

# //Processors, Assertions, and Timers

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## **Development Environment:**

- Apache JMeter 5.1.1 Version
- JDK Runtime Environment 8.1

This guide has three subsections, namely:

- 1.3.1 Problem statement for Processors, Assertions, and Timers
- 1.3.2 Solution for the problem statement
- 1.3.3 Pushing the code to GitHub repositories

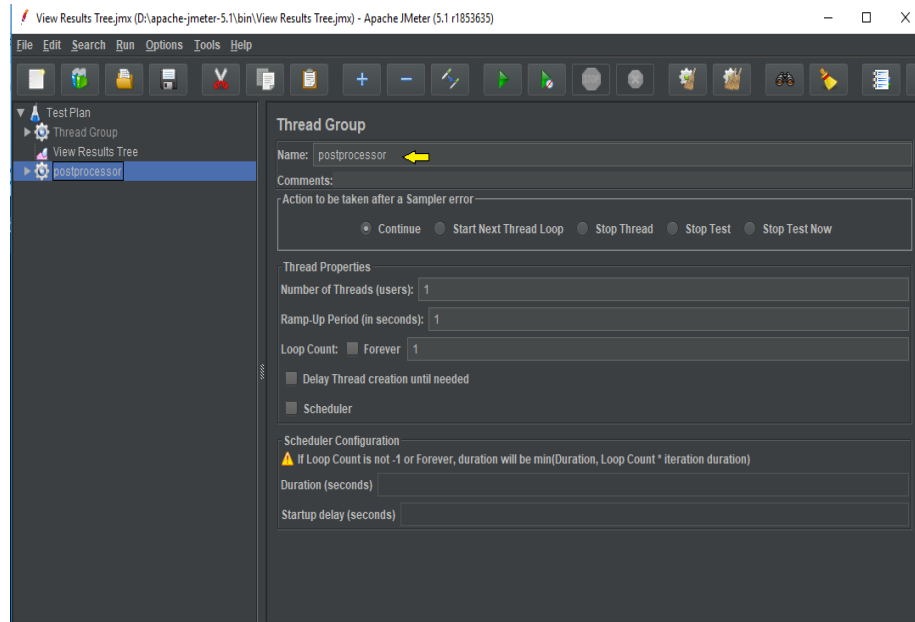
## **Step 1.3.1:** Problem statement for Processors, Assertions, and Timers

- Objective: Create Processors, Assertions, Timers in Jmeter for a particular domain.
- Steps involved:
  - 1) Set up JMeter.
  - 2) Create a test plan.
  - 3) Add thread group.
    - 4) Add HTTP request.
  - 5) Record the scripts.
  - 6) Add Listener and view the results.

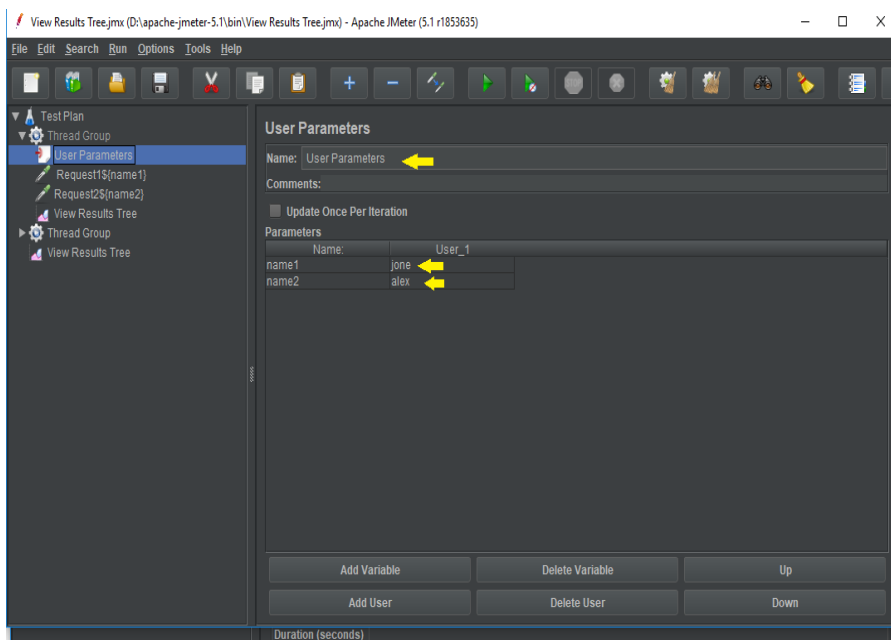
## **Step 1.3.2:** Solution for the problem statement

