Search Reset

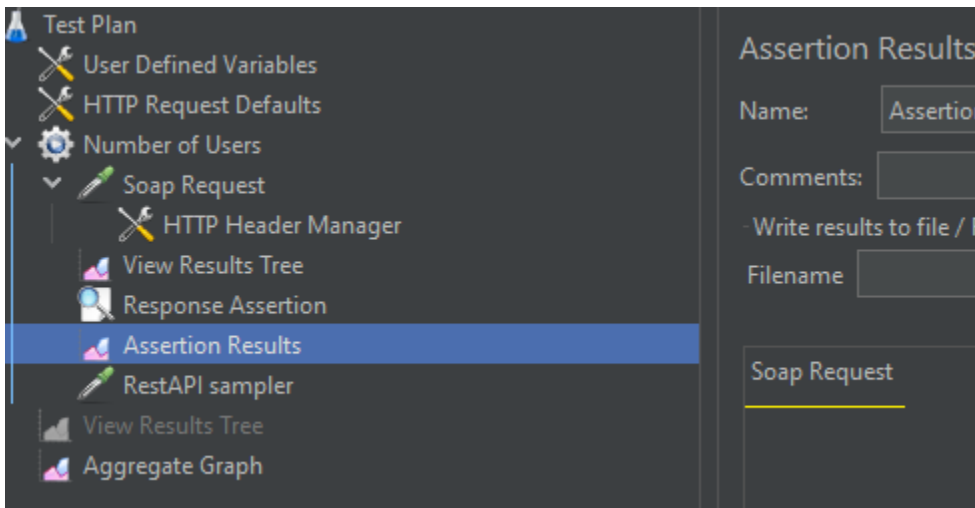
Text

Soap Request

Response Body Response headers

Find ☐ Case sensitive ☐ R

```
[{"id":2,"email":"janet.weaver@reqres.in","first_name":"Janet","last_name":"Weaver","avatar":"https://reqres.in/img/faces/2-image.jpg","support":{"url":"https://reqres.in/#support-heading","text":"To keep ReqRes free, contributions towards server costs are appreciated!"}]
```



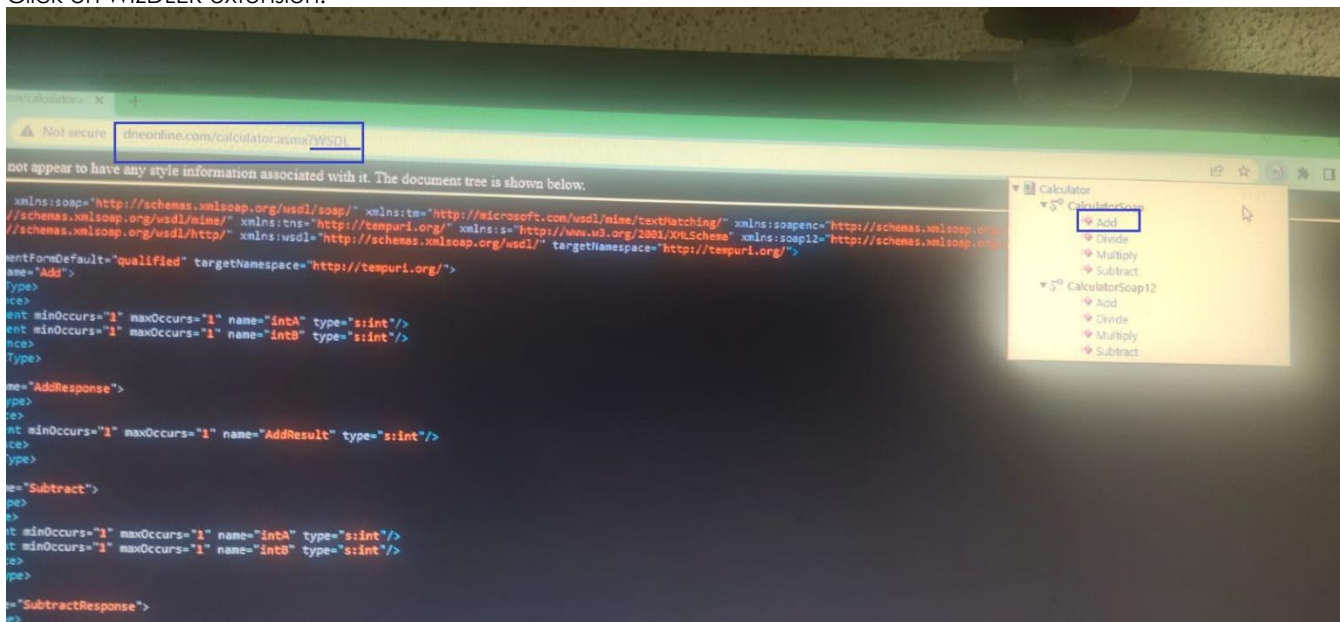
Demo: SOAP API Testing

<http://www.dneonline.com/calculator.asmx>

Add WIZDLER extension to your chrome.
Restart the browser.
The WIZDLER is active only for WSDL pages.

