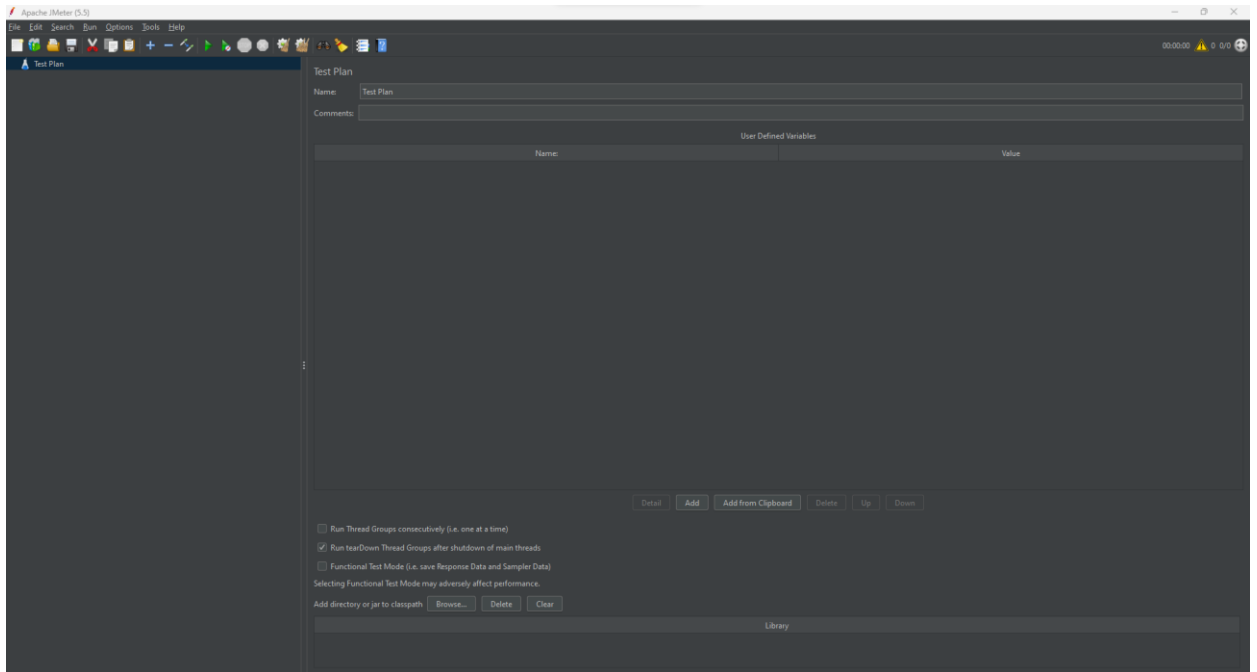


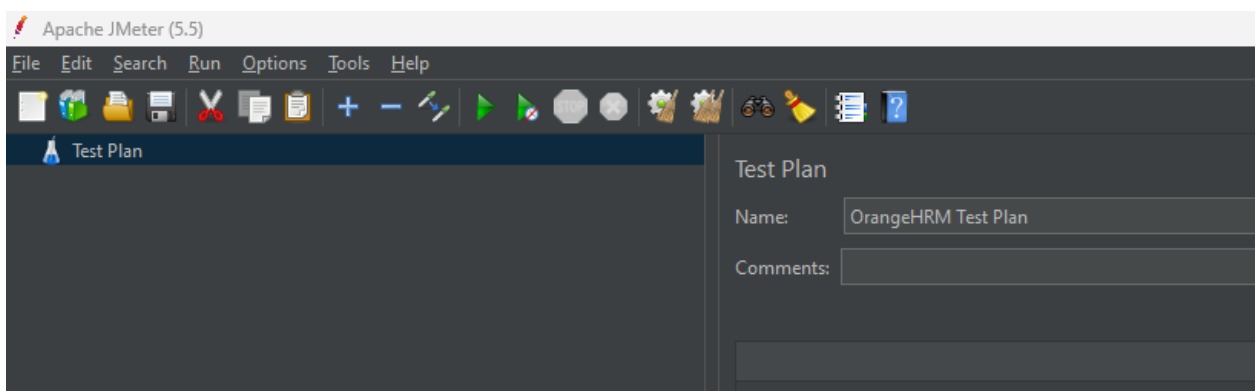
Jmeter : Perform 2 rounds of load testing with minimum 20 users, on OrangeHrm application using JMETER