## 1) Adding Preprocessor:

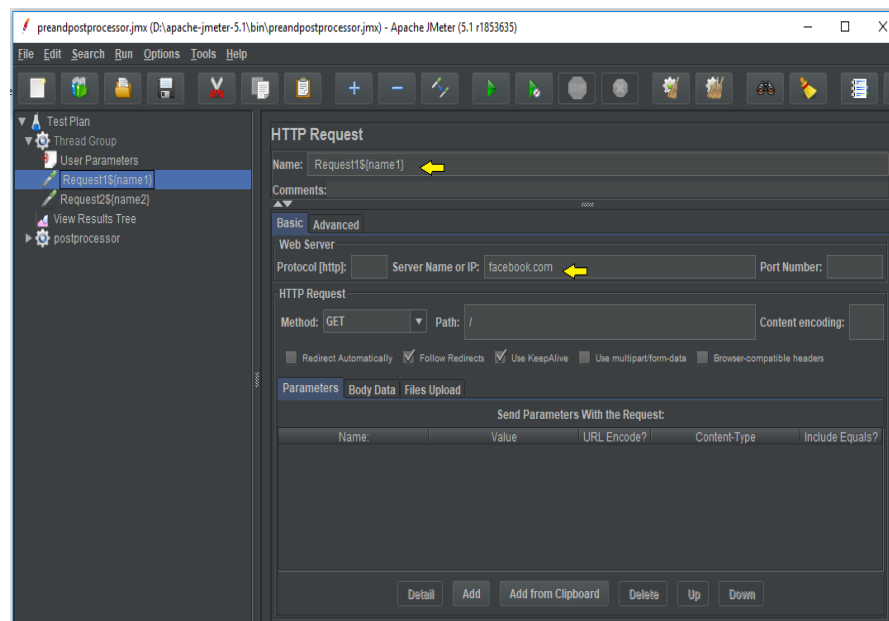
- Right click on test plan-->Add-->Threads-->Thread Group.

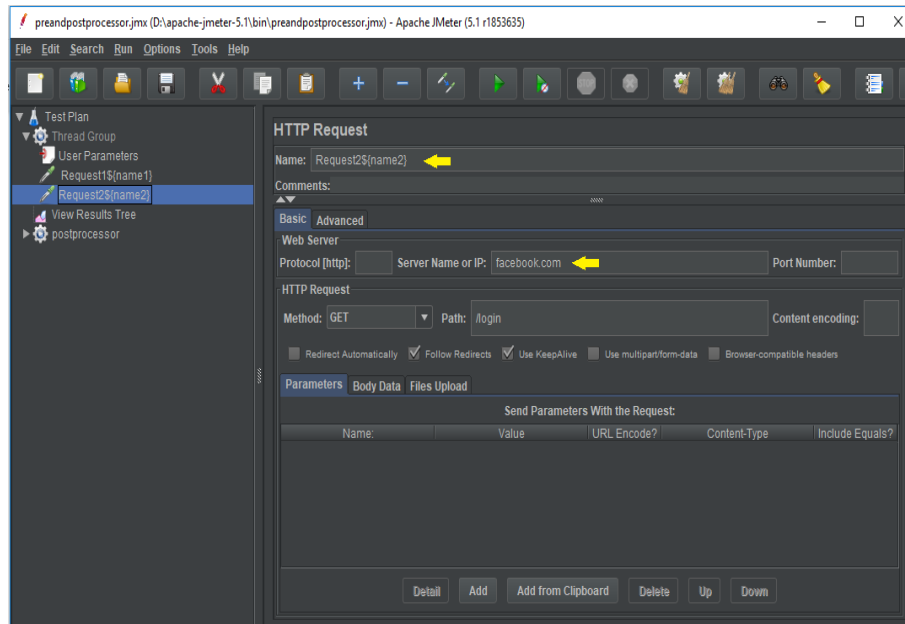


- Right click on Thread-->Add-->preprocessor -->User parameters.



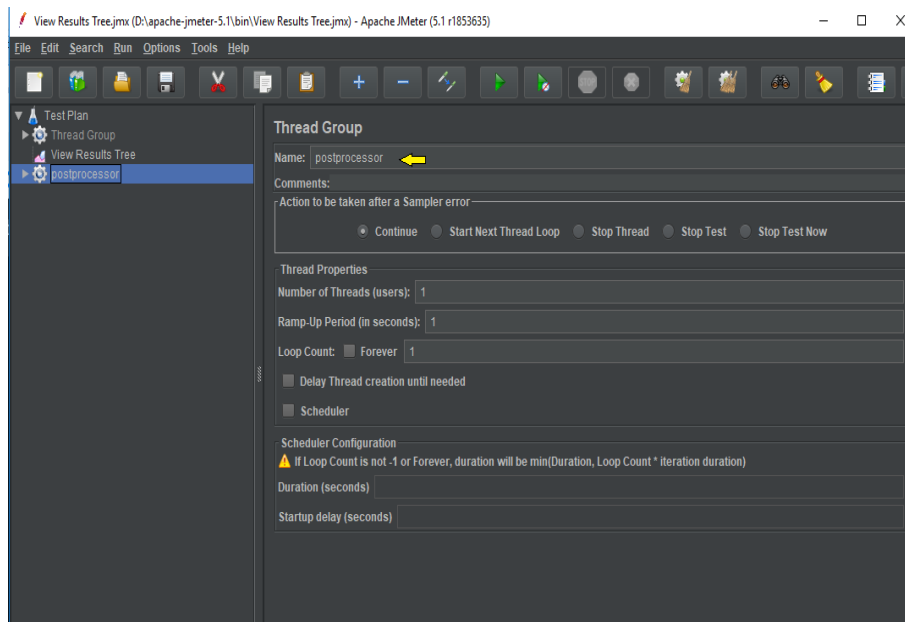
- Right click on Thread Group-->Add Two-->Sampler-->HTTP Request-->consider facebook.com domain.



