

Phase3-Practice Project: Assisted Practice

JMeter:

Controllers in JMeter:

Write a program to demonstrate random and random order controllers in JMeter.

Write a program to demonstrate interleave controller in JMeter.

Write a program to demonstrate throughput controller in JMeter.

Write a program to demonstrate if and while controllers in JMeter.

Write a program to demonstrate switch, module, and include controllers in JMeter.

Write a program to demonstrate ForEach controller with regular expression extractor in JMeter.

Write a program to demonstrate ForEach controller with Xpath extractor in JMeter.

Write a program to demonstrate implementation of JMeter controllers using Selenium.

Write a program to demonstrate pre and post-processors in JMeter.

Write a program to demonstrate Http Authentication Manager, cookies, and CSV Data Set Config in JMeter.

1. Recording script using Blazemeter.

First we should record the the JMeter Script.

Recording script using Blazemeter .

First go to login page, enter username and password.

<https://the-internet.herokuapp.com/login>

The Internet the-internet.herokuapp.com/login

Login Page

This is where you can log into the secure area. Enter `tomsmith` for the user and `SuperSecretPassword!` for the password. If the information is wrong you will receive an error message.

Username
tomsmith

Password

Login

Powered by Elemental Selenium

BlazeMeter

1 Test case(s) / Label(s) [Test](#)

UI | JMX (10)(4)

2 Test case / Label Add Step



Then click on logout.

The Internet the-internet.herokuapp.com/secure

You logged into a secure area!

Secure Area

Welcome to the Secure Area. When you are done click logout below.

Logout

Powered by Elemental Selenium

BlazeMeter

1 Test case(s) / Label(s) [Test](#)

UI | JMX (12)(5)

2 Test case / Label Add Step



go to below link,

<https://the-internet.herokuapp.com/>

click on first link.

The Internet the-internet.herokuapp.com/abtest

A/B Test Variation 1

Also known as split testing. This is a way in which businesses are able to simultaneously test and learn different variations of their website to see which text and/or functionality works best towards a desired outcome (e.g. a user action such as a click).

Logout

Powered by Elemental Selenium

BlazeMeter

1 Test case(s) / Label(s) [Test](#)

UI | JMX (19)(20)

2 Test case / Label Add Step



go to below link,

<https://the-internet.herokuapp.com/>

click on second link.

The screenshot shows a web browser window with the URL 'the-internet.herokuapp.com/checkboxes'. The page content includes a heading 'Welcome to the-internet' and a section titled 'Available Examples' listing various UI elements like A/B Testing, Basic Auth, Broken Images, etc. To the right of the browser is the BlazeMeter UI test recorder interface, which displays a test plan with one test case labeled 'Test' and a summary showing 25 steps recorded.

go to below link,

<https://the-internet.herokuapp.com>

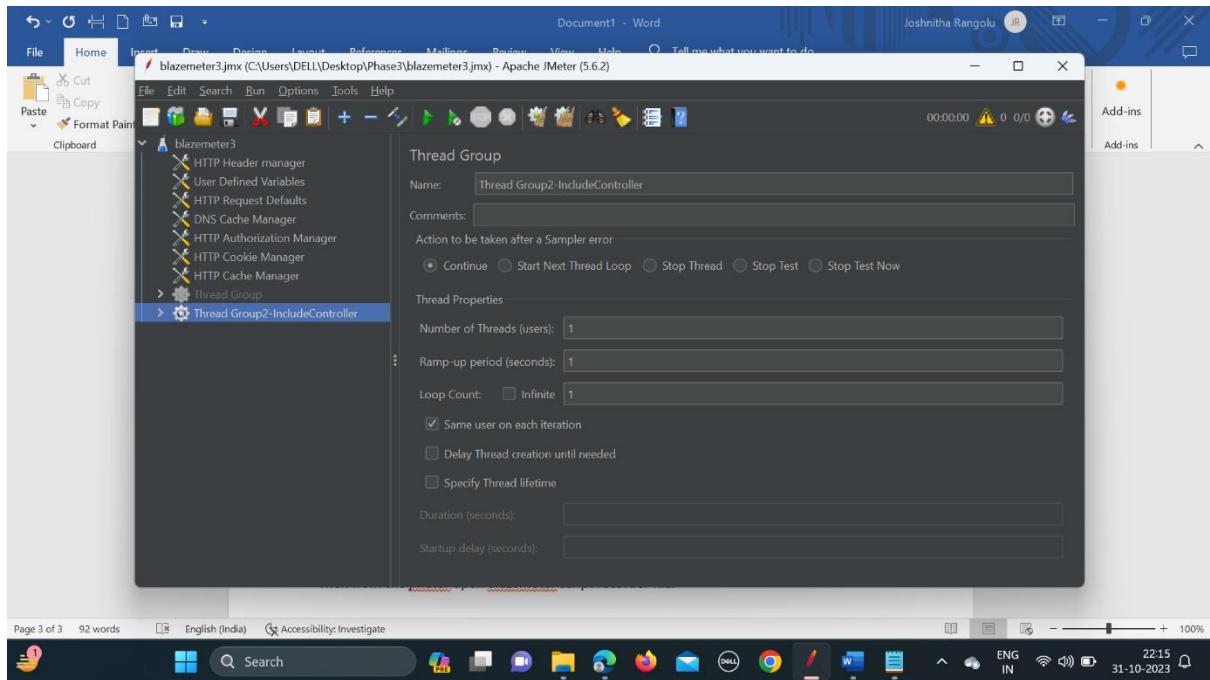
click on third link.

The screenshot shows a web browser window with the URL 'the-internet.herokuapp.com/dropdown'. The page content includes a heading 'Dropdown List' and a dropdown menu with the placeholder 'Please select an option'. Below the dropdown is a note 'Powered by Elemental Selenium'. To the right of the browser is the BlazeMeter UI test recorder interface, which displays a test plan with one test case labeled 'Test' and a summary showing 31 steps recorded.

Then stop the recorder and save the script.

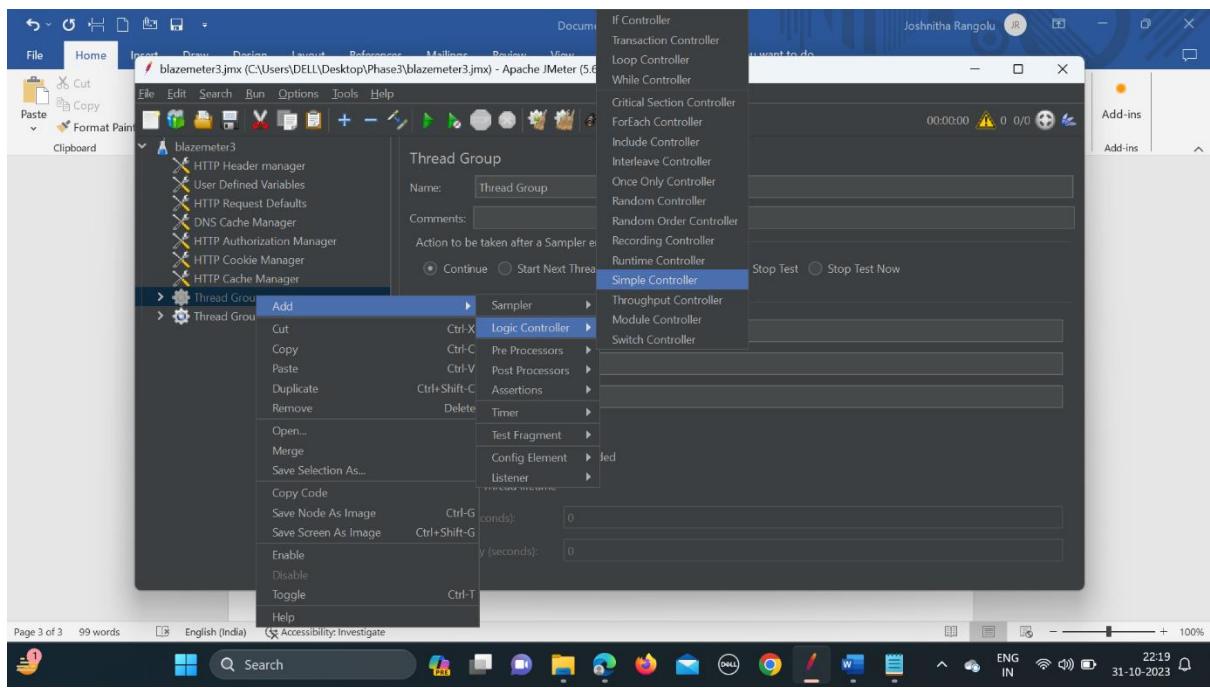
Then move the save script file to Jmeter folder .

Then from the jmeter open blazemeter script recorder file.

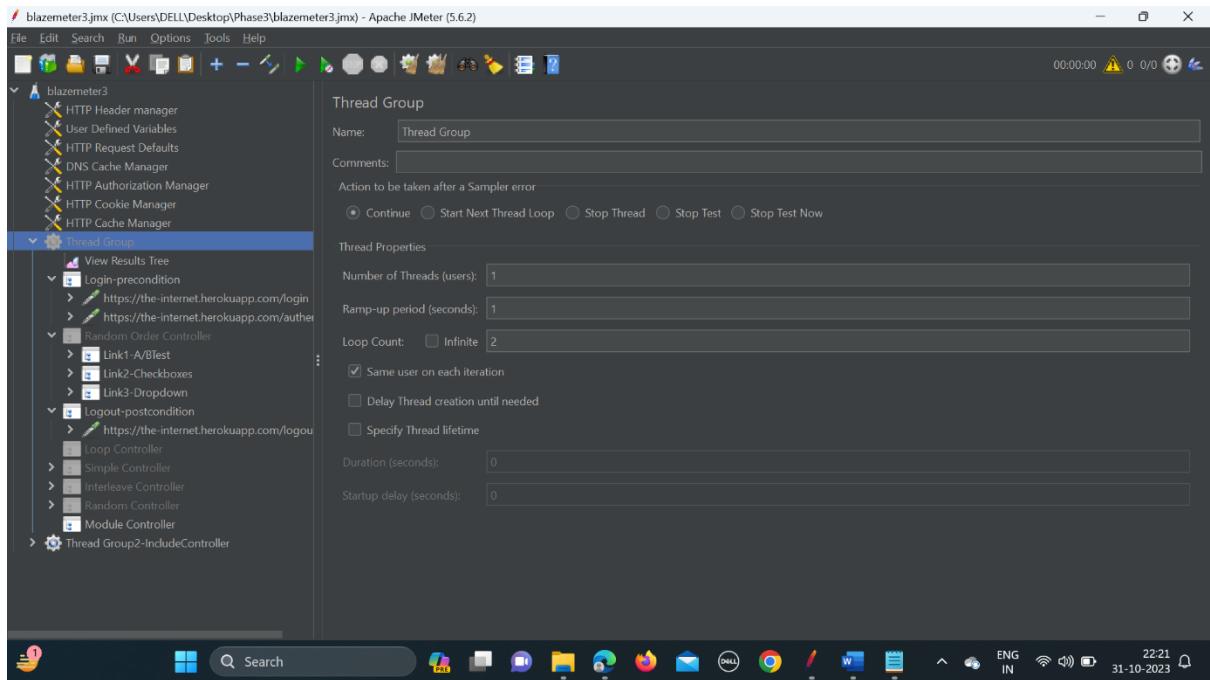


Then add thread group .

Then add → logic controller → simple controller.

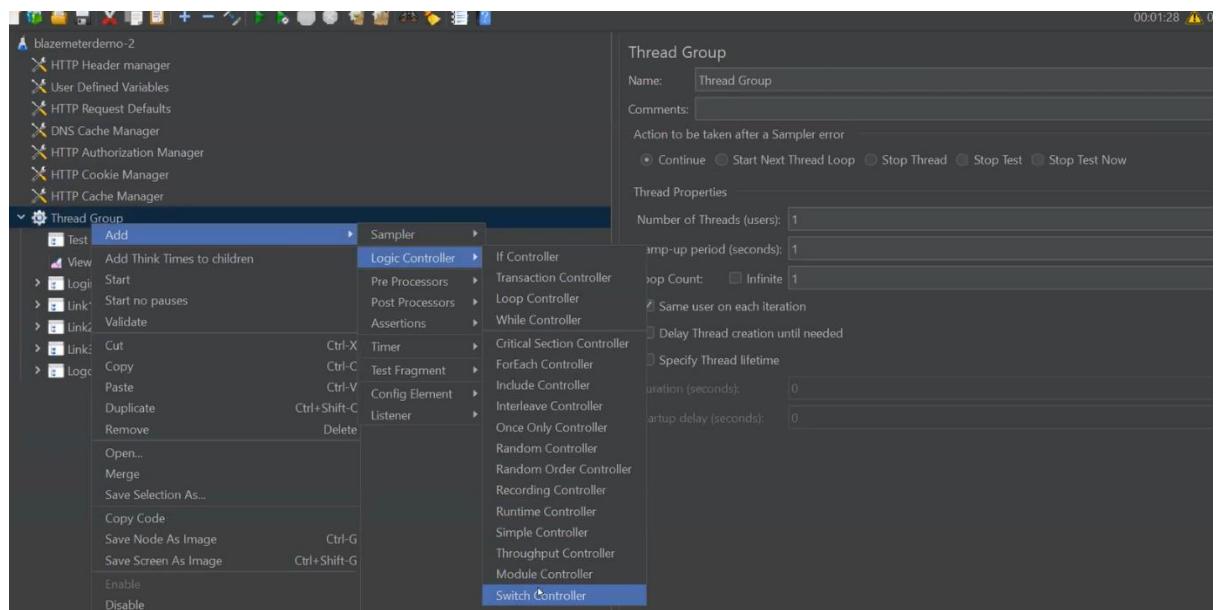


Add simple controller for each operation and name them

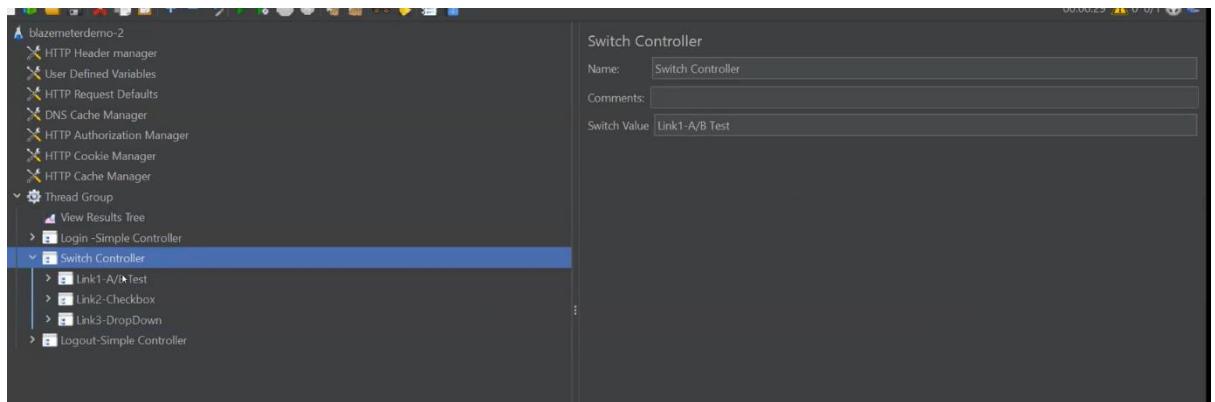


2. Switch Controller:

Add switch Controller.