By Nidish Rao

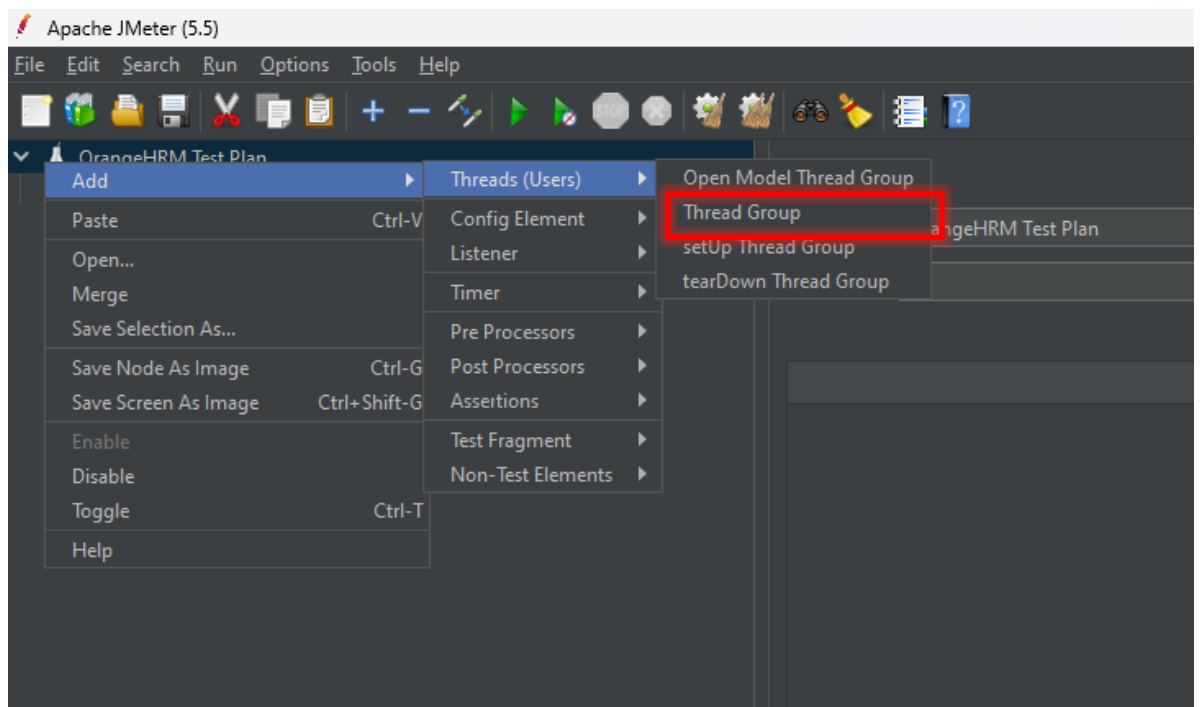
1. Open Jmeter by running the Jmeter bash file. The Jmeter window opens as shown below



2. Giving a name to our test plan. We are working on OrangeHRM so we will give Test Plan name as “OrangeHRM Test Plan”



3. Adding a new thread group our test plan by right clicking on our test plan and navigating as shown below (Add>> Threads>> Thread Group)



4. The Thread Group window will open and look as shown below

A screenshot of the 'Thread Group' configuration window in Apache JMeter. The window has a dark theme. At the top, the title is 'Thread Group'. Below the title, there are two text input fields: 'Name:' with the value 'Thread Group' and 'Comments:'. Below these is a section titled 'Action to be taken after a Sampler error' with five radio button options: 'Continue' (selected), 'Start Next Thread Loop', 'Stop Thread', 'Stop Test', and 'Stop Test Now'. Below this is a section titled 'Thread Properties' with several settings: 'Number of Threads (users):' set to '1', 'Ramp-up period (seconds):' set to '1', 'Loop Count:' with an unchecked 'Infinite' checkbox and a value of '1', a checked checkbox for 'Same user on each iteration', an unchecked checkbox for 'Delay Thread creation until needed', and an unchecked checkbox for 'Specify Thread lifetime'. At the bottom, there are two more text input fields: 'Duration (seconds):' and 'Startup delay (seconds):'.

5. As the given problem statement asks for 2 rounds of load testing on 20 users we will add following conditions in our thread group
- Number of threads (users) : 20
 - Ramp-up period (seconds) : 2
 - Loop count : 2

Thread Group

Name:

Thread Group

Comments:

Action to be taken after a Sampler error

☒ Continue

☐ Start Next Thread Loop

☐ Stop Thread

☐ Stop Test

☐ Stop Test Now

Thread Properties

Number of Threads (users):

20

Ramp-up period (seconds):

2

Loop Count:

☐ Infinite

2

☒ Same user on each iteration

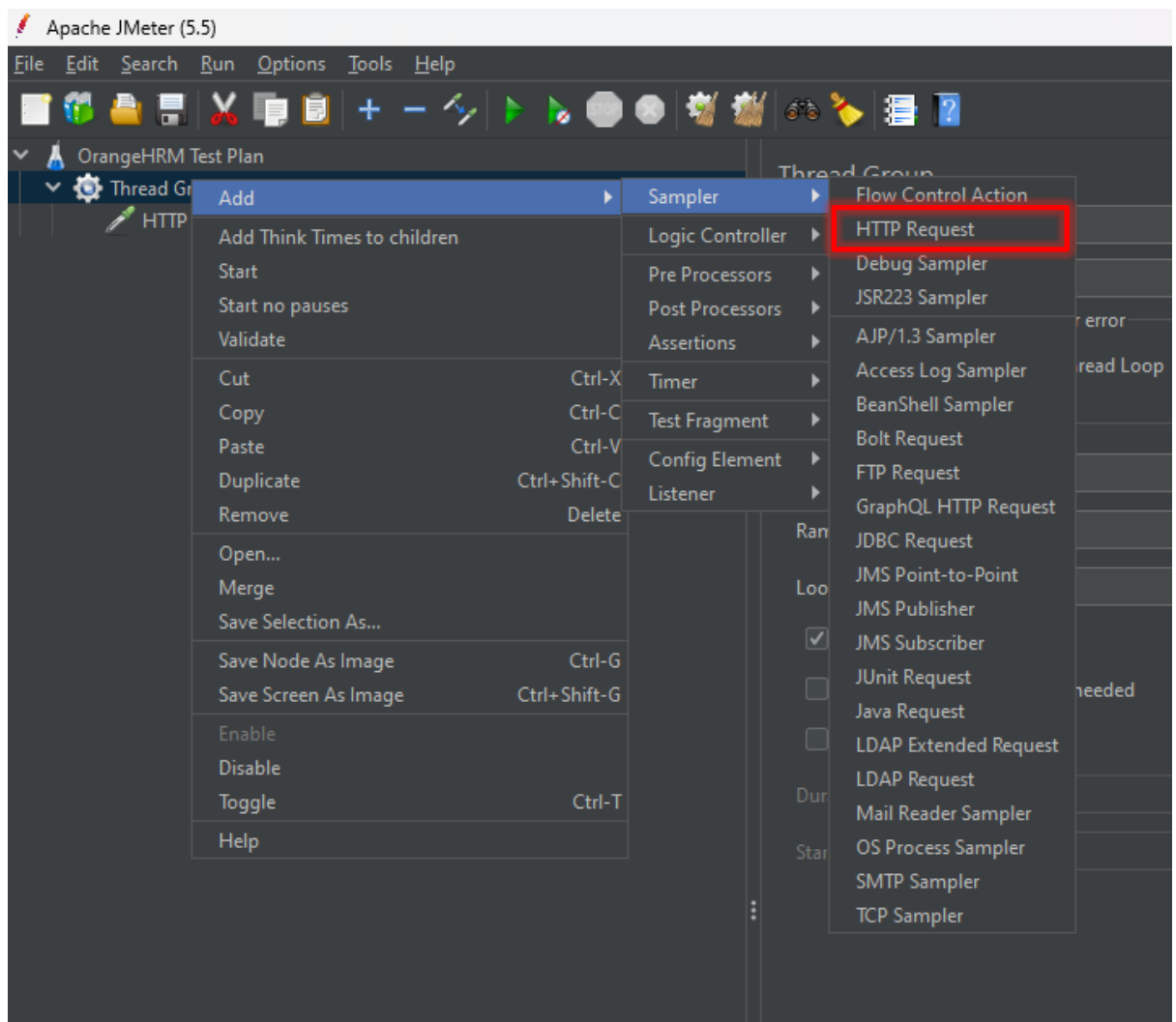
☐ Delay Thread creation until needed

☐ Specify Thread lifetime

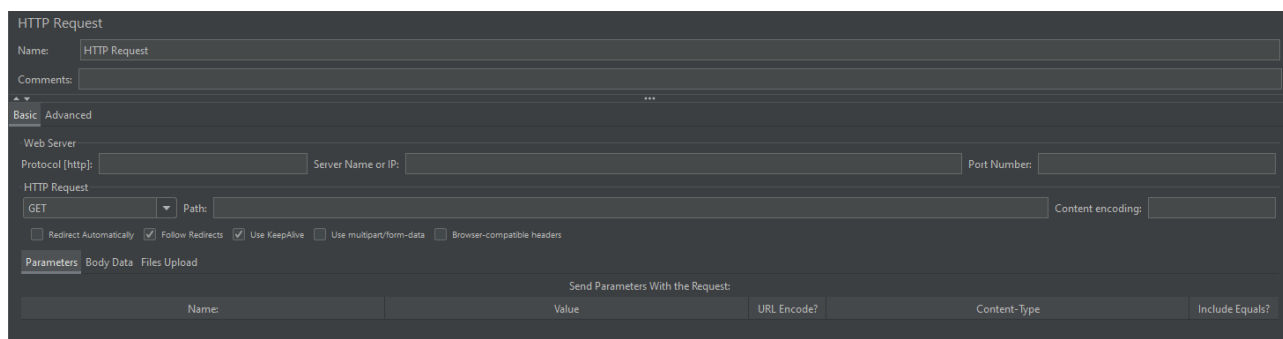
Duration (seconds):