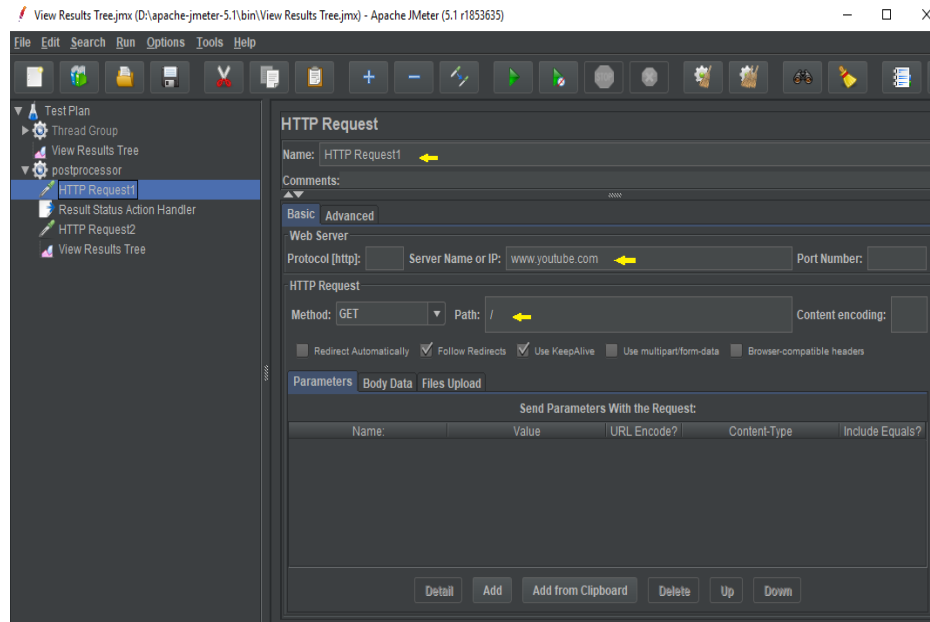


## 2) Adding Post Processor:

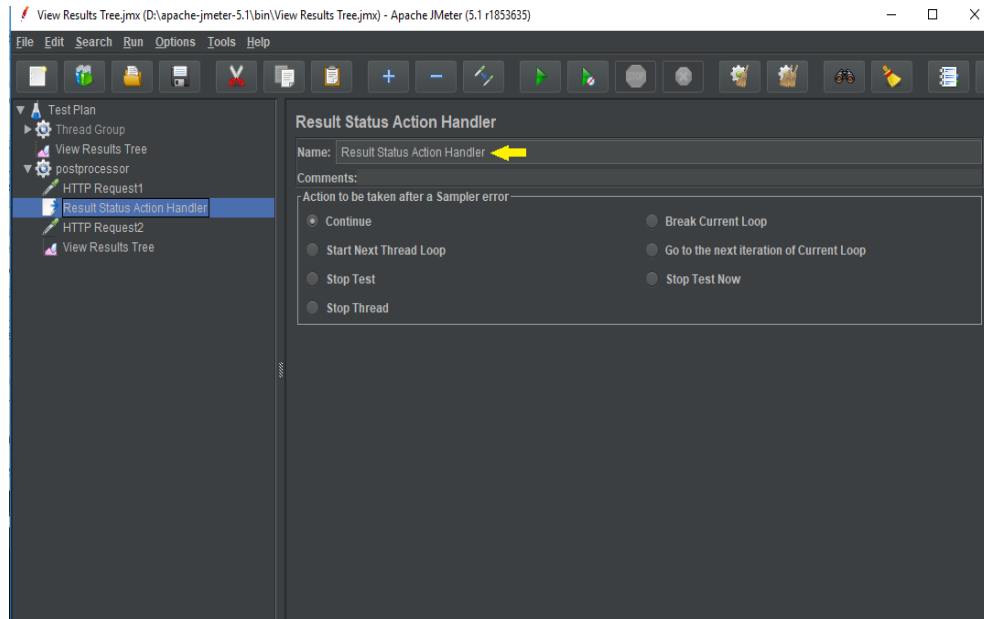
- Right click on test plan-->Add-->Threads-->Thread Group.



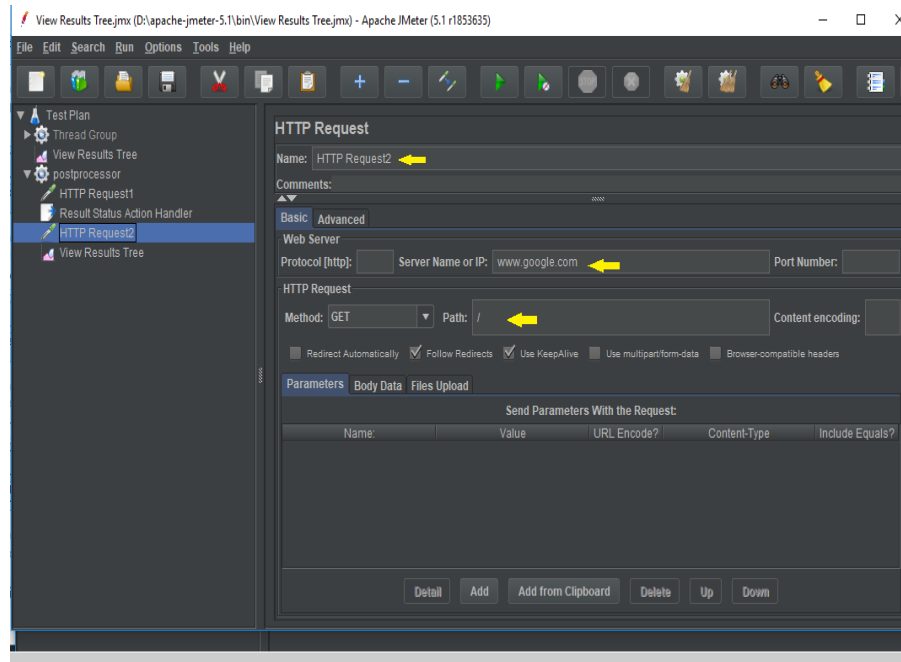
- Right click on Thread Group-->Add -->Sampler-->HTTP Request1.