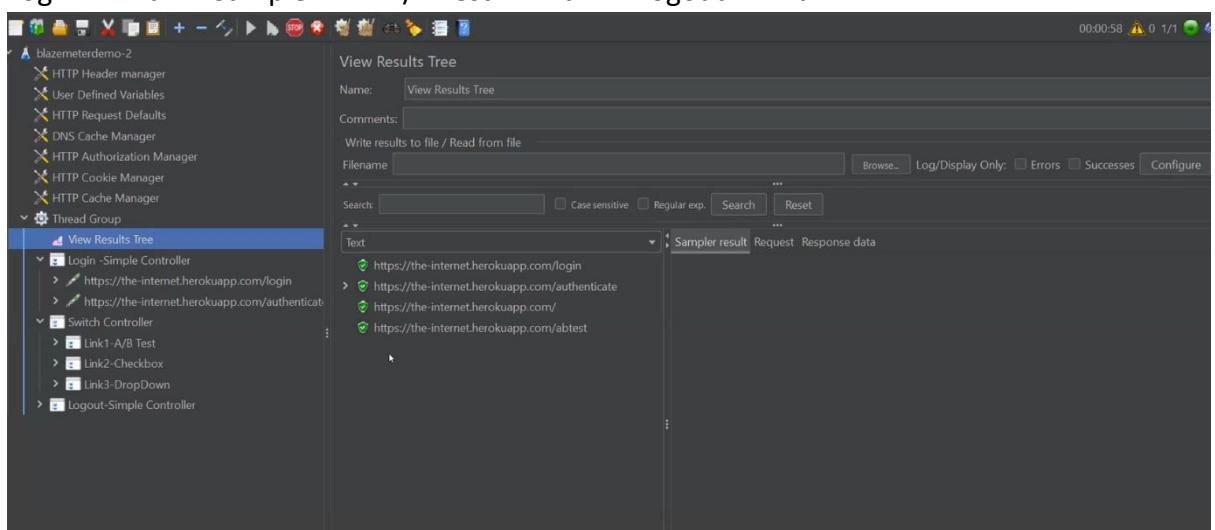


Place your Samplers in Simple and Switch Controller.



Give Switch value as one of the Sampler.

Login will run → Sample link1 A/B Test will run → logout will run.



3. Interleave Controller:

If we want to run our all 3 Test.

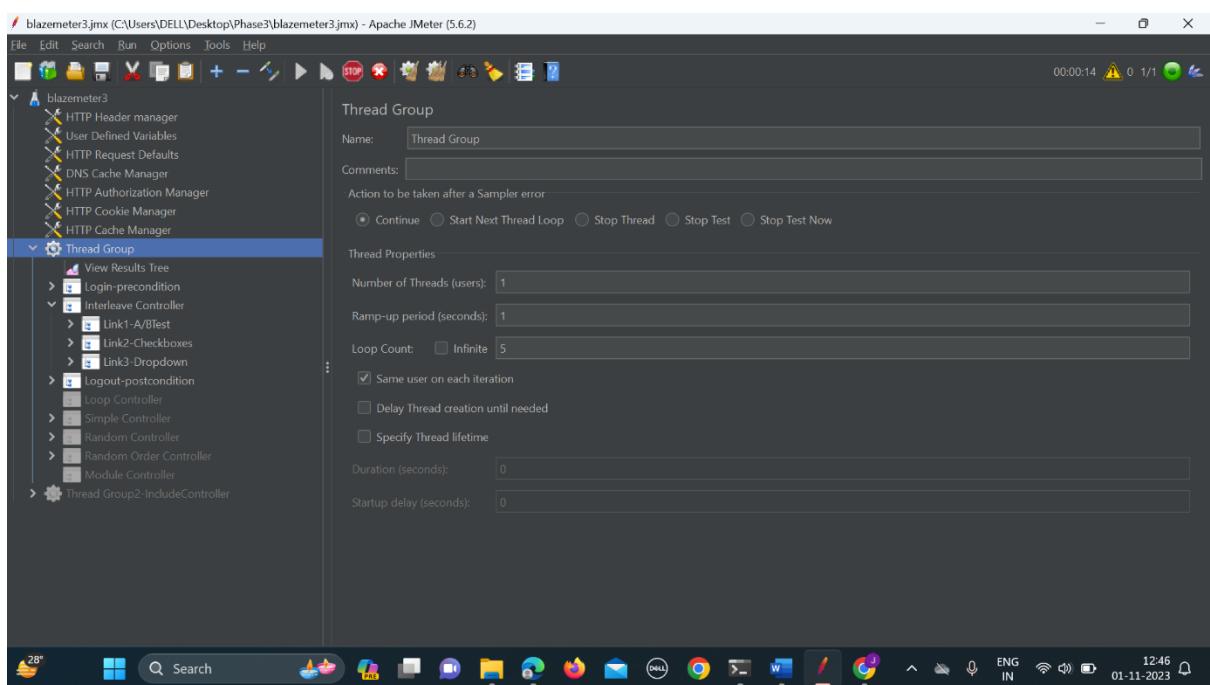
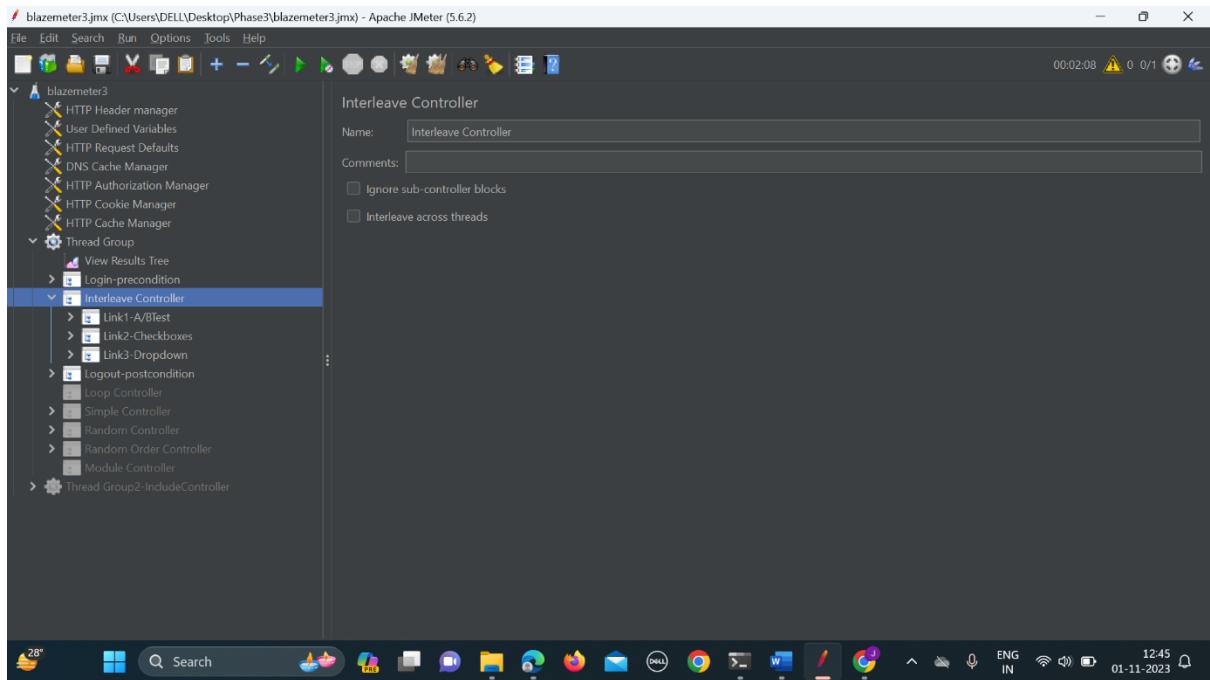
Pre-condition-login → test1 → post condition-logout

Pre-condition-login → test2 → post condition-logout

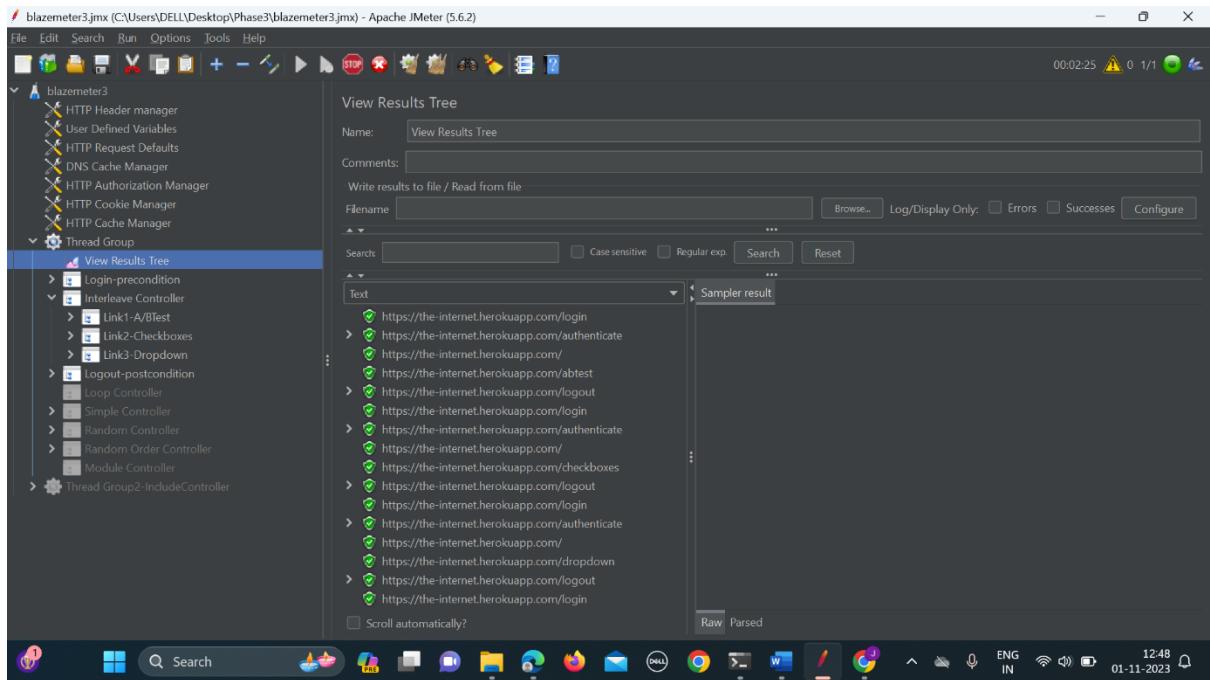
Pre-condition-login → test3 → post condition-logout

Add interleave controller

Place your Samplers in Simple and interleave Controller.



Click on run.