Startup delay (seconds):

6. Adding a HTTP Request sampler to our thread group by right clicking on our thread group and navigating as shown below (Add>> Sampler>> HTTP Request)



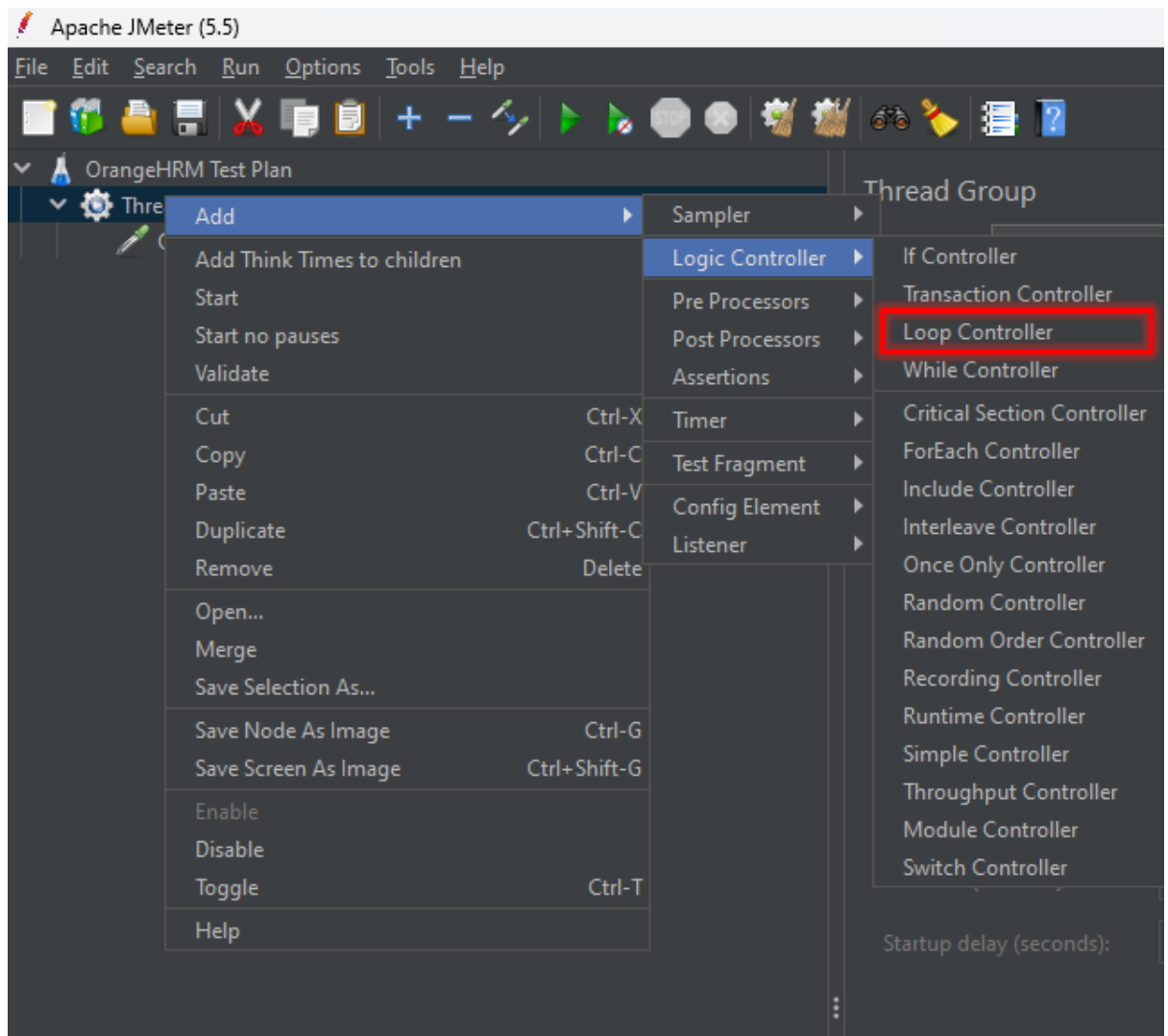
7. The HTTP Request sampler window will open and look as shown below



