# Assignment – 5 AUTOMATION CORE TESTING

1. Which components have you used in Load Runner?

The key components of LoadRunner are:

**Vuser generator:–** For generating Scripts

**Controller: –** For creating and executing scenarios

**Analyzer: –** To analysis results.

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

You can set the number of Vusers in the controller section while creating your scenarios. Many other advanced options like ramp-up, ramp-down of Vusers are also available in the Controller section.

1. What is Correlation?

Correlation is used to obtain data which is unique for each run of your test script (ex: session ids). While recording, these dynamic values are hard-coded in your script causing the script to fail during playback. Correlation is a technique where dynamic values are not hard-coded in your script but are extracted at run-time to avoid failure.

1. What is the process for developing a Vuser Script?

Step 1- Record the Vuser Script.

Step 2- Playback and improve the recorded vuser script.

Step 3- Define and test the different run-time parameters.

Step 4- Use the script in a LoadRunner scenario.

1. How Load Runner interacts with the application?

LoadRunner simulates user activity by generating messages between application components or by simulating interactions with the user interface such as key presses or mouse movements. The messages and interactions to be generated are stored in scripts.

1. How many VUsers are required for load testing?

if you run a load test with 10,000 virtual users, each making a request every 20 seconds (3 requests per minute), then you're making 30,000 requests per minute, which equals 500 requests per 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 mean 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.

1. To test the Performance testing on “Tops Technologies website” :- https://www.topsint.com/

1. to Record all top level menu

2. to Record minimum 10 Vuser on this website

3. save all (Script,Design,Graph)

FOLDER NAME: - HP LOADRUNNER > FILE NAME: 200

1. create a normal script of above website with correlate using hp default website.

FOLDER NAME: - HP LOADRUNNER > FILE NAME: 200

1. What is Automation Testing?

Automated testing is a software testing technique that automates the process of validating the functionality of software and ensures it meets requirements before being released into production. With automated testing, an organization can run specific software tests at a faster pace without human testers.

1. Which Are The Browsers Supported By Selenium Ide?

The supported browsers include Mozilla Firefox, Google Chrome, Microsoft Edge, Safari, and Opera, among others. Selenium WebDriver allows you to write tests in various programming languages (including Java, C#, Python, and more) and execute them on different browsers using the corresponding WebDriver implementations.

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?

Selenium provides high tester flexibility to write advanced and complex test cases. Supports test scripts written in any user-preferred languages such as C#, Java, Perl, PHP, Python, and Ruby. Supports test case execution on multiple operating systems such as Windows, Linux, Android, Mac, and iOS ...

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

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| SELENIUM | QTP |
| Open source, free to use, and free of  charge. | Commercial |
| Highly extensible | Limited add-ons |
| Can run tests across different browsers | Can only run tests in Firefox , Internet  Explorer and Chrome |
| Supports various operating systems | Can only be used in Windows |
| Supports mobile devices | Supports mobile devise using 3rd party  software |
| Can execute tests while the browser is minimized | Needs to have the application under test to be visible on the desktop |
| Can execute tests in parallel | Can only execute in parallel but using Quality Center Which is againa paid product |