4. Random Controller :

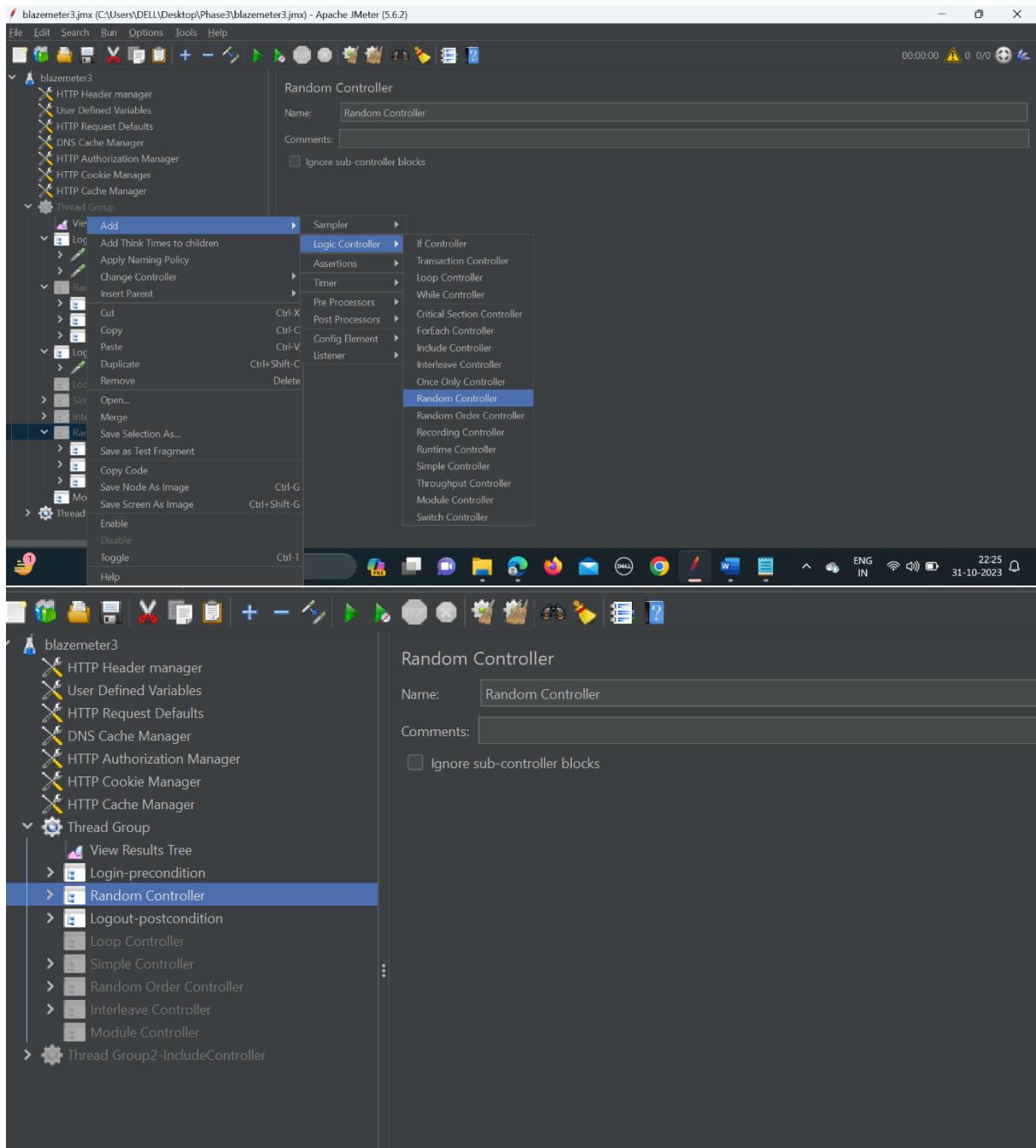
Loop count=3

Pre-condition-login → test3 → postcondition-logout

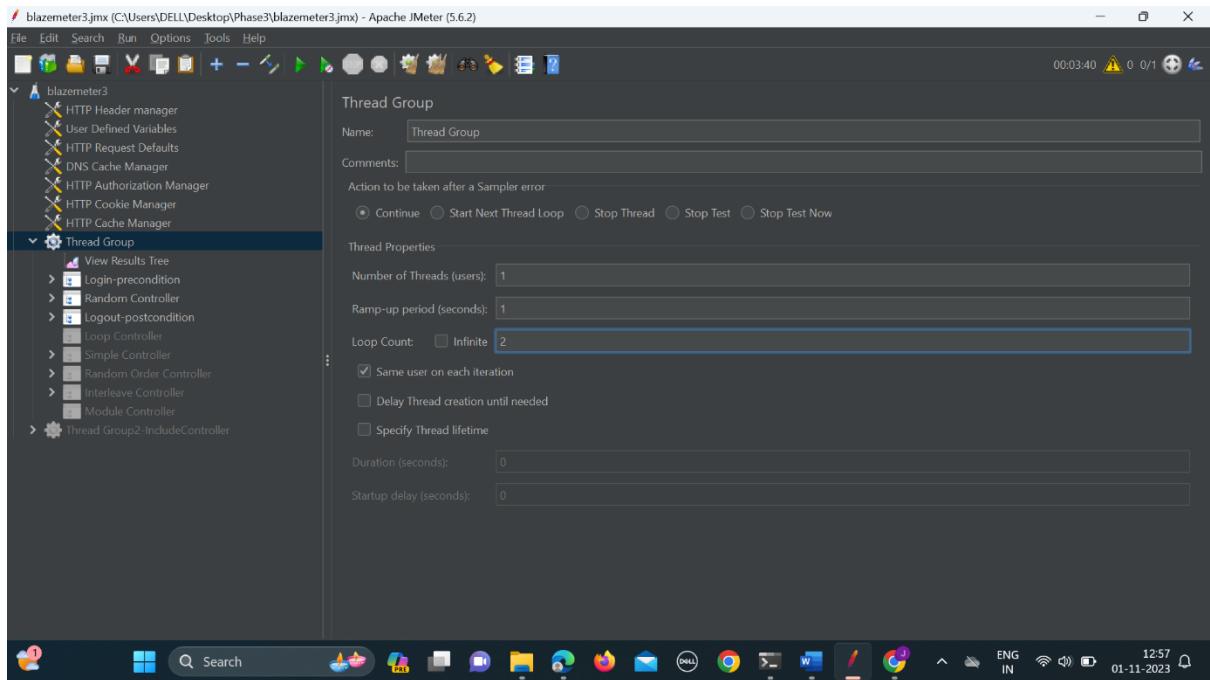
Pre-condition-login → test1 → postcondition-logout

Pre-condition-login → test2 → postcondition-logout

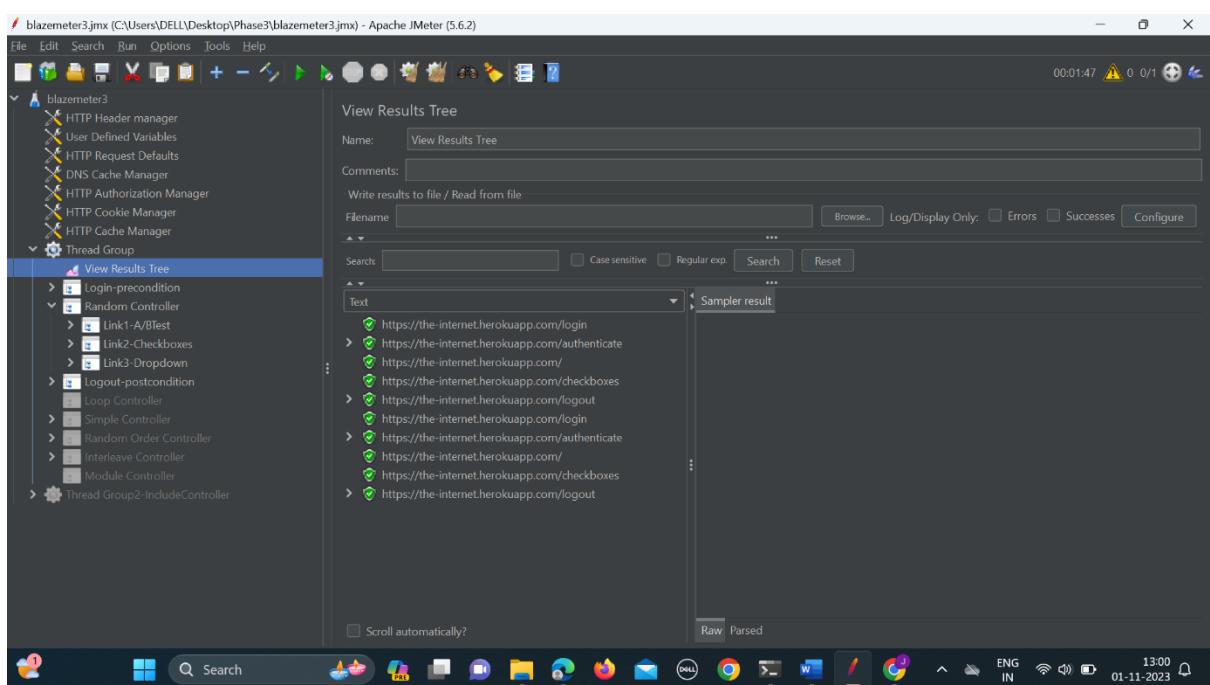
Add Random controller.



Place your Samplers in Simple and random Controller.



Click on run.

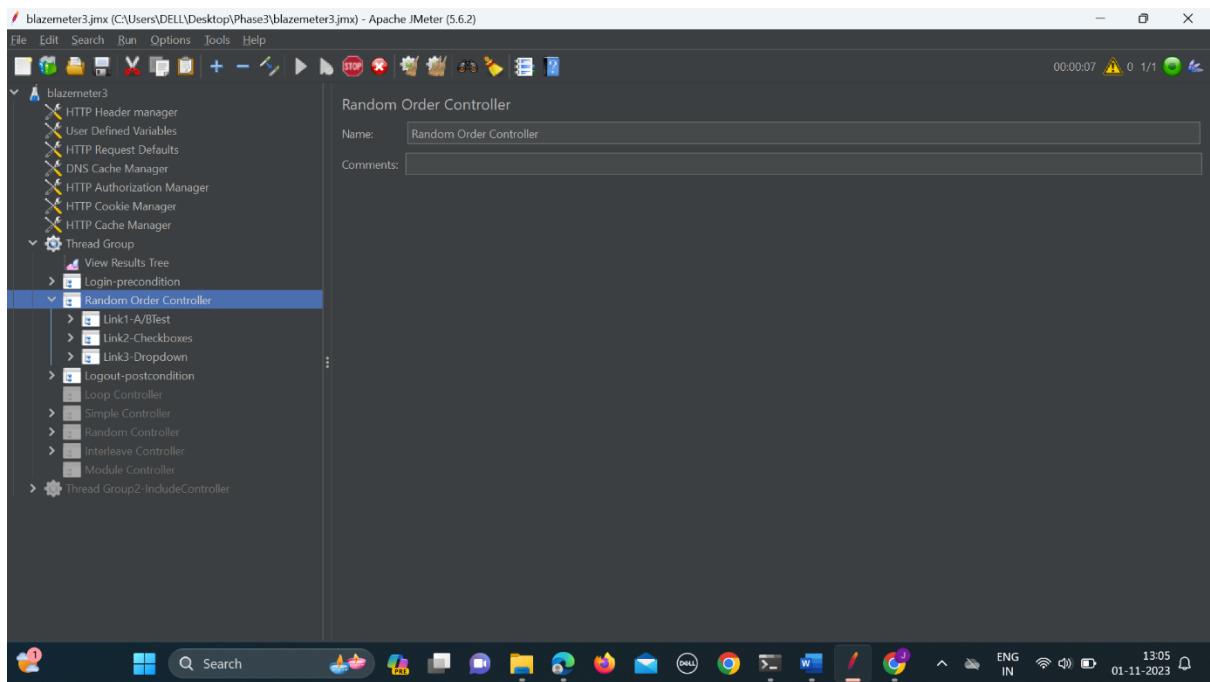


5. Random Order Controller

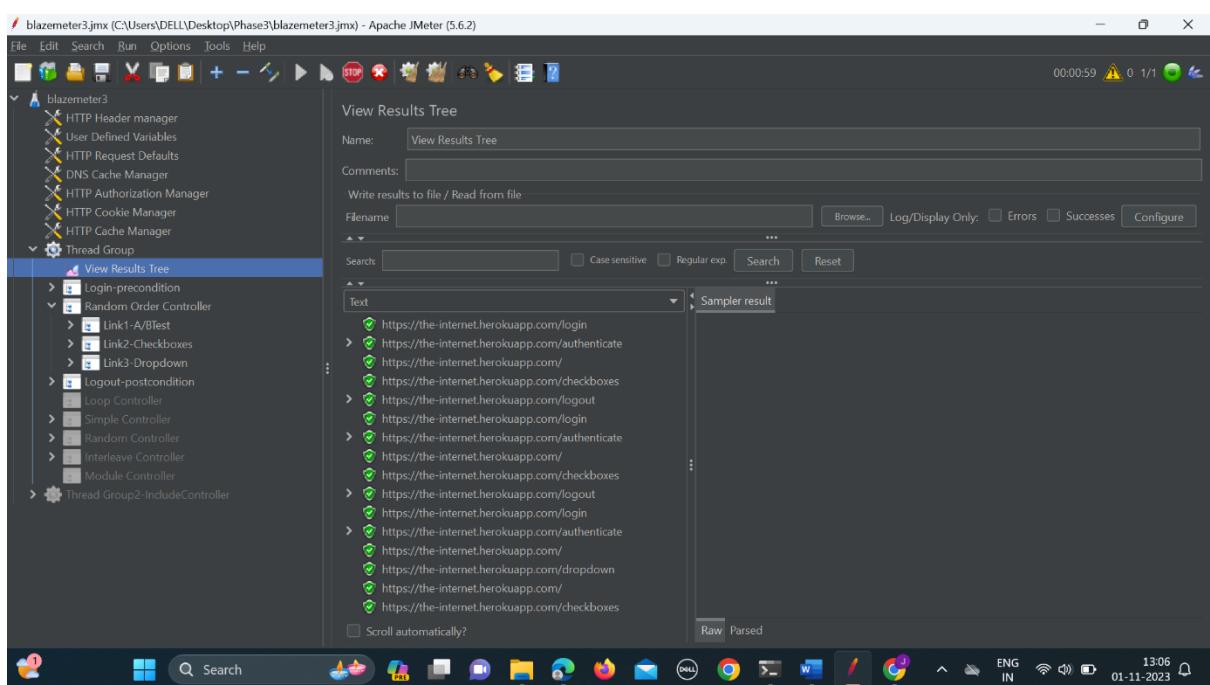
Pre-condition-login → test3 ,test1 , test2 → postcondition-logout

Pre-condition-login → test2 ,test1 , test3 → postcondition-logout

Add Random order controller.



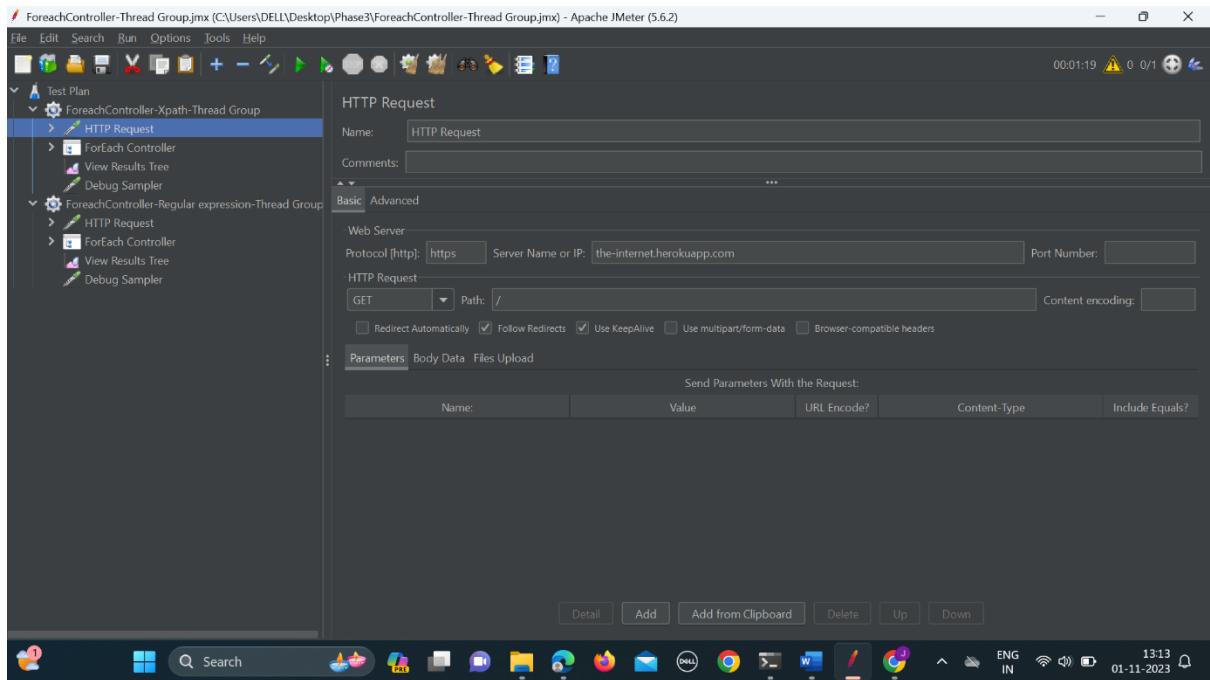
Click on run.