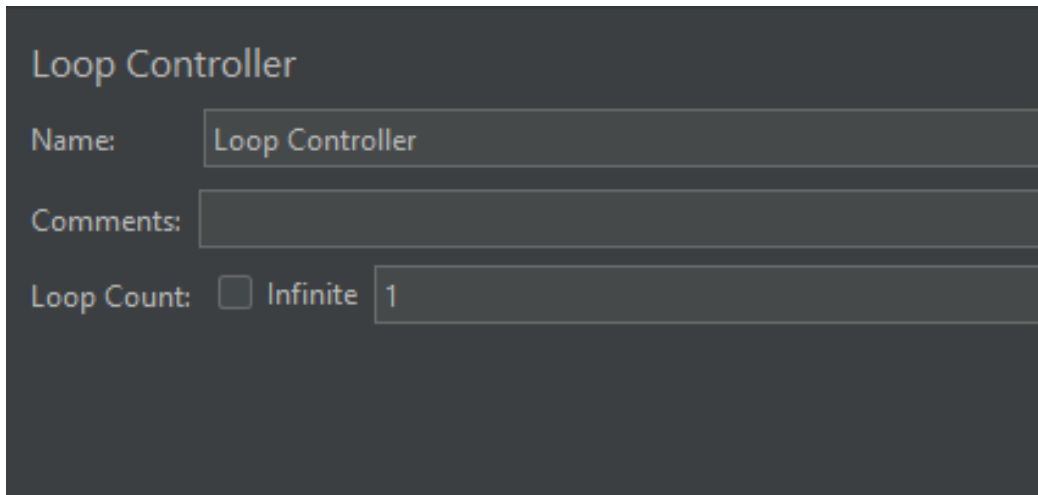
8. We will name our HTTP request sampler as “OrangeHRM Login Page”. Next, we will add server name i.e URL of our OrangeHRM application and add path for which page we are performing load testing i.e Login page of Orange HRM Application

The screenshot shows the 'HTTP Request' configuration window in Apache JMeter. The 'Name' field is set to 'OrangeHRM Login Page'. The 'Protocol' is 'Http'. The 'Server Name or IP' is 'https://opensource-demo.orangehrmlive.com'. The 'Port Number' is empty. The 'Method' is 'GET' and the 'Path' is '/web/index.php/auth/login'. The 'Content encoding' is empty. There are checkboxes for 'Redirect Automatically', 'Follow Redirects', 'Use KeepAlive', 'Use multipart/form-data', and 'Browser-compatible headers'. The 'Parameters' tab is selected, showing a table with columns 'Name', 'Value', 'URL Encode?', 'Content-Type', and 'Include Equals?'. The 'Basic' tab is also visible.

9. Adding a Loop controller to our thread group by right clicking on our thread group and navigating as shown below (Add>> Logic Controller>> Loop Controller)



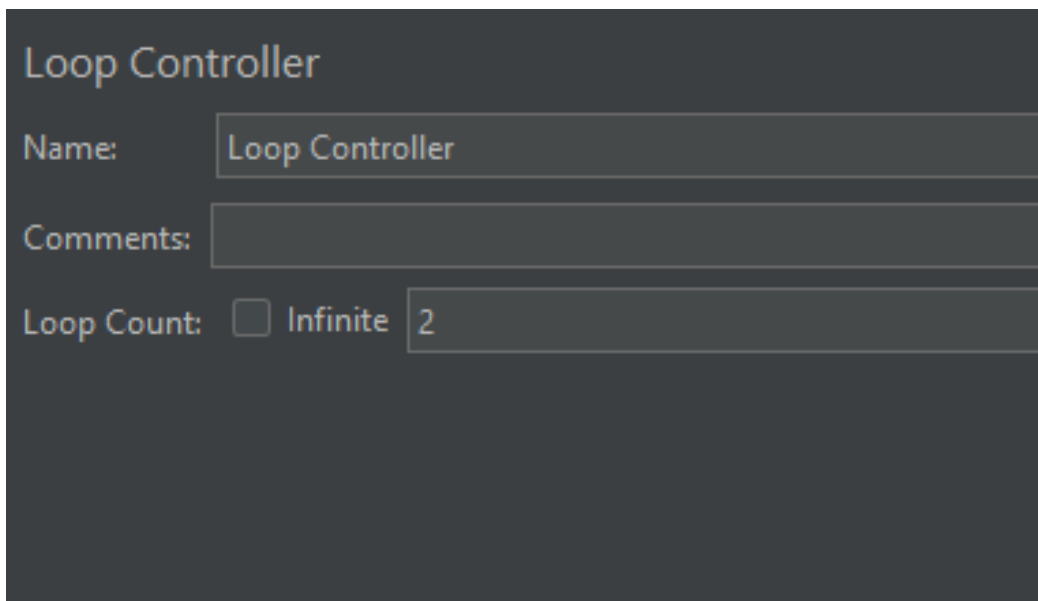
10. The Loop Controller window will open and look as shown below