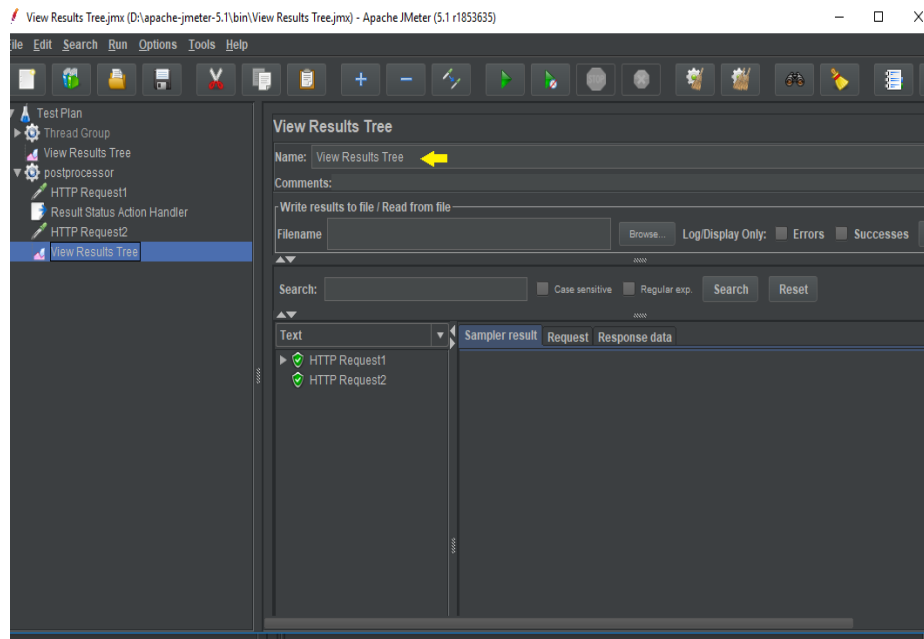
- Right click on post processor Thread Group-->Add-->post processor -->Result Status Action Handler.



- Right click on Thread Group-->Add -->Sampler-->Another HTTP Request2 under Result Status Action Handler.



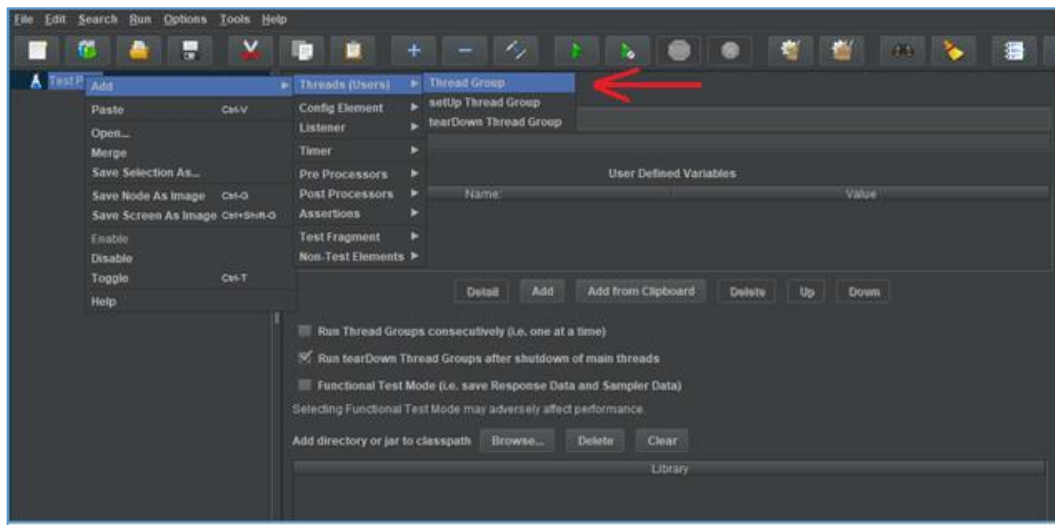
- Right click on postprocessor -->Add --> Listener-->Run result.



### 3) Response Assertion:

The Response assertion is used in test scripts to validate a pattern in the response body, header, code, message, etc.

- Open the Apache JMeter.
- Click on the Test plan.
- Rename the Test plan.
- Right click on Test plan --->Add--->Thread(users)--->Thread Group.