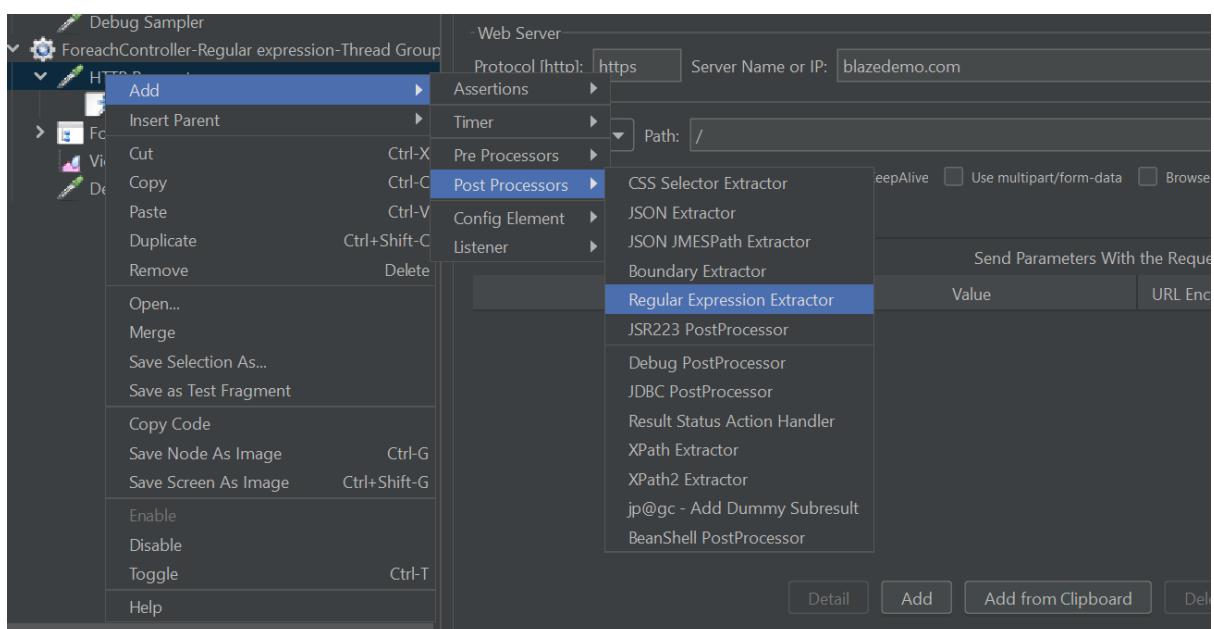
6. Foreach Controller with regular Expression Extractor:

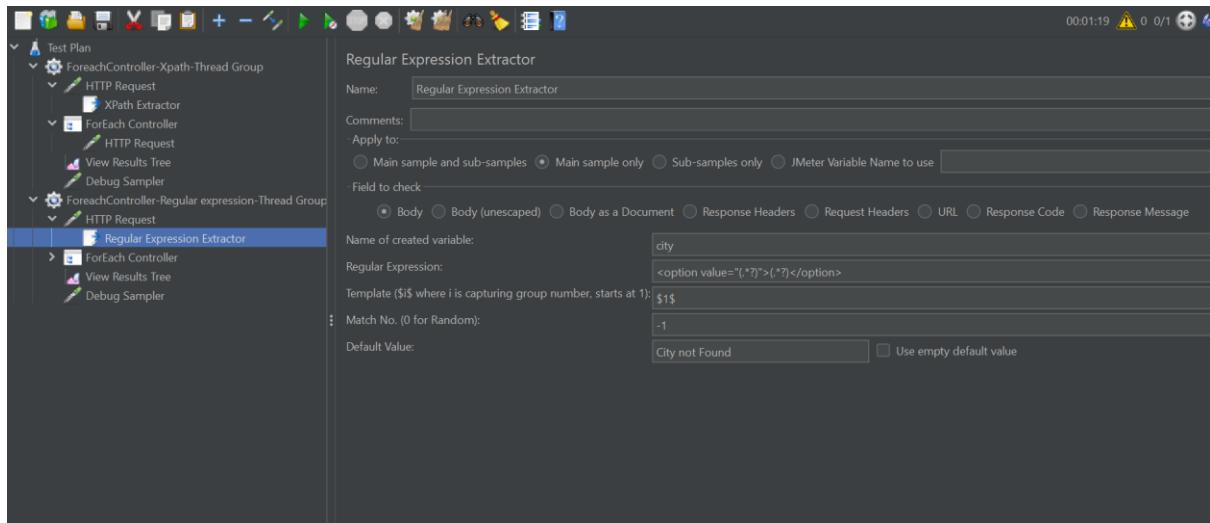
add thread group for foreach controller.

Add http request

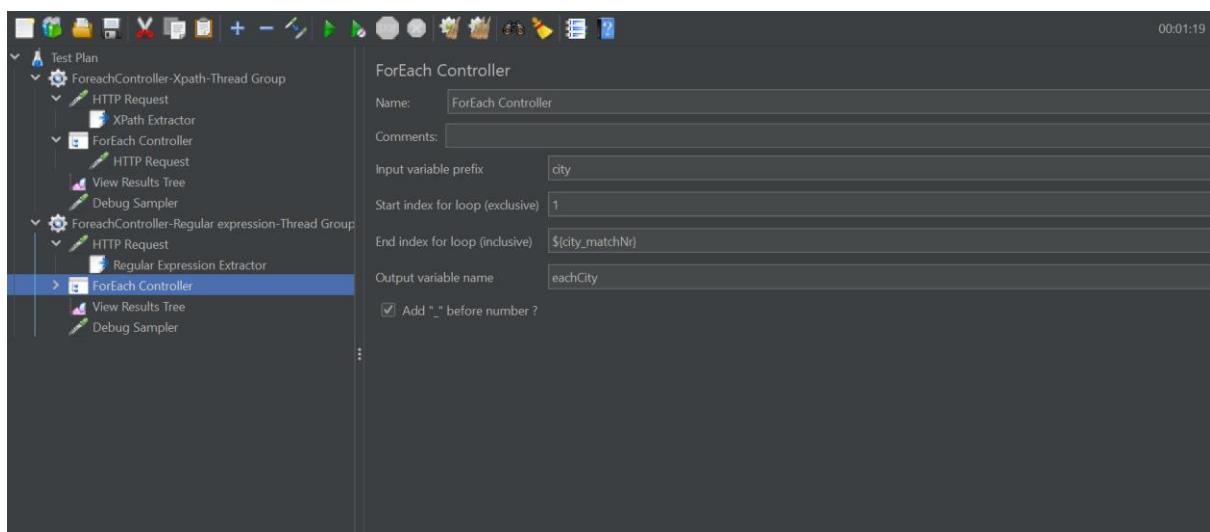


Then add a Regular Expression Extractor in http request

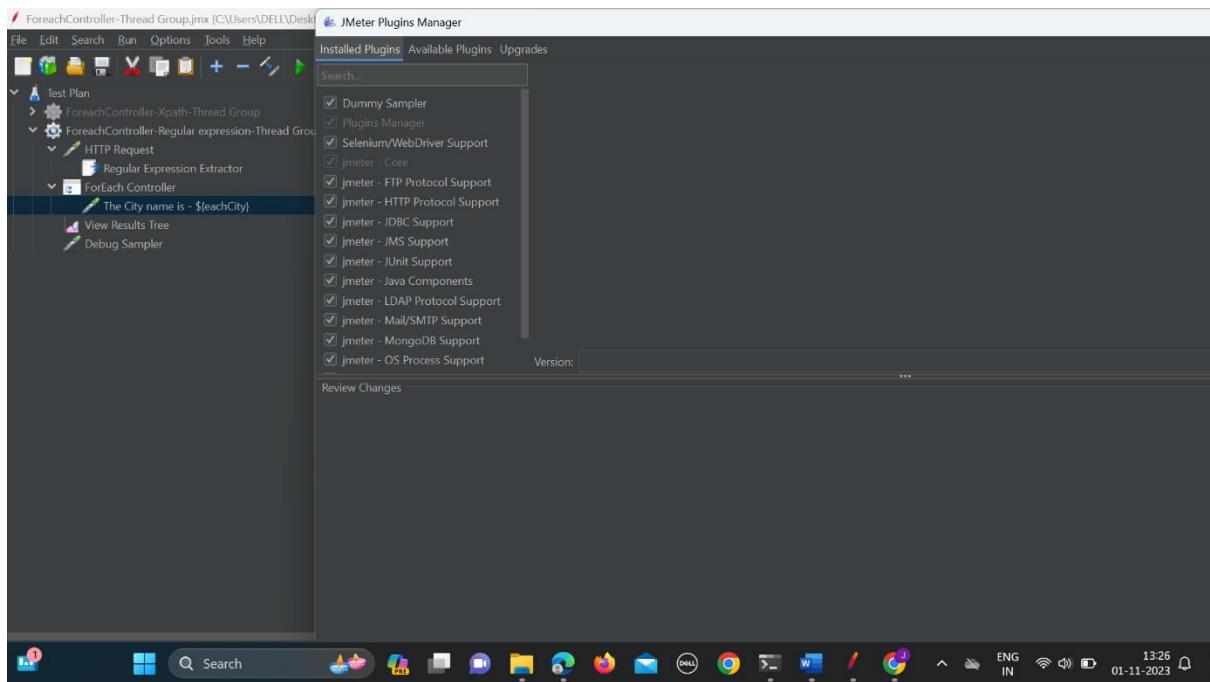




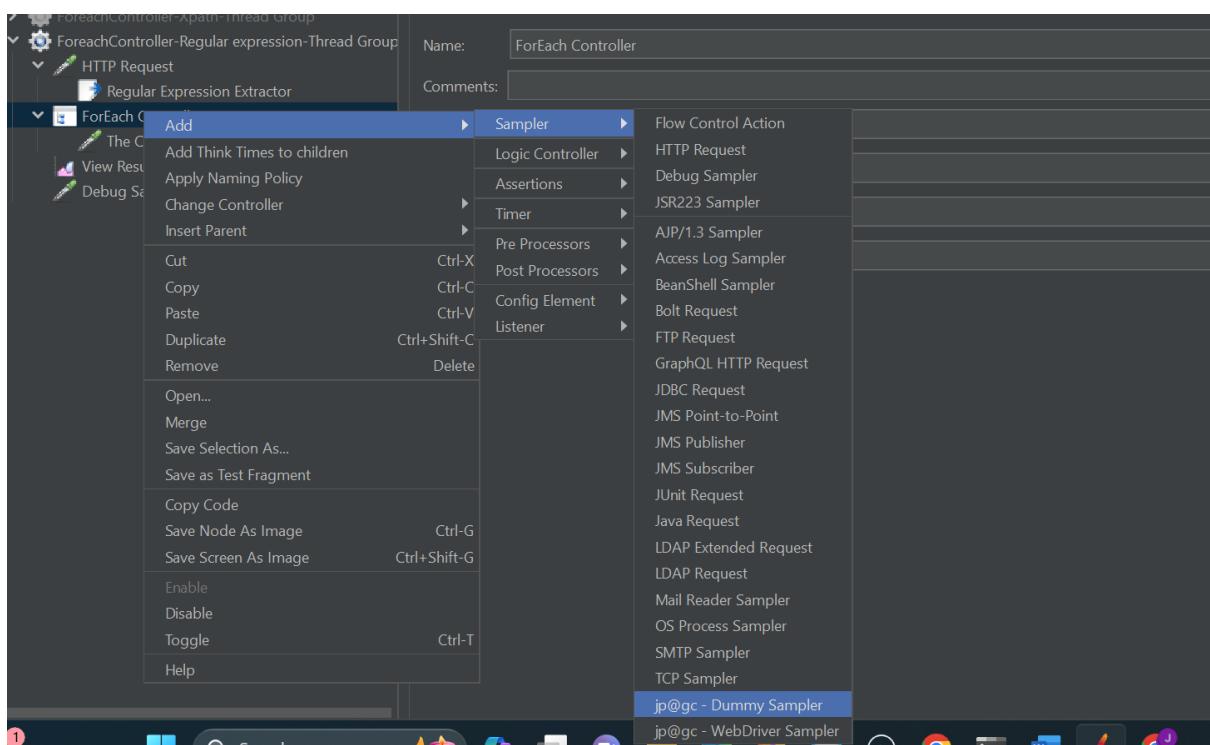
Then add ForEach Controller in Thread Group.

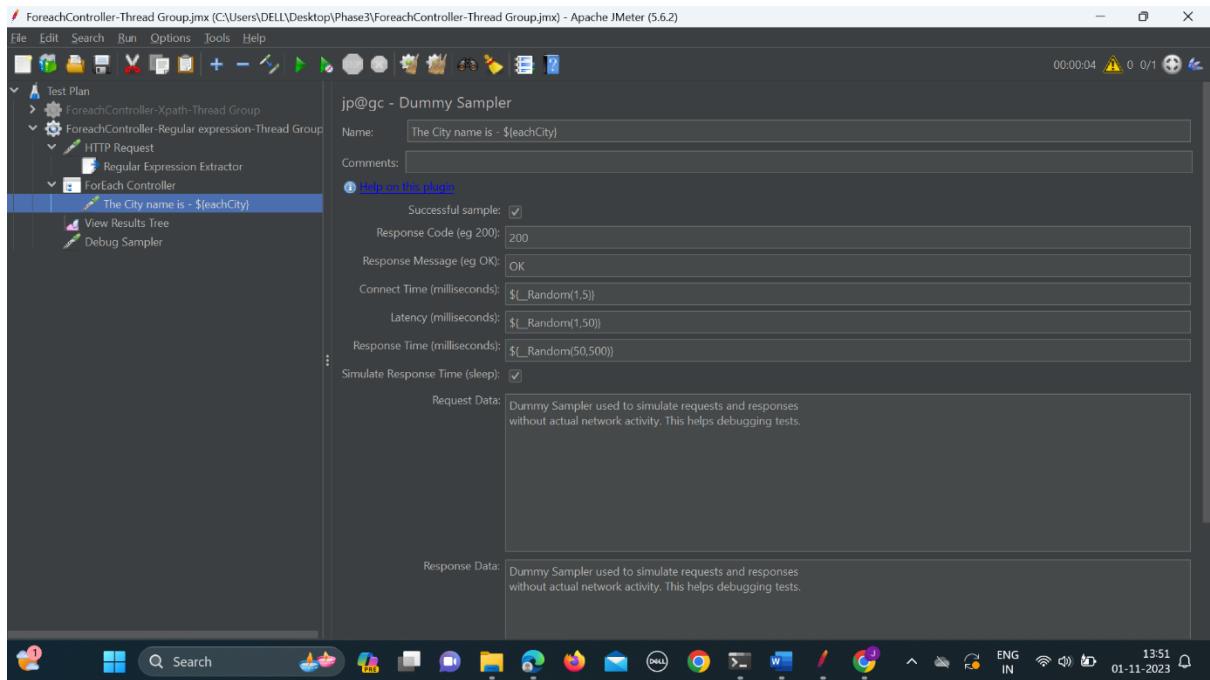


Go to options → plugins manager → install dummy Sampler.