So.. click on [Service Description](#) link. You will be navigated to
<http://www.dneonline.com/calculator.asmx?WSDL>

Click on WIZDLER extension.



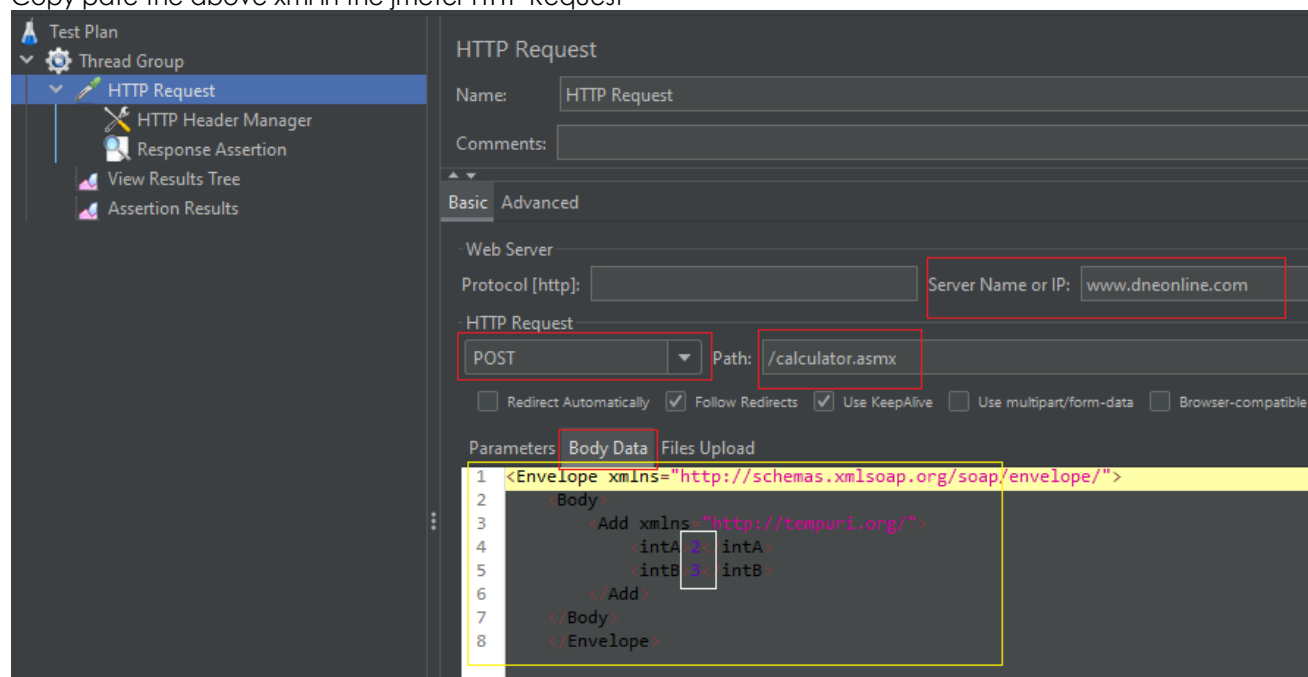
Select ADD.


```

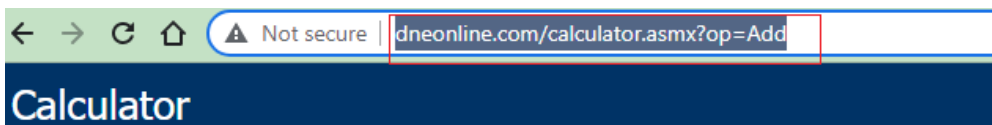
Wizdler | chrome-extension://oebpmncolmhi
POST http://www.dneonline.com/calculator.asmx
<Envelope xmlns="http://schemas.xmlsoap.org/soap/envelope/">
  <Body>
    <Add xmlns="http://tempuri.org/">
      <intA>[int]</intA>
      <intB>[int]</intB>
    </Add>
  </Body>
</Envelope>

```

Copy paste the above xml in the jmeter HTTP Request



Add HTTP Header Manager and add the following details from
<http://www.dneonline.com/calculator.asmx?op=Add> (Click on ADD from url
<http://www.dneonline.com/calculator.asmx>)



Click [here](#) for a complete list of operations.