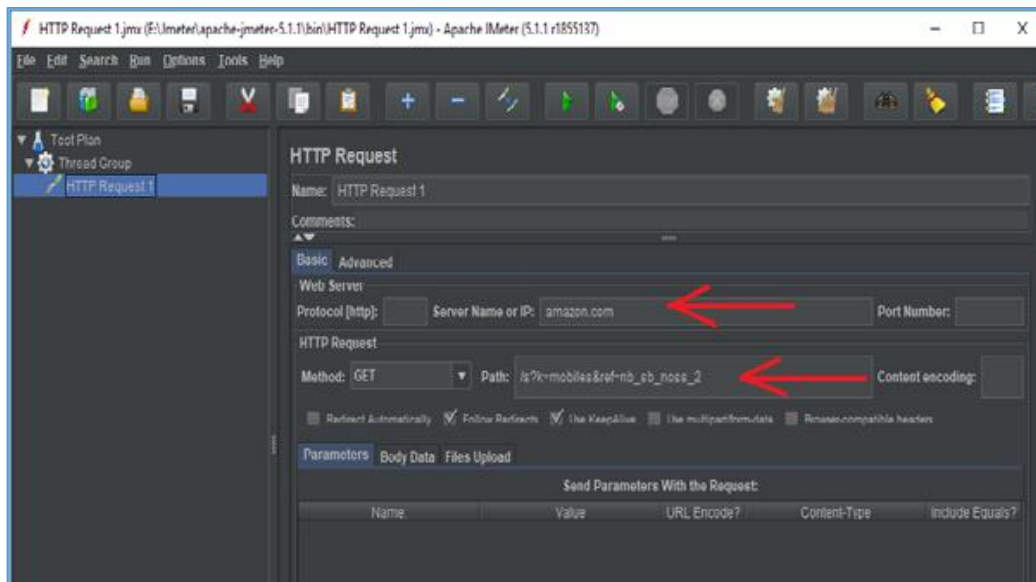


- Navigate through the path: Thread Group--->Name--->Comments---> Continue --->Thread properties--->Number of Threads(users): ---> Ramp-up period (in seconds): ---> Loop Count --->Save.

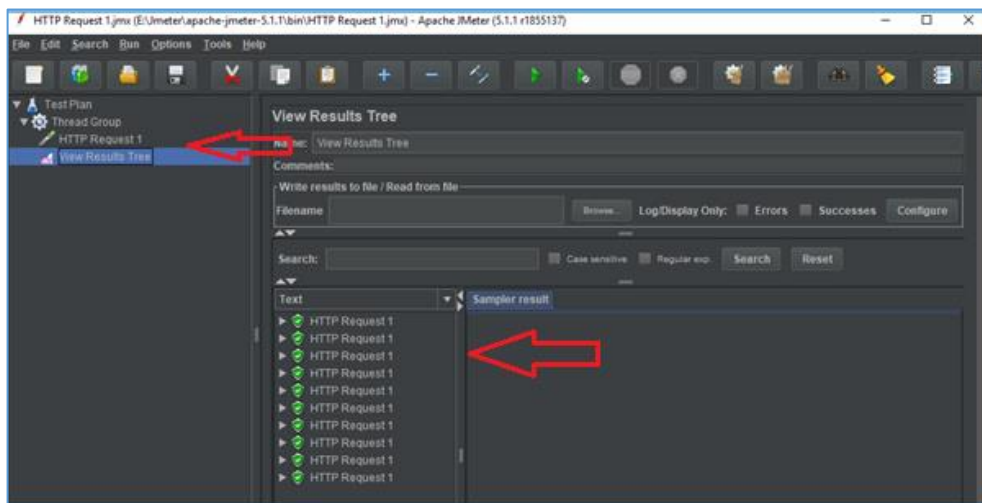




- Navigate through the given path: HTTP Request----> Server Name or IP :---> Path :/---> Save.



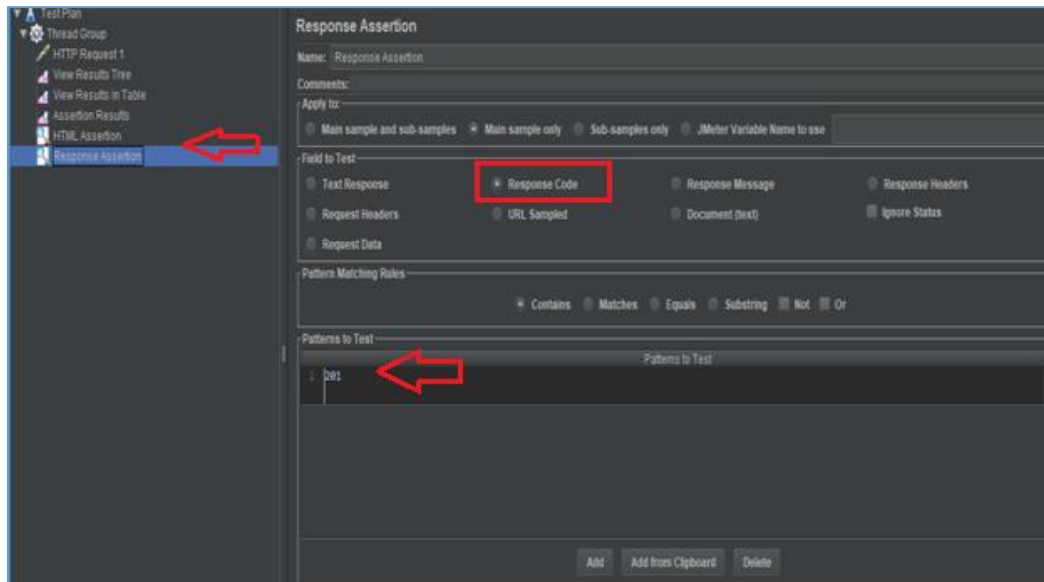
- Right click on Thread Group --->Add--->Listeners---> View Results Tree---> Run.