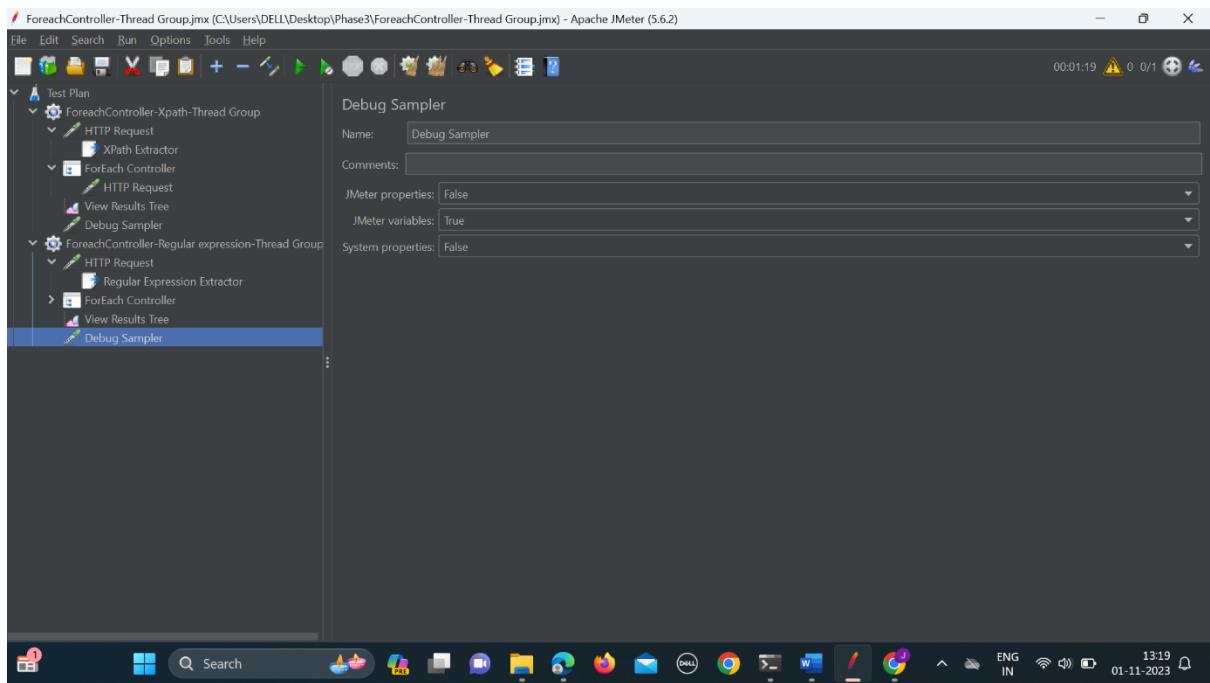


Then in ForEach controller add jp@gc – Dummy sampler

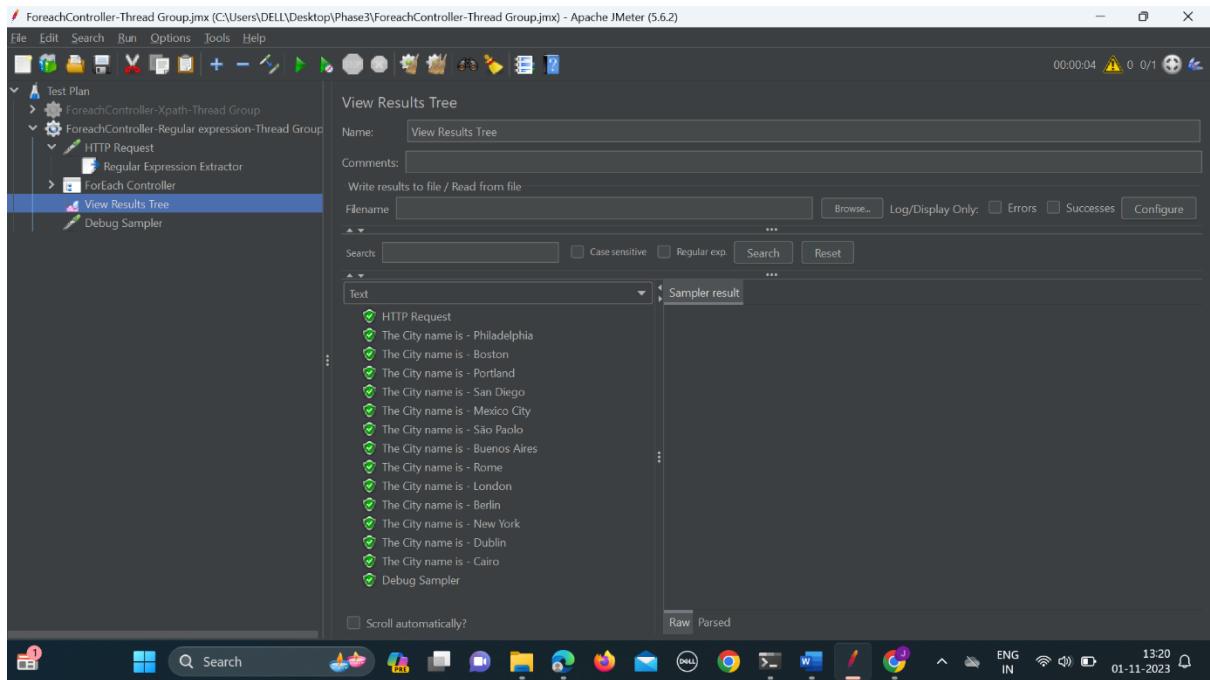




Then add view results tree and debug sampler.



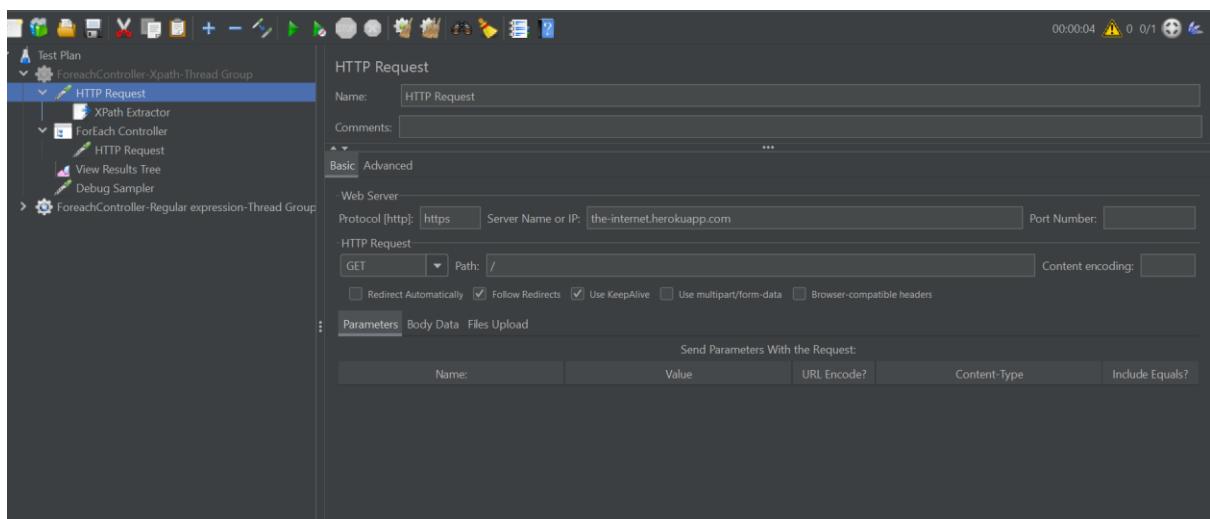
Click on run.



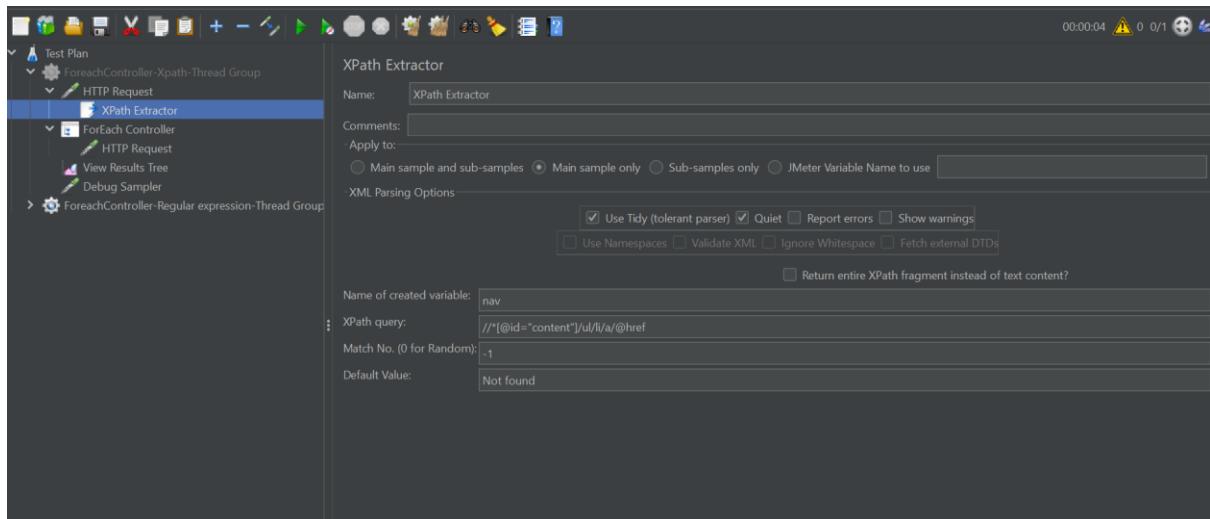
7. ForEach Controller with Xpath Extractor :

add thread group for foreach controller.

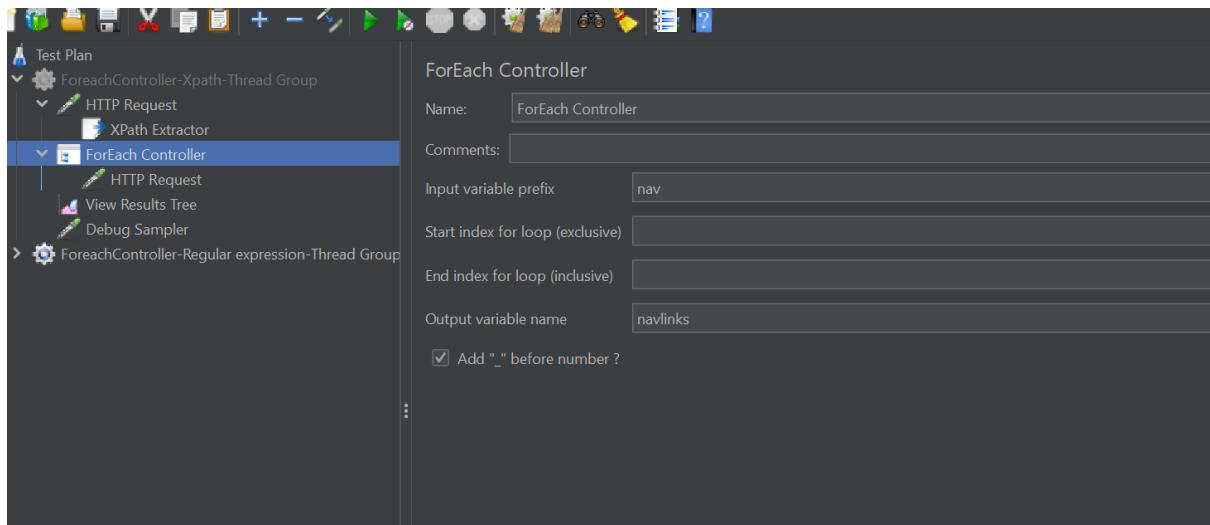
Add http request



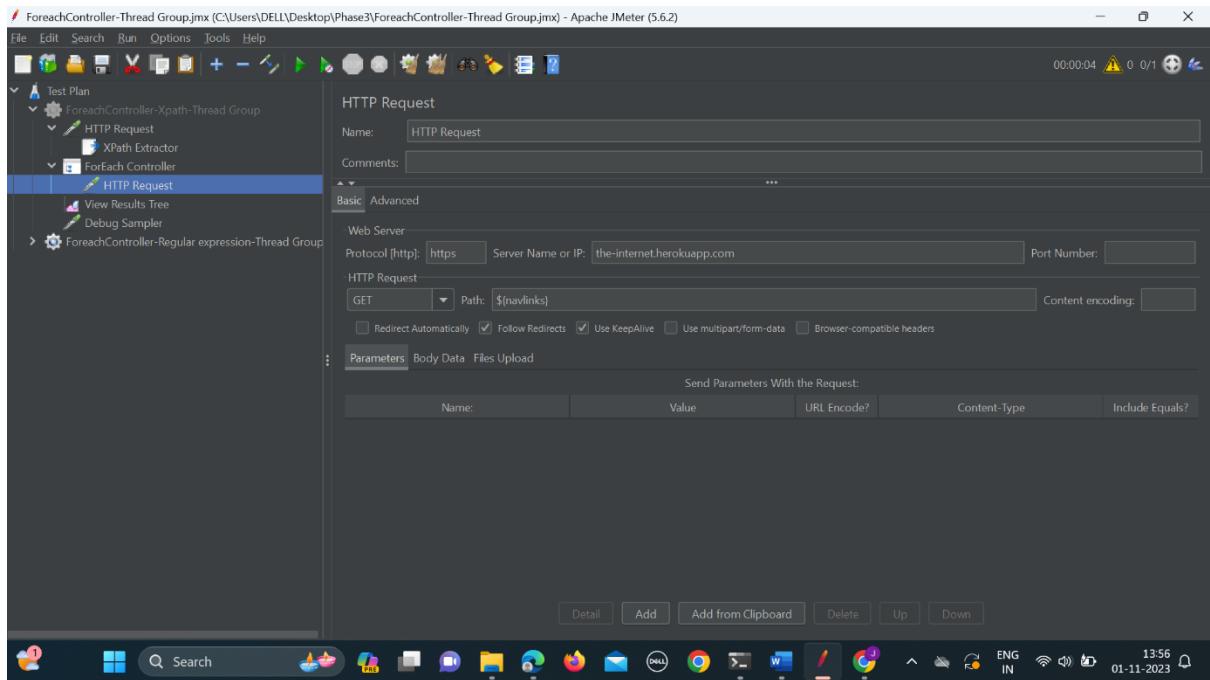
Then add a Xpath Extractor in http request.