Add

Adds two integers. This is a test Webservice. ©DNE Online

Test

The test form is only available for requests from the local machine.

SOAP 1.1

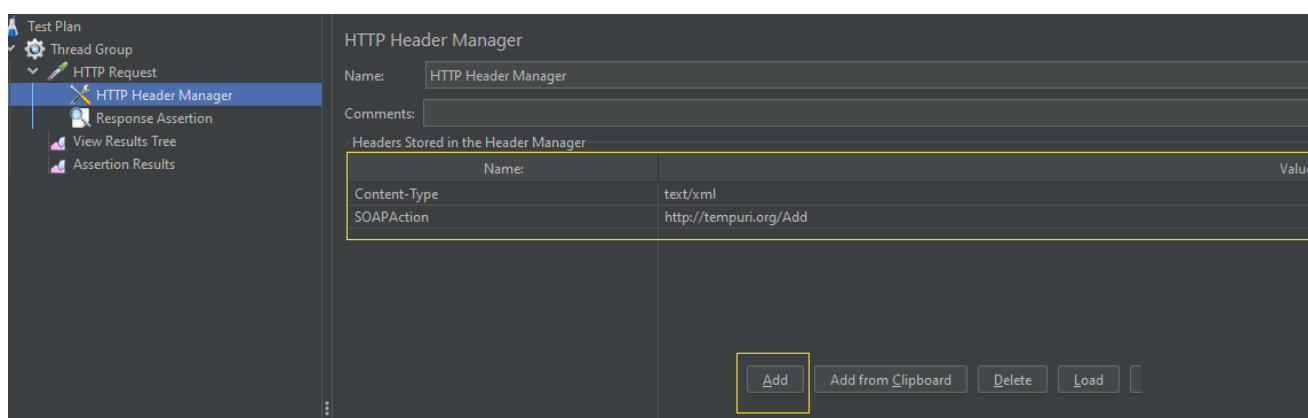
The following is a sample SOAP 1.1 request and response. The [placeholders](#) shown need to be replaced with:

```
POST /calculator.asmx HTTP/1.1
Host: www.dneonline.com
Content-Type: text/xml; charset=utf-8
Content-Length: length
SOAPAction: "http://tempuri.org/Add"

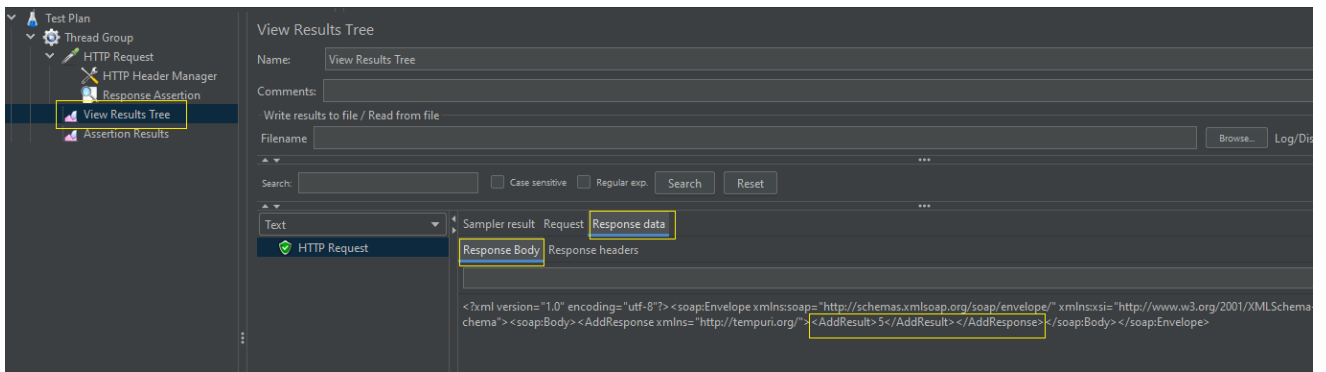
<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  <soap:Body>
    <Add xmlns="http://tempuri.org/">
      <intA>int</intA>
      <intB>int</intB>
    </Add>
  </soap:Body>
</soap:Envelope>

HTTP/1.1 200 OK
Content-Type: text/xml; charset=utf-8
Content-Length: length

<?xml version="1.0" encoding="utf-8"?>
<soap:Envelope xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:xsd="http://www.w3.org/2001/XMLSchema"
  <soap:Body>
    <AddResponse xmlns="http://tempuri.org/">
      <AddResult>int</AddResult>
    </AddResponse>
  </soap:Body>
</soap:Envelope>
```



Run:



Add RESPONSE ASSERTION once you run the Test – for the next time.