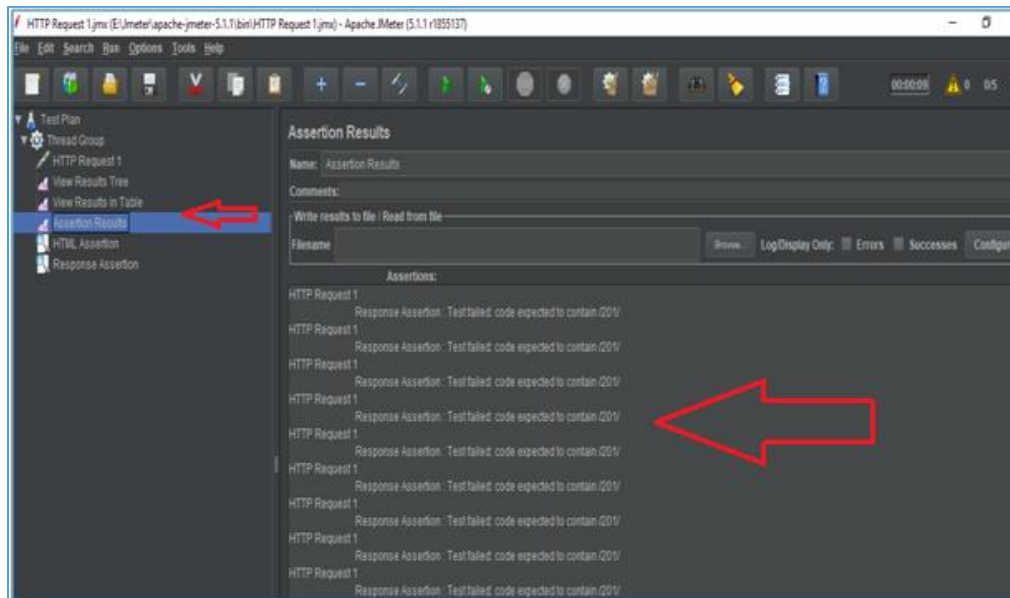
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- HTTP Request 1.jmx (E:\meter\apache-jmeter-5.1.1\bin\HTTP Request 1.jmx) - Apache JMeter (5.1.1 r1855137)
- File Edit Search Run Options Tools Help
- Test Plan  
Thread Group  
HTTP Request 1  
View Results Tree  
**View Results in Table**
- View Results in Table**
- Name: View Results in Table
- Comments:
- Write results to file / Read from file
- Filename:  Browse... Log/Display Only: ☐ Errors ☐ Successes
- | Sample # | Start Time   | Thread Name  | Label          | Sample Time | Status  | Bytes | Sent Bytes | Latency |
|----------|--------------|--------------|----------------|-------------|---------|-------|------------|---------|
| 1        | 16.10.20.369 | Thread Group | HTTP Request 1 | 4242        | Success | 80436 | 567        | 458     |
| 2        | 16.10.21.581 | Thread Group | HTTP Request 1 | 3169        | Success | 80204 | 567        | 449     |
| 3        | 16.10.20.971 | Thread Group | HTTP Request 1 | 4190        | Success | 80475 | 567        | 451     |
| 4        | 16.10.22.162 | Thread Group | HTTP Request 1 | 3044        | Success | 80042 | 567        | 441     |
| 5        | 16.10.22.763 | Thread Group | HTTP Request 1 | 3950        | Success | 80191 | 567        | 422     |
| 6        | 16.10.24.612 | Thread Group | HTTP Request 1 | 2758        | Success | 80463 | 567        | 440     |
| 7        | 16.10.24.751 | Thread Group | HTTP Request 1 | 3230        | Success | 80089 | 567        | 439     |
| 8        | 16.10.25.207 | Thread Group | HTTP Request 1 | 2854        | Success | 80219 | 567        | 450     |
| 9        | 16.10.26.714 | Thread Group | HTTP Request 1 | 2719        | Success | 80298 | 567        | 435     |
| 10       | 16.10.25.162 | Thread Group | HTTP Request 1 | 4825        | Success | 80199 | 567        | 443     |

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- The screenshot shows the Apache JMeter interface. The title bar indicates the current test plan is 'HTTP Request 1.jmx'. The left sidebar contains a tree view with 'Test Plan', 'Thread Group', 'HTTP Request 1', 'View Results Tree', 'View Results in Table', and 'Assertion Results'. The 'Assertion Results' tab is selected, highlighted by a red arrow. The main workspace displays the 'Assertion Results' configuration. It includes a 'Name' field set to 'Assertion Results', a 'Comments' field, and a section for 'Write results to file / Read from file' with a 'Filename' input field, a 'Browse...' button, and checkboxes for 'Log/Display Only', 'Errors', and 'Successes'. Below this is a list of 'Assertions', all of which are 'HTTP Request 1'. A large red arrow points to this list.