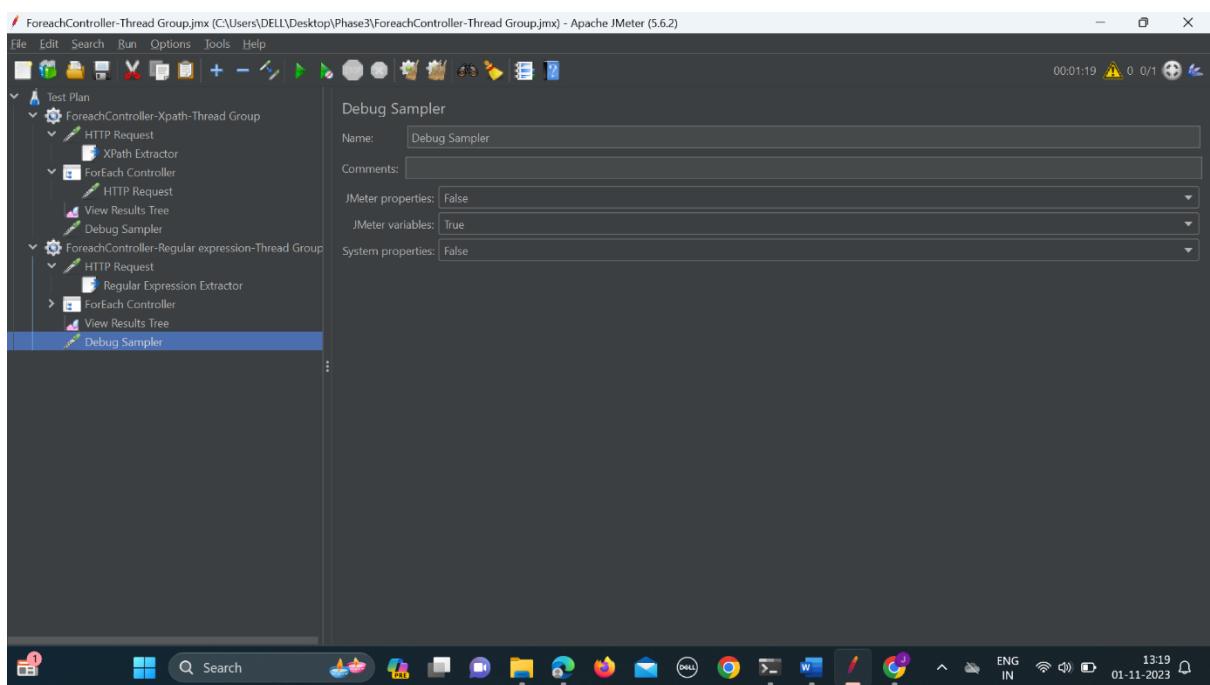
Then add ForEach Controller in Thread Group.



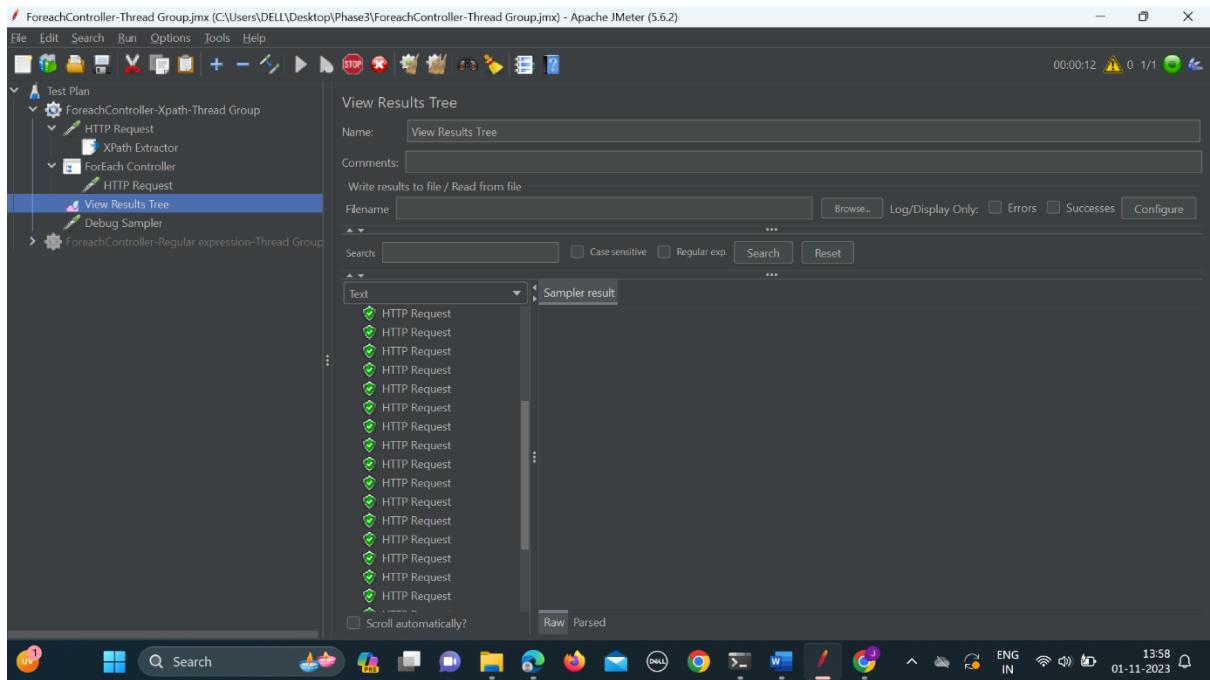
The add http request in foreach controller.



Then add view results tree and debug sampler.

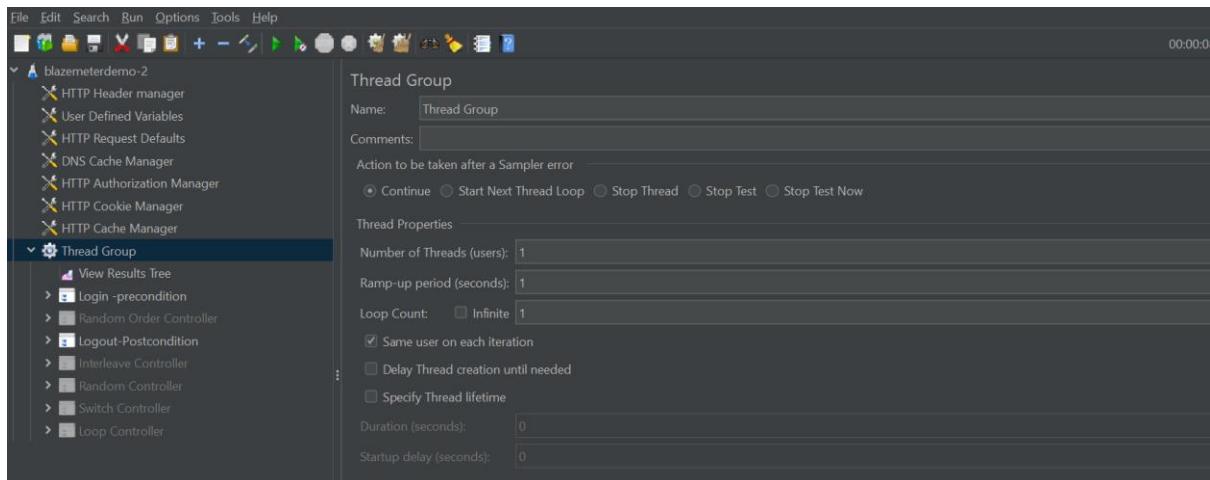


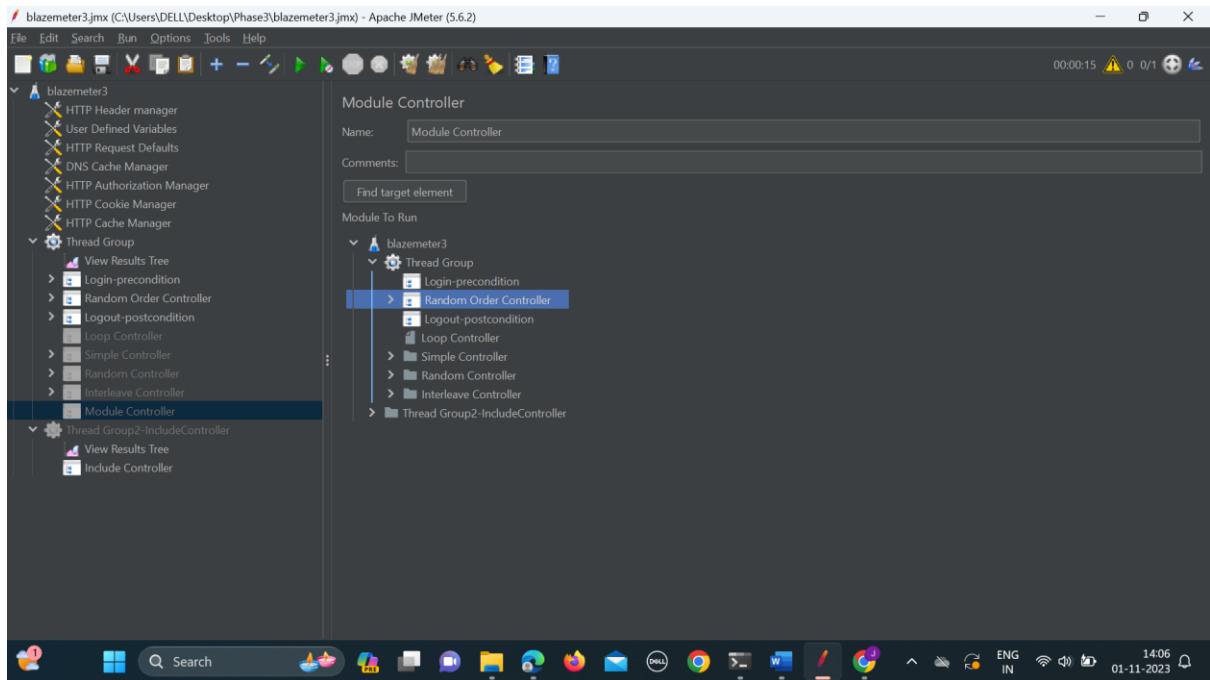
Click on run.



8. Module Controller:

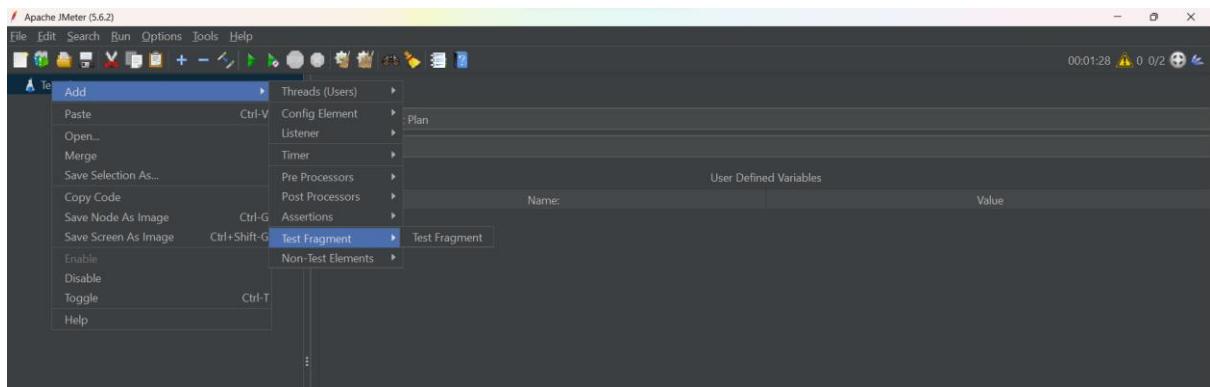
In order to run many disabled controllers (state is disabled) at once, we can use module controller



