**ASSIGNMENT**

1. **Which components have you used in Load Runner?**

* Virtual generator
* Analyzer
* Controller
* Load generator

1. **How can you set the number of Vusers in Load Runner?**

* In the Vuser dialog box click add Vuser,
* Add Vuser dialog box open
* Quantity add to box
* Select the number of Vuser

1. **What is Correlation**
   * Correlation is the capturing of dynamic values passed from the server to the client and back.
   * We save this captured value into a LoadRunner parameter, and then use this parameter in the script in place of the original value.
2. **What is the process for developing a Vuser Script?**
   * Open a script in VuGen.
   * Select File > User-Defined Templates > Export to Template.
   * Enter a name and location for the template.
   * Click OK to create the template.
3. **How Load Runner interacts with the application?**
   * + - LoadRunner is a software testing tool from Micro Focus.
       - It is used to test applications, measuring system behaviour and performance under load.
       - LoadRunner can simulate thousands of users concurrently using application software, recording and later analysing the performance of key components of the application.
4. **How many Vusers are required for load testing?**

* **Example:**
* Number of users per hour = 10. Number of requests per user = 10 number of web pages he accesses Length of user scenario = 10 min \* 60 = 600 second.

1. **What is the relationship between Response Time and Throughput?**

* Response time and throughput are related.
* The response time for an average transaction tends to decrease as you increase overall throughput.
* However, you can decrease the response time for a specific query, at the expense of overall throughput, by allocating a disproportionate amount of resources to that query.

1. **What is the difference between hits/second and requests/second?**
   * + - Hits per second means the number of hits the server receives in one second from the Vuser.
       - Request per second is the number of request the Vuser will request from the server.
2. **What is Automation Testing?**

* Test automation is the use of software to control the execution of tests, the comparison of actual outcomes to predicted outcomes,
* The setting up of test preconditions, and other test control and test reporting functions.
* Commonly, test automation involves automating a manual process already in place that uses a formalized testing process.
* Although manual tests may find many defects in a software application, it is a laborious and time-consuming process.
* In addition, it may not be effective in finding certain classes of defects.
* Test automation is a process of writing a computer program to do testing that would otherwise need to be done manually.
* Once tests have been automated, they can be run quickly. This is often the most cost-effective method for software products that have a long maintenance life, because even minor patches over the lifetime of the application can cause features to break which were working at an earlier point in time.

1. **Which Are the Browsers Supported by Selenium Ide?**

* Firefox
* Chrome

1. **What are the benefits of Automation Testing?**

* 70% faster than the manual testing
* Wider test coverage of application features
* Reliable in results
* Ensure Consistency
* Saves Time and Cost
* Improves accuracy
* Human Intervention is not required while execution
* Increases Efficiency
* Better speed in executing tests
* Re-usable test scripts
* Test Frequently and thoroughly
* More cycle of execution can be achieved through automation
* Early time to market

1. **What are the advantages of Selenium?**

* Language and Framework Support
* Open-Source Availability
* Multi-Browser Support
* Support Across Various Operating Systems
* Ease Of Implementation
* Reusability and Integrations
* Flexibility
* Parallel Test Execution and Faster Go-to-Market

1. **Why testers should opt for Selenium and not QTP?**

* Open source, free to use, and free of charge.
* Highly extensible
* Can run tests across different browsers
* Supports various operating systems
* Supports mobile devices
* Can execute tests in parallel.