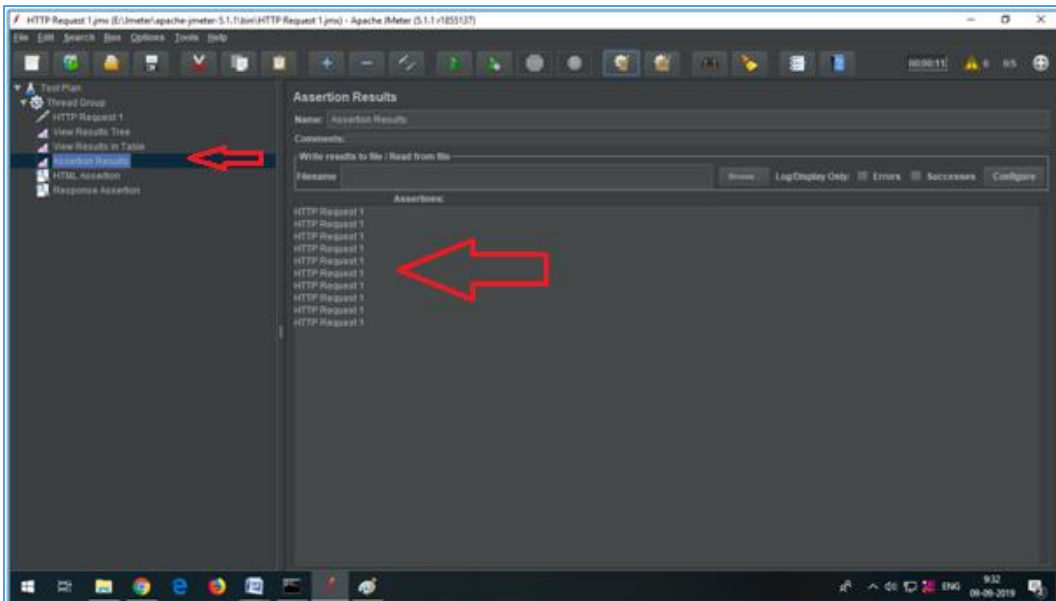
- Right click on Thread Group --->Add--->Assertions ---> Response Assertions---> Response Code---> Contains---> Add---> 201---> Save---> Clear All---> Run.



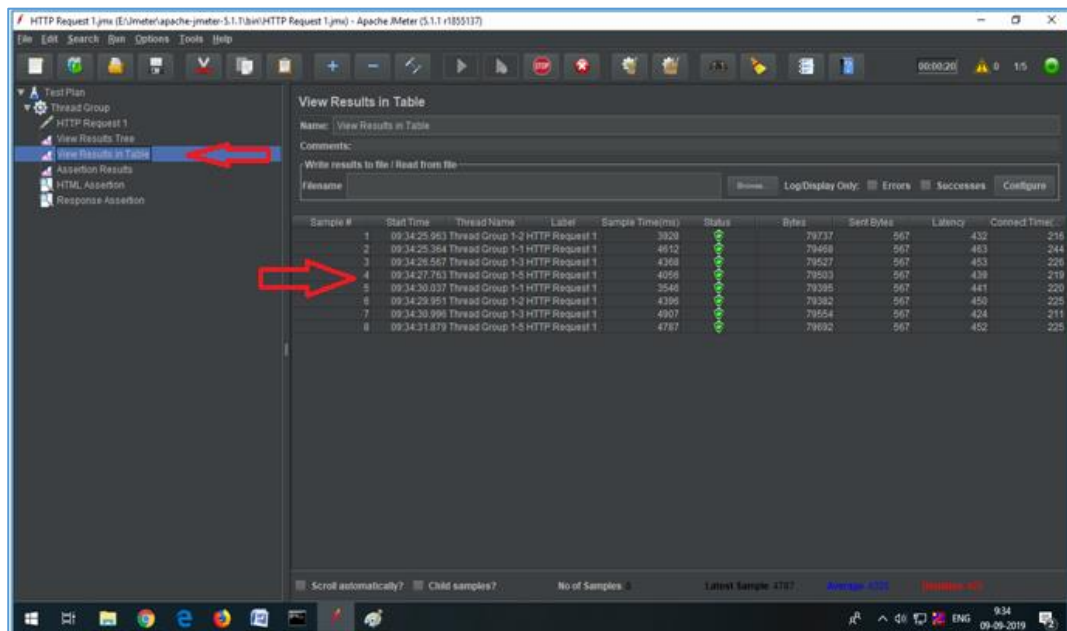
- Navigate through the given path: Assertion Result---> Run. It will show error



- Right click on Thread Group --->Add--->Assertions ---> Response Assertions---> Response Code---> Contains---> Add---> 200---> Save---> Clear All---> Run.