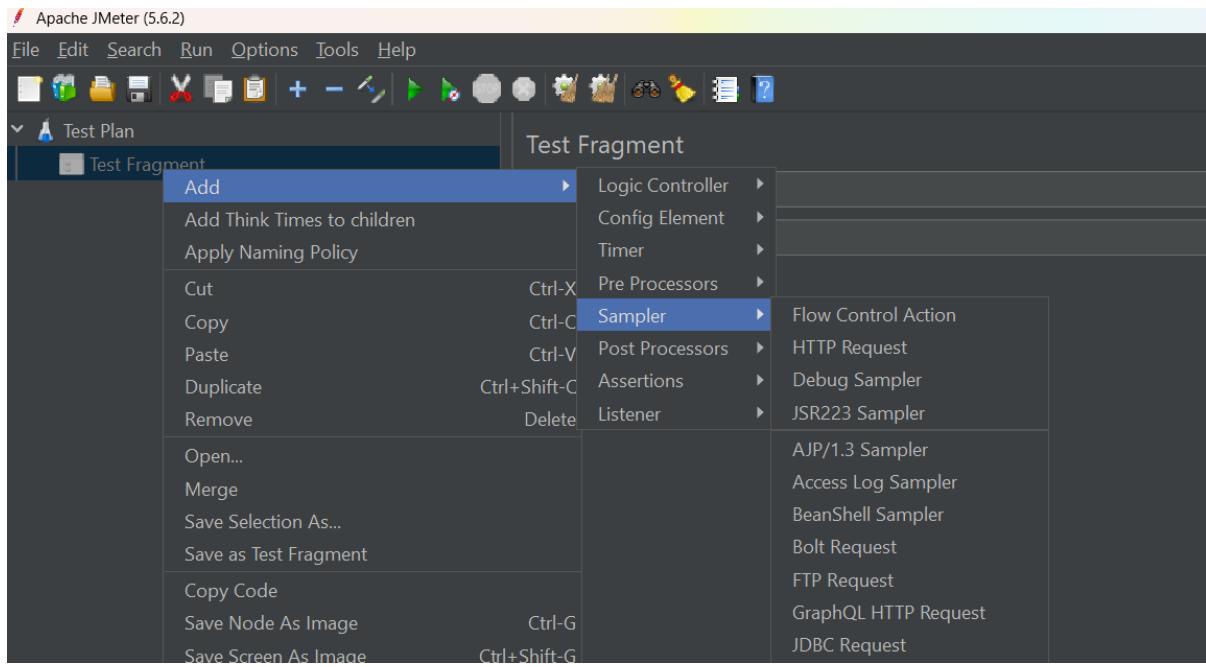


9. Include Controller

Create a new Test Plan → Add a new Test Fragment



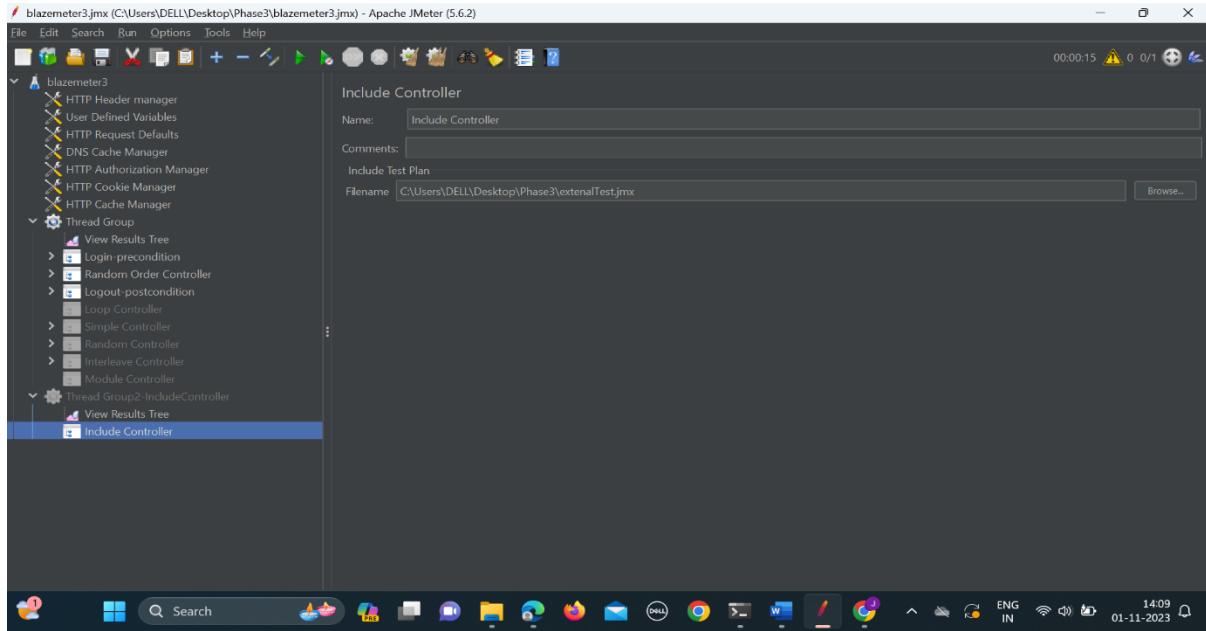
In Test Fragment → add a HTTP sampler



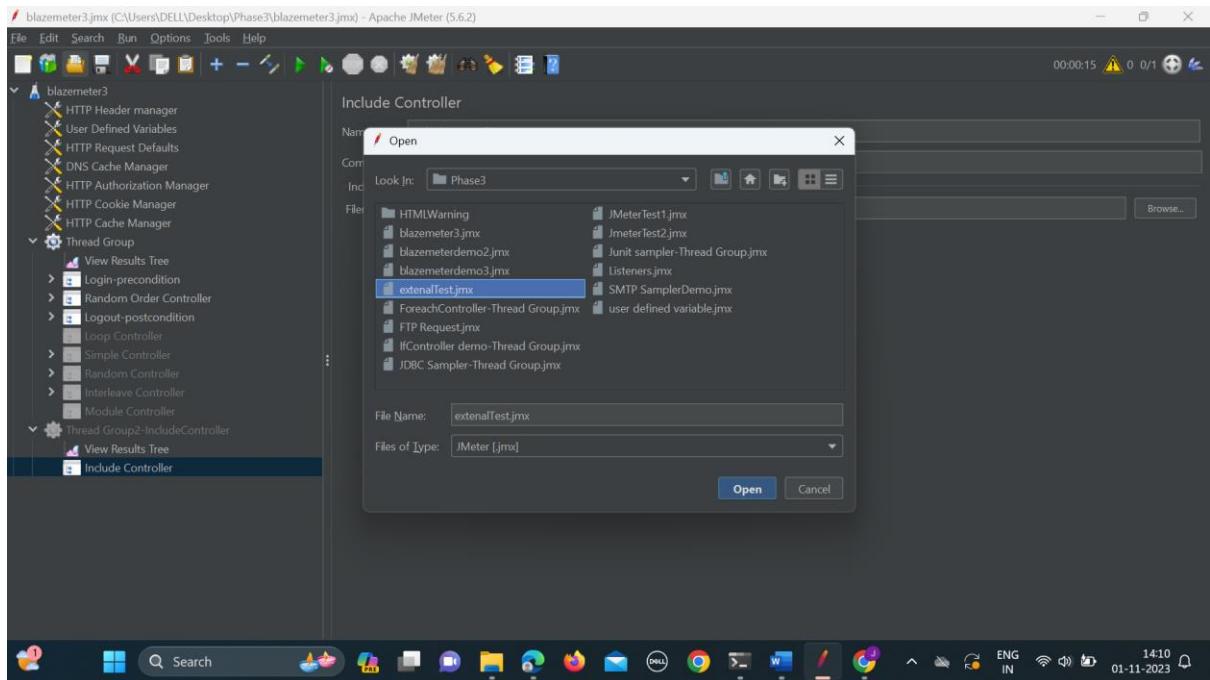
In the http request add blozedemo.com

Save the test plan as externalTest.jmx

Now open an existing test plan → Add a threadgroup→add a include controller.



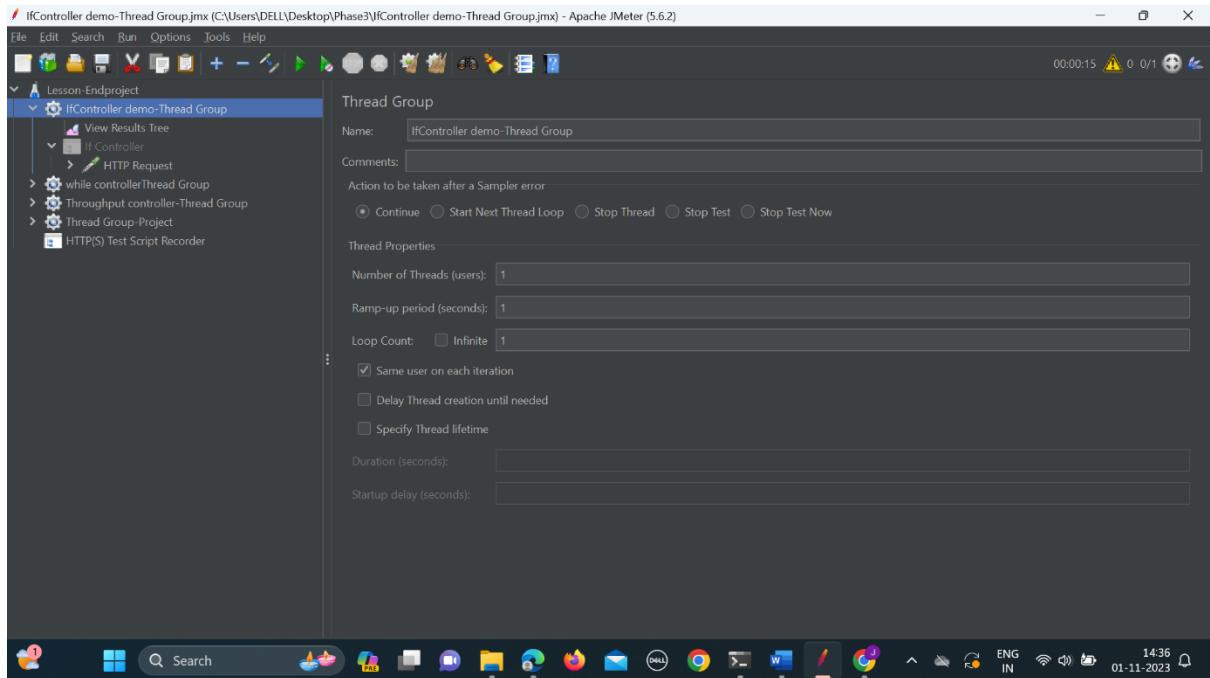
Underfile name click on browse button and select your script



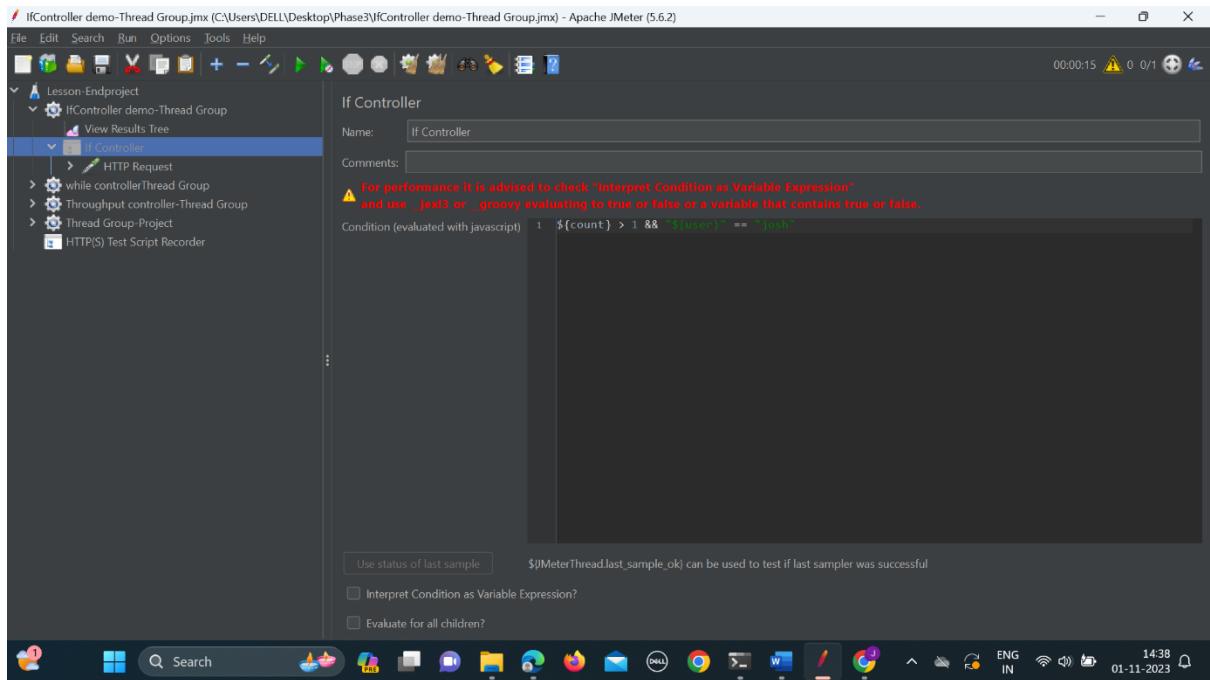
Click on run.

10. If controller:

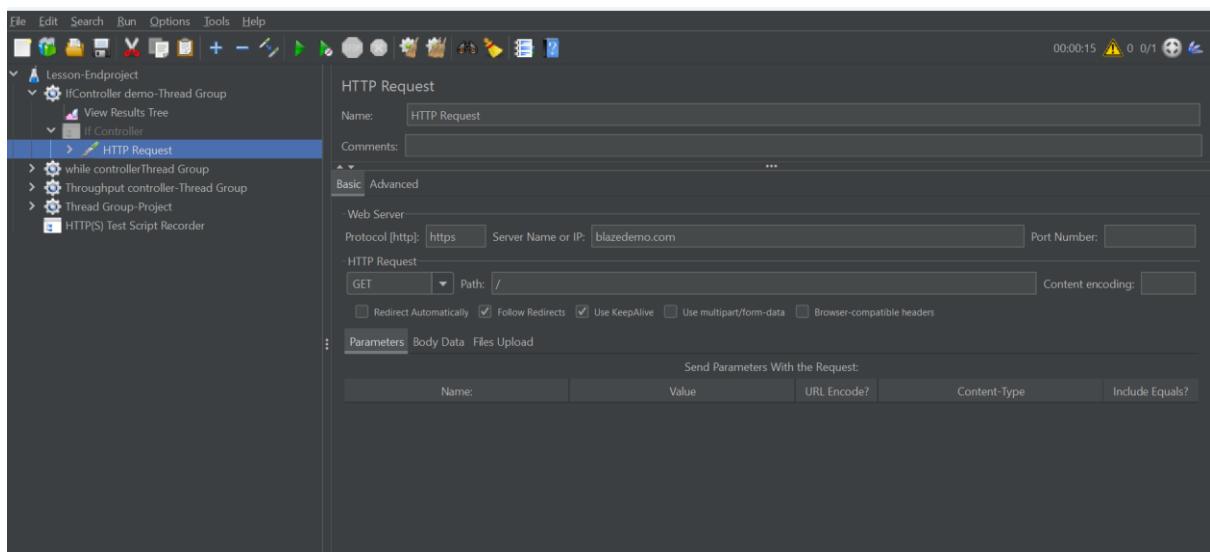
Add a thread group and view results tree.



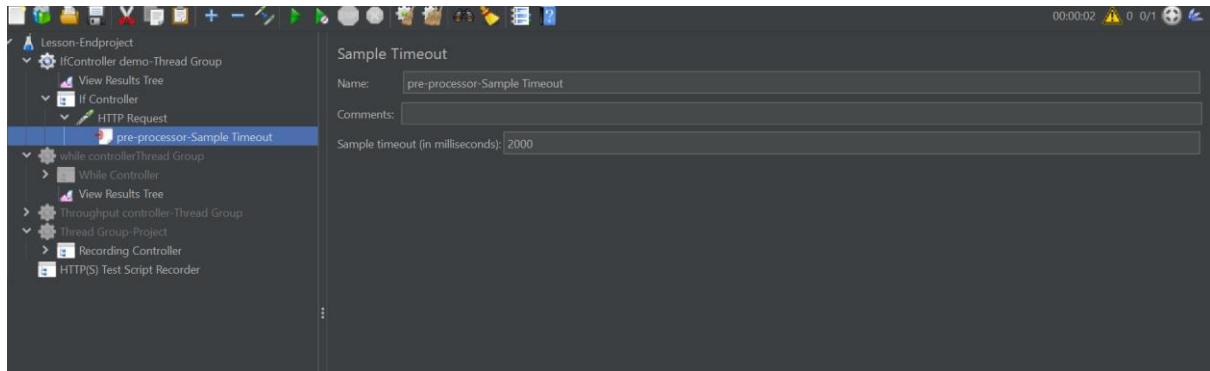
Add if controller in thread group



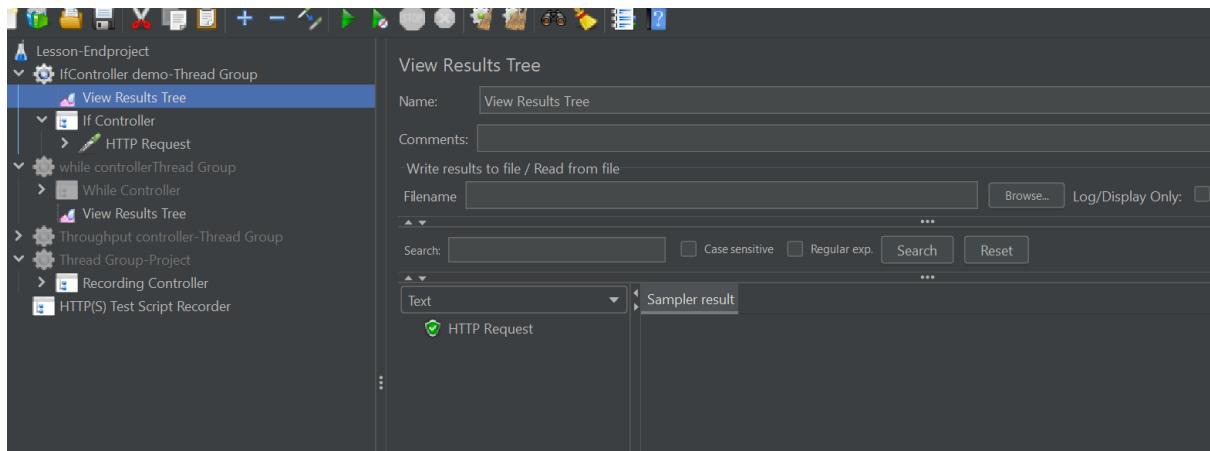
And add http request in if controller.



