**Module-4 Automation Core Testing (Load Runner Up and Selenium IDE).**

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

* Segaue Silk Performer
* Rational Team Test
* Mercury Load Runner
* Empirix e-Load/RSW
* Soft Light Tools Loader

**2.How can you set the number of V users in Load Runner?**

* In Load Runner, you can set the number of virtual users in the "Run-Time Settings" for a scenario. Here's a brief description of the steps:
* Open Load Runner and go to the Scenario section.
* Right-click the scenario and select "Scenario Properties".
* Go to the "Run-Time Settings" tab.
* In the "General" section, you will see the "Number of V-users" field.
* Set the desired number of V-users for your load test and click "OK".

**3.What is Correlation?**

* Correlation in refers to the technique of identifying the relationship between two or more variables and how they influence each other. This helps in extracting values from one response to be used in subsequent requests. This enables dynamic value substitution, making the test data more realistic and relevant, and helps in reducing maintenance costs.

**4.What is the process for developing a Vuser Script?**

* Identifying the functionality to be tested: This involves identifying the functionality of the application that needs to be tested.
* Determine the type of V-user script to be created: Depending on the functionality to be tested, different types of V-user scripts can be used, such as GUI scripts, API scripts, or database scripts.
* Record the script: The Vuser script can be recorded by using the Load Runner Controller. This involves performing the actions that need to be tested in the application.
* Review the recorded script: After the recording is completed, the script should be reviewed to ensure that it has captured the intended functionality.
* Enhance the script: The recorded script may need to be enhanced by adding additional steps or logic to handle the different scenarios that might arise during the test.
* Debug the script: The script should be debugged to identify and correct any errors or issues.
* Test the script: The script should be tested to ensure that it is working as intended.
* Document the script: The script should be documented, including any notes or comments on how it works and how it should be used.
* Maintain the script: The script should be maintained and updated as necessary to keep it up-to-date with changes to the application or the testing environment.

**5.How Load Runner interacts with the application?**

* Load Runner is a performance testing tool that is used to measure the performance and stability of an application under different conditions. Load Runner interacts with the application by simulating a large number of virtual users (V users) accessing the application simultaneously. These V users simulate the actions of real-life users and generate a load on the application, allowing Load Runner to measure the application's response time, transaction time, and other performance metrics. Load Runner also monitors the server resources, such as CPU usage and memory consumption, to identify any performance bottlenecks and provide recommendations for optimization. In short, Load Runner interacts with the application to stress test it and determine its performance under high load conditions.

**6.How many V users are required for load testing?**

* The number of V users can range from a few hundred to thousands. It is best to work with load testing experts and conduct pilot tests to determine the optimal number of V users for a specific scenario.

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

**8.What is the difference between hits/second and requests/second?**

* Hits/second refers to the number of individual files requested from a web server in a second. Requests/second refers to the number of HTTP requests made to a server in a second. The difference is that a single request can result in multiple file hits,so requests/second would be lower than hits/second for the same scenario.

**9.What is Automation Testing?**

* Automation testing is the use of software tools to perform repetitive and routine tasks in a software testing process, with minimal human intervention. It is designed to increase the speed and efficiency of testing while reducing the risk of human error.

**10.Which Are The Browsers Supported By Selenium Ide?**

* Selenium IDE has add-ons for Firefox and Chrome browsers. Selenium IDE comes with a rich set of commands that are powered by Selenese, and it allows you to record and test different interactions of a web application with the browser.

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

* Saves Time and Increases Efficiency: Automation testing can save a lot of time as it can run multiple tests in a short amount of time, reducing the manual effort required.
* Improved Accuracy: Automated tests are less prone to human error, which can lead to more accurate results.
* Consistency: Automation testing ensures that tests are performed in a consistent manner every time, avoiding any human inconsistencies.
* Early Detection of Defects: Automated testing enables the early detection of defects, which reduces the cost of fixing the issue later in the development process.
* Re-usability: Automated test scripts can be reused for future testing, which reduces the time and effort required to create new tests.

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

* Cross browser and cross platform
* Can perform looping and conditional operations
* Can support data-driven testing
* Has matured and complete API
* Can readily support new browsers
* Faster execution than IDE

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