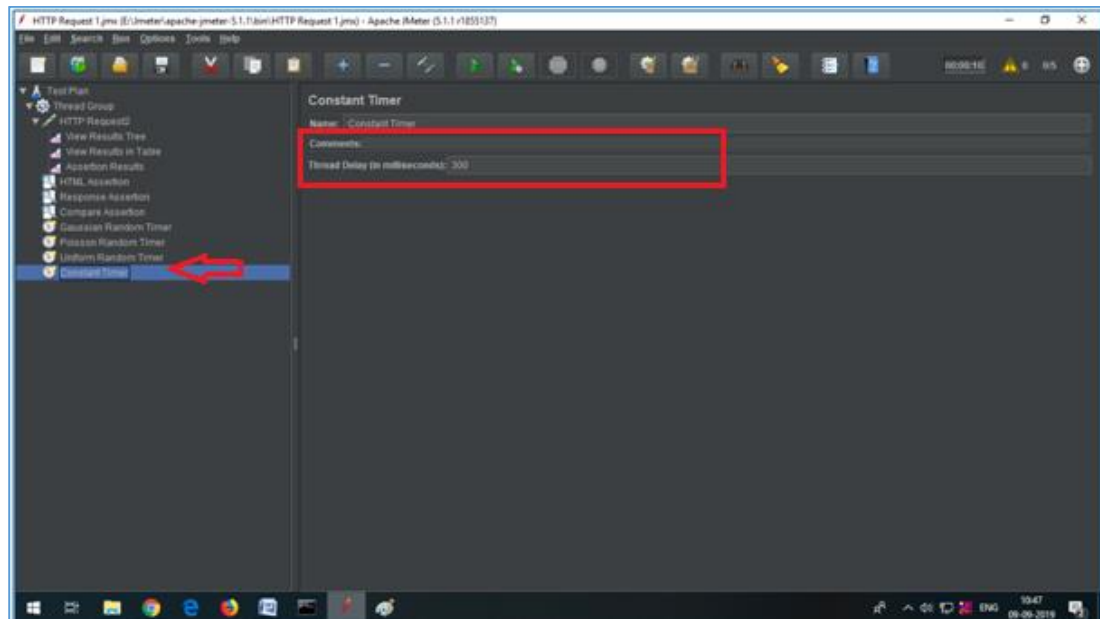


- Right click on Thread Group --->Add--->Assertions ---> Response Assertions---> Response Message---> Contains---> Add---> OK---> Save---> Clear All---> Run ---> View Results in Table.

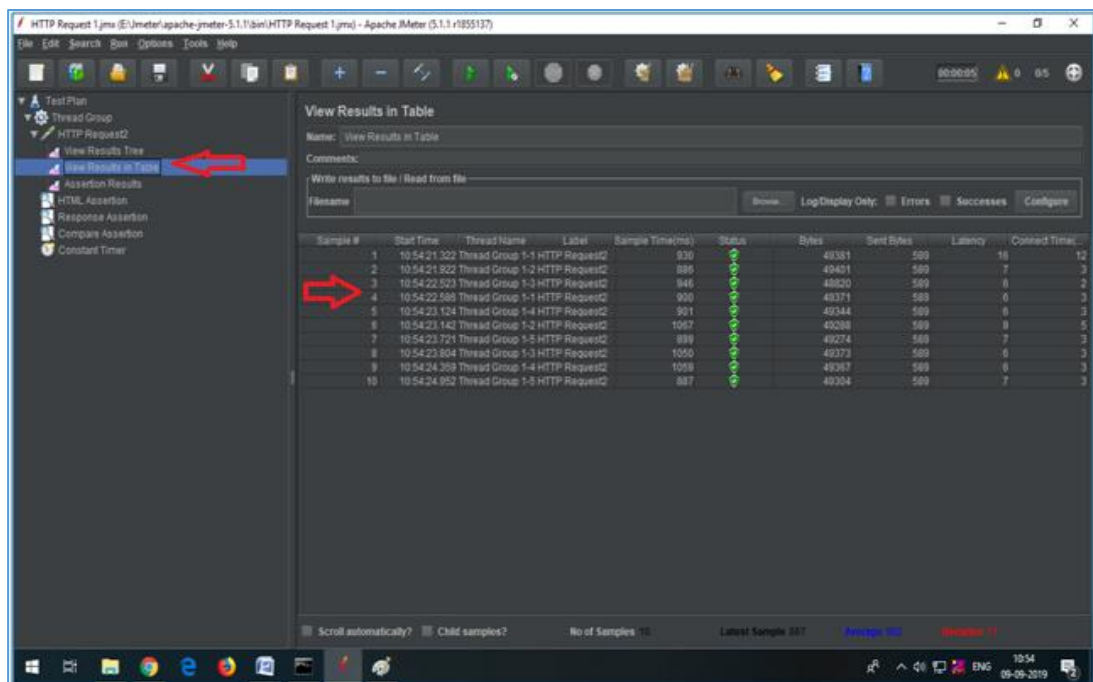


4) Constant Timer:

- Constant timer delays each user request for the same amount of time.
- Right click on Thread Group---> Add---> Timer---> Constant Timer---Thread delay in ms---> Save.



- Navigate through the given path: Clear all---> Run---> View Result in Table.



### Step 1.3.3: Pushing the code to GitHub repositories

Open your command prompt and navigate to the folder where you have created your files.

```
cd <folder  
path>
```

Initialize your repository using the following command:

```
git init
```

Add all the files to your git repository using the following command:

```
git add .
```

Commit the changes using the following command:

```
git commit .  
-m
```

“Changes have been committed.”

Push the files to the folder you initially created using the following command:

```
git push -u  
origin
```

master