The screenshot shows a dark-themed window titled "Loop Controller". It contains three input fields: "Name:" with the value "Loop Controller", "Comments:" which is empty, and "Loop Count:" with a checkbox labeled "Infinite" that is unchecked and a text box containing the number "1".

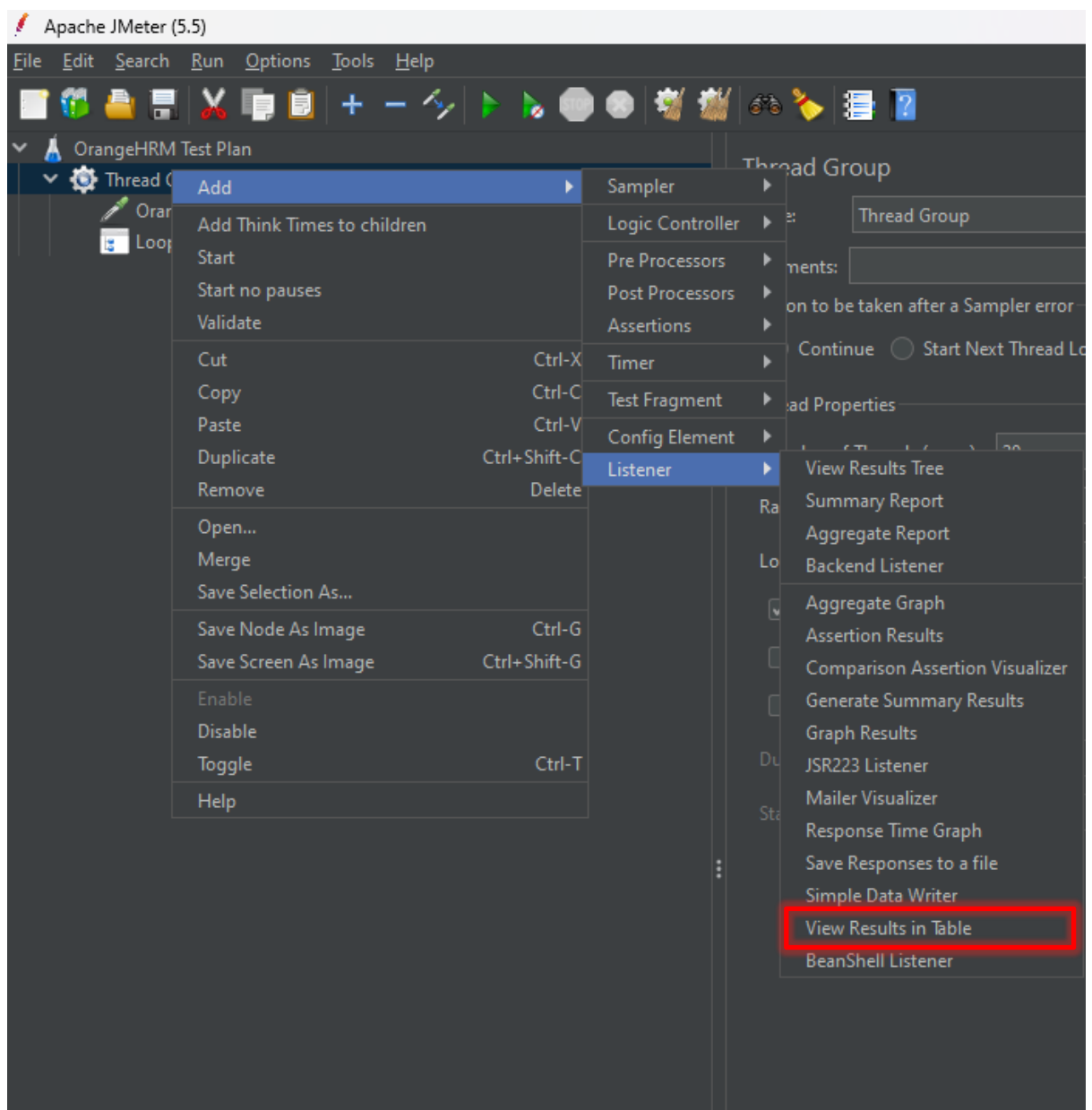
11. As the given problem statement asks for 2 rounds of load testing on 20 users we will add following conditions in our thread group

- Loop count : 2



The screenshot shows the same "Loop Controller" window, but the "Loop Count:" text box now contains the number "2". The "Name:" field remains "Loop Controller" and the "Comments:" field remains empty.