Pre-processor



Click on run.



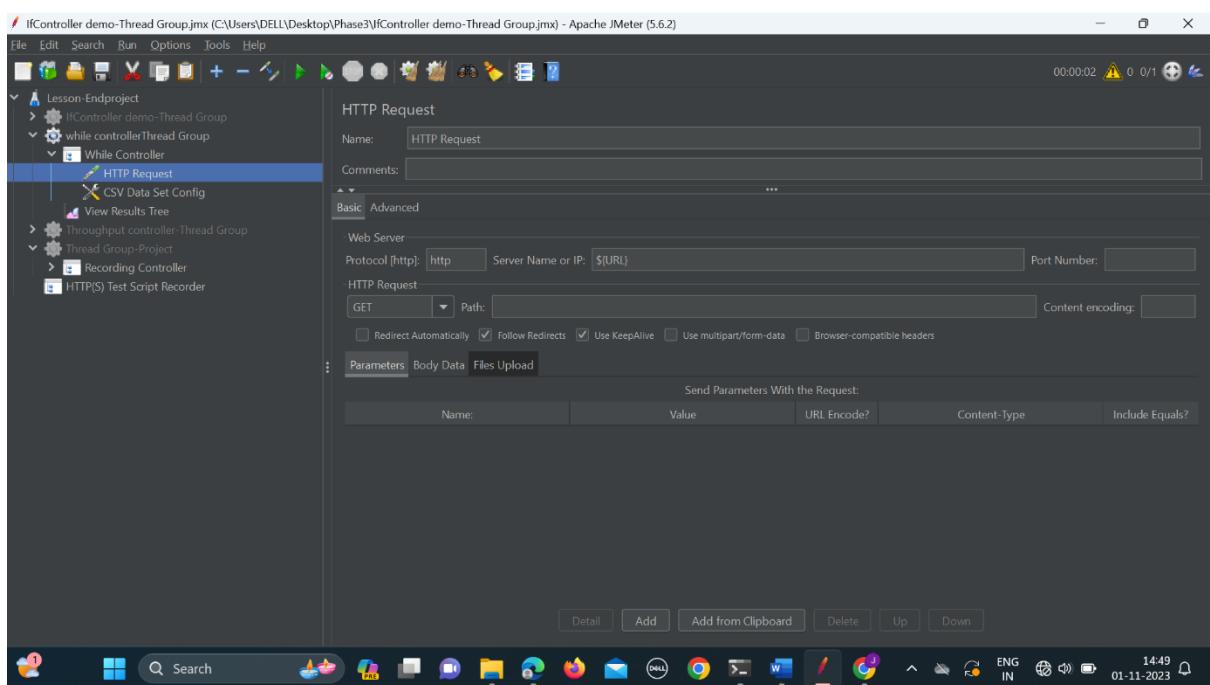
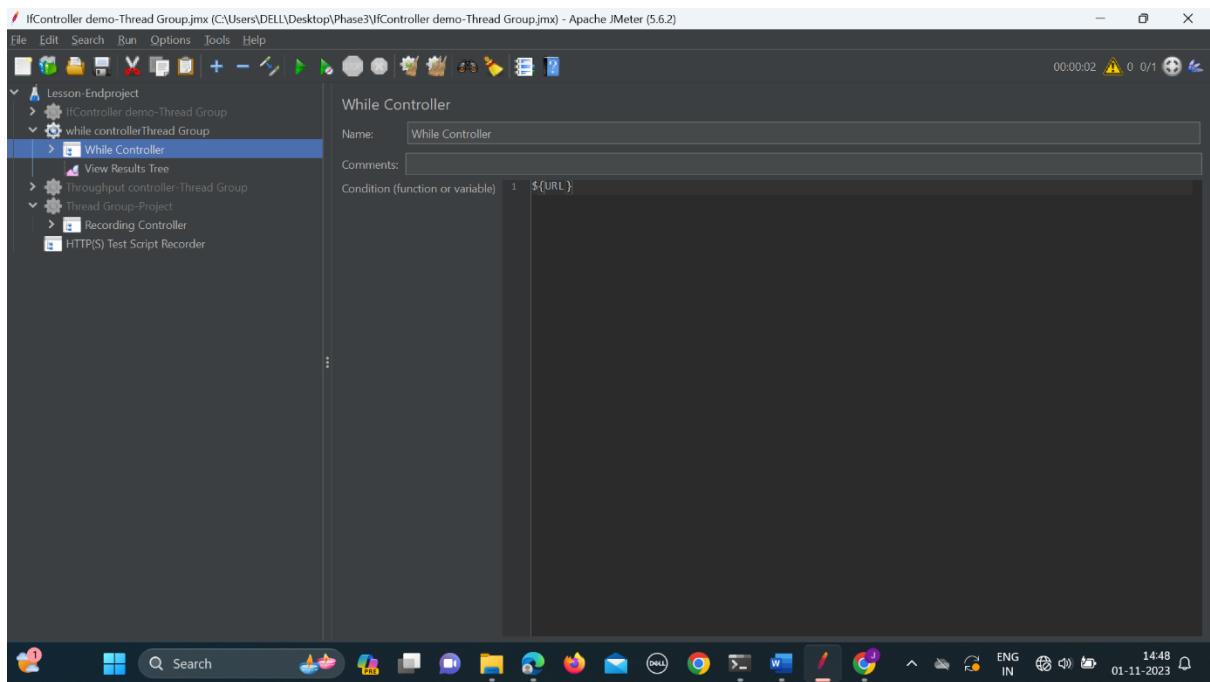
11. While Controller and CSV data config

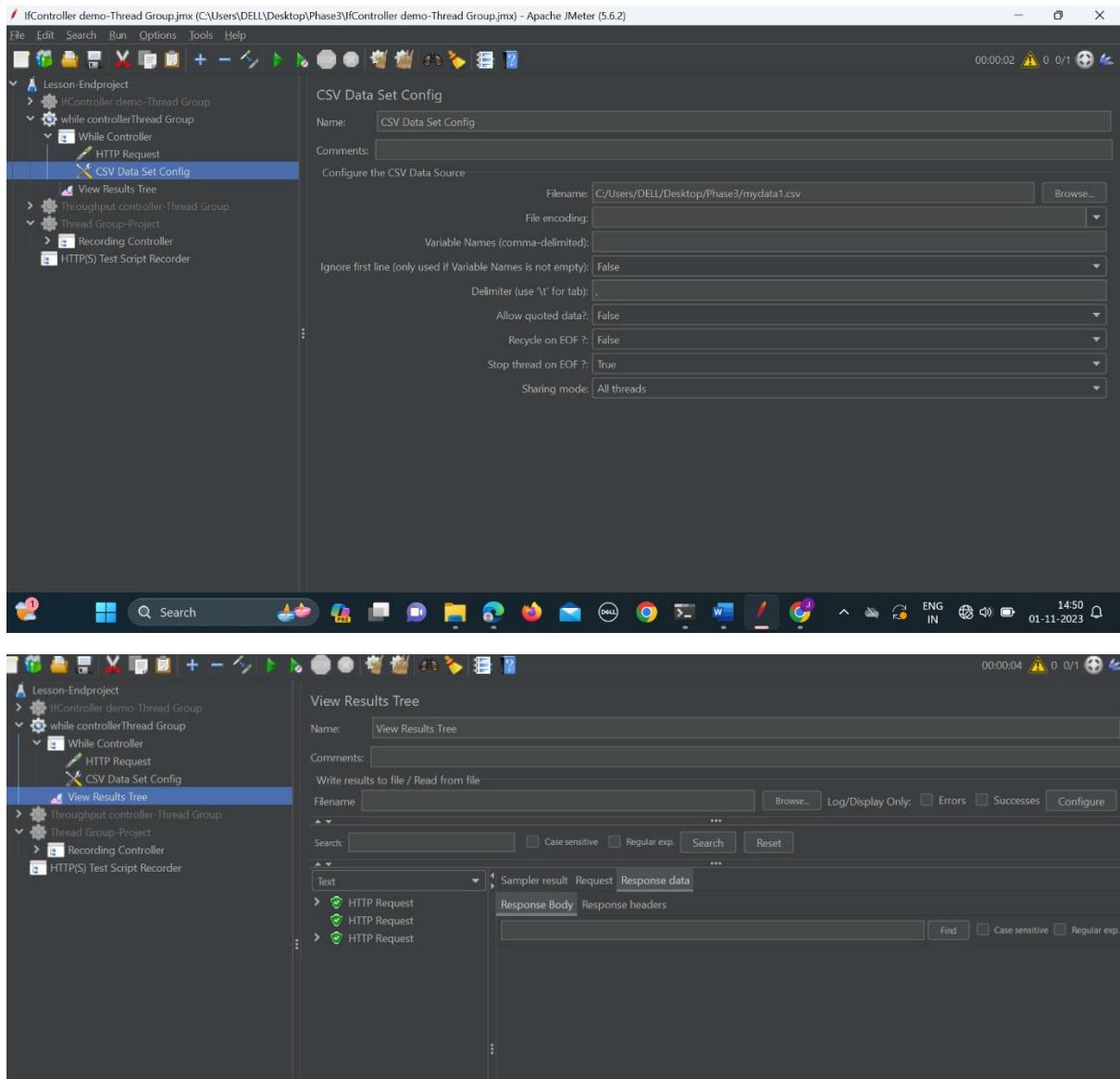
Create an excel sheet and save it as a CSV format

The screenshot shows a Microsoft Excel spreadsheet with data in columns A through H. The data consists of a header 'URL' and four rows of URLs: 'blazedemo.com', 'www.google.com', and 'www.wikipedia.org'. The first row ('blazedemo.com') has a green border around cells A1 to D1, indicating it is selected or highlighted.

A	B	C	D	E	F	G	H
URL							
blazedemo.com							
www.google.com							
www.wikipedia.org							
0							
1							
2							
3							
4							
5							

Save the file as mydata1 in csv(comma delimited)





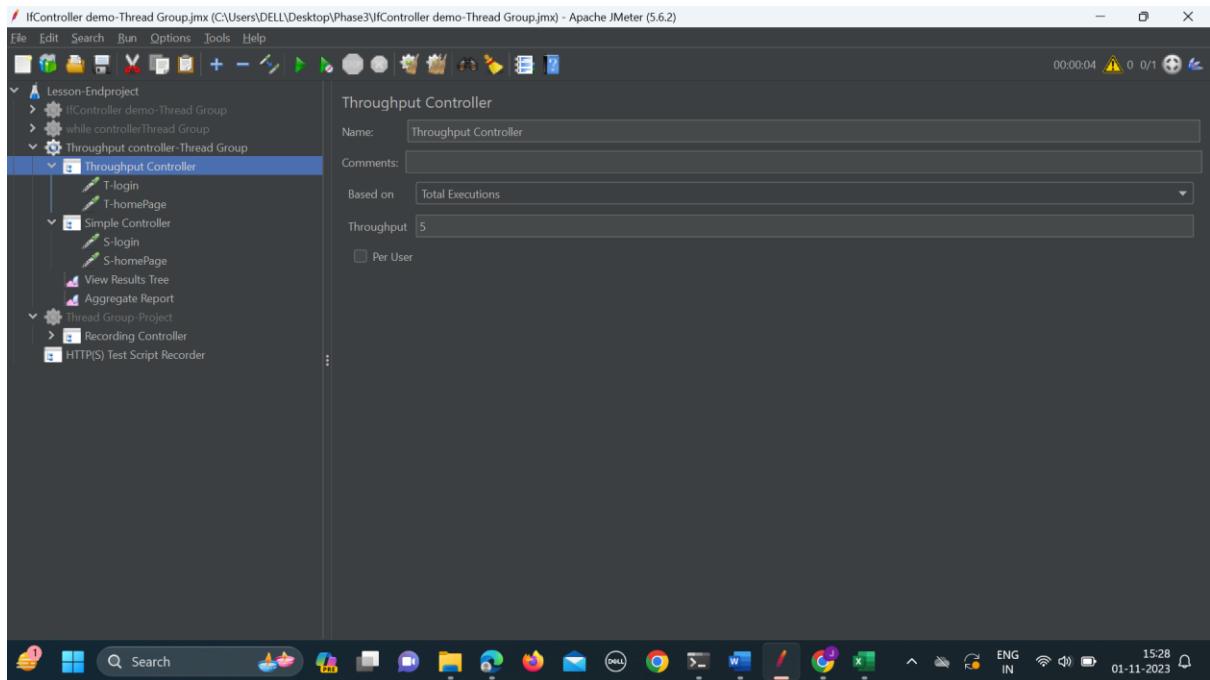
12. Throughput Controller:

Add thread group

Add 4 http requests

Add throughput controller → in this add two http requests . login and homepage

Then add simpler controller → in this add two http requests . login and home page



Add view results tree and aggregate report

The screenshot shows two panels in the JMeter interface:

- Left Panel (Tree View):** Shows the project structure under 'Lesson-Endproject'. The 'View Results Tree' and 'Aggregate Report' nodes under the 'Throughput controller-Thread Group' are selected.
- Right Panel (Configuration):**
 - View Results Tree:** Configuration for writing results to a file. The 'Text' tab is selected, showing a list of samplers: T-login, T-homePage, S-login, S-homePage, T-login, T-homePage, S-login, S-homePage, T-login, T-homePage, S-login, S-homePage, and T-login.
 - Aggregate Report:** Configuration for writing results to a file. The 'Log/Display Only' checkbox is checked. The 'Errors' and 'Successes' checkboxes are unchecked. The 'Configure' button is visible. A table below shows the summary statistics:

Label	# Samples	Average	Median	90% Line	95% Line	99% Line	Min	Maximum	Error %	Throughput	Received ...	Sent KB/sec
T-login	5	2099	1319	2647	4914	4914	798	4914	0.00%	6.3/min	0.59	0.01
T-homeP...	5	3068	3794	4710	5725	5725	501	5725	0.00%	6.6/min	0.51	0.01
S-login	10	1970	819	3806	4117	4117	430	4117	0.00%	9.7/min	0.91	0.02
S-homeP...	10	2772	1211	6143	6143	9011	409	9011	0.00%	9.3/min	0.72	0.02
TOTAL	30	2442	1211	4914	5725	9011	409	9011	0.00%	24.6/min	2.10	0.05