12. Adding a View Results in Table to our thread group by right clicking on our thread group and navigating as shown below (Add>> Listener>> View Results in Table)



13. Now we will perform load testing by saving and running the Jmeter file. The output will be displayed in a Table format for 20 users for 2 loop counts as shown below

View Results in Table

Name:

View Results in Table

Comments:

Write results to file / Read from file

Filename

Browse...

Log/Display Only:

☐ Errors

☐ Successes

Configure

Sample #	Start Time	Thread Name	Label	Sample Time(ms)	Status	Bytes	Sent Bytes	Latency	Connect Time(ms)
1	11:59:58.844	Thread Group 1-4	OrangeHRM_Login_Page	3561		4824	324	805	478
2	11:59:59.515	Thread Group 1-11	OrangeHRM_Login_Page	2890		4796	324	608	305
3	12:00:00.116	Thread Group 1-17	OrangeHRM_Login_Page	2291		4808	324	594	305
4	11:59:59.814	Thread Group 1-14	OrangeHRM_Login_Page	2612		4823	324	608	308
5	12:00:00.317	Thread Group 1-19	OrangeHRM_Login_Page	2120		4820	324	551	277
6	11:59:58.844	Thread Group 1-1	OrangeHRM_Login_Page	3598		4821	324	805	477
7	11:59:59.931	Thread Group 1-5	OrangeHRM_Login_Page	3513		4811	324	718	390
8	11:59:59.215	Thread Group 1-8	OrangeHRM_Login_Page	3255		4820	324	606	307
9	11:59:59.714	Thread Group 1-13	OrangeHRM_Login_Page	2764		4796	324	569	301
10	11:59:59.913	Thread Group 1-15	OrangeHRM_Login_Page	2569		4787	324	669	310
11	11:59:59.314	Thread Group 1-9	OrangeHRM_Login_Page	3449		4821	324	605	310
12	12:00:00.415	Thread Group 1-20	OrangeHRM_Login_Page	2372		4823	324	573	295
13	11:59:59.115	Thread Group 1-7	OrangeHRM_Login_Page	3674		4808	324	570	305
14	11:59:58.844	Thread Group 1-3	OrangeHRM_Login_Page	4017		4819	324	805	478
15	12:00:00.216	Thread Group 1-18	OrangeHRM_Login_Page	2662		4825	324	543	272
16	12:00:00.023	Thread Group 1-16	OrangeHRM_Login_Page	2873		4815	324	559	275
17	11:59:59.016	Thread Group 1-6	OrangeHRM_Login_Page	3883		4807	324	633	306
18	11:59:59.414	Thread Group 1-10	OrangeHRM_Login_Page	3487		4806	324	550	271
19	11:59:58.844	Thread Group 1-2	OrangeHRM_Login_Page	4090		4808	324	805	477
20	11:59:59.617	Thread Group 1-12	OrangeHRM_Login_Page	3342		4815	324	607	302
21	12:00:02.406	Thread Group 1-4	OrangeHRM_Login_Page	852		4798	324	276	0
22	12:00:02.408	Thread Group 1-17	OrangeHRM_Login_Page	856		4797	324	274	0
23	12:00:02.442	Thread Group 1-11	OrangeHRM_Login_Page	860		4799	324	268	0
24	12:00:02.406	Thread Group 1-11	OrangeHRM_Login_Page	965		4822	324	276	0
25	12:00:02.427	Thread Group 1-14	OrangeHRM_Login_Page	1003		4796	324	268	0
26	12:00:02.444	Thread Group 1-5	OrangeHRM_Login_Page	1354		4814	324	265	0
27	12:00:02.471	Thread Group 1-8	OrangeHRM_Login_Page	1364		4796	324	271	0
28	12:00:02.479	Thread Group 1-13	OrangeHRM_Login_Page	1507		4798	324	271	0
29	12:00:02.483	Thread Group 1-15	OrangeHRM_Login_Page	1509		4796	324	290	0
30	12:00:02.437	Thread Group 1-19	OrangeHRM_Login_Page	1614		4816	324	273	0
31	12:00:02.788	Thread Group 1-20	OrangeHRM_Login_Page	1615		4815	324	276	0
32	12:00:02.790	Thread Group 1-7	OrangeHRM_Login_Page	2064		4804	324	266	0
33	12:00:02.862	Thread Group 1-3	OrangeHRM_Login_Page	2122		4804	324	274	0
34	12:00:02.878	Thread Group 1-18	OrangeHRM_Login_Page	2138		4809	324	268	0
35	12:00:02.763	Thread Group 1-9	OrangeHRM_Login_Page	2274		4814	324	273	0

☐ Scroll automatically?

☐ Child samples?

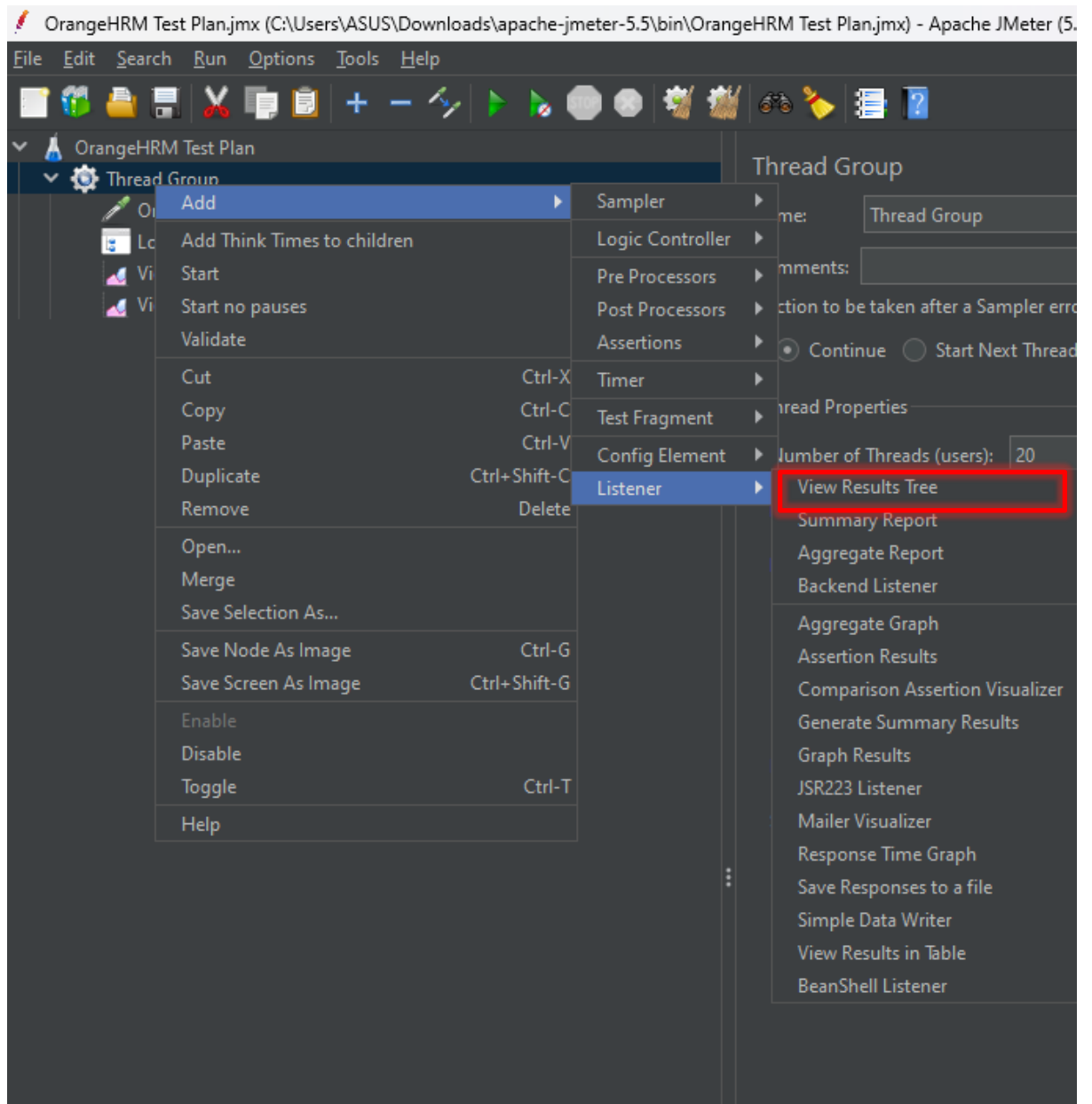
No of Samples: 40

Latest Sample: 3063

Average: 3486

Deviation: 940

14. Adding a View Results Tree to our thread group by right clicking on our thread group and navigating as shown below (Add>> Listener>> View Results Tree)



15. Now we will perform load testing by saving and running the Jmeter file. The output will be displayed in a tree format for 20 users for 2 loop counts as shown below

