**Experiment 5**

**Student Name**: Rahul Saxena

**UID:** 24MCI10204

**Branch:** MCA (AI-ML)

**Section/Group:** MAM - 3(B)

# Semester: II

**Subject Name:** Software Testing [24CAH-654]

**Aim:** Using Selenium IDE, create automated test scripts for any of the web applications, execute them, and analyze the results.

**Definition:** Selenium is an open-source framework used for automating web browsers, enabling developers and testers to write scripts in various languages to test web applications across different browsers and platforms.

## Steps:

* + Step 1: Install Selenium IDE Extension
    - * Open Google Chrome or Mozilla Firefox.
      * Go to the Firefox Add-ons (for Firefox).
      * Search for "Selenium IDE".
      * Click "Add to Firefox and confirm the installation.
      * Once installed, you will see the Selenium IDE icon in the browser toolbar.
  + Step 2: Open Selenium IDE
    - * Click on the Selenium IDE icon in the browser toolbar.
      * The Selenium IDE window will open with options to create a new test case.
  + Step 3: Create a New Project and Test Case
    - * Click "Create a New Project" and name it (e.g., "Login Test").
      * Click on "Record a new test".
      * Enter the URL of the web application you want to test (e.g., https://example.com).
      * Click "Start Recording"—a new browser window opens where all actions will be recorded.
  + Step 4: Record a Login Test
    - * In the new browser window, enter a username and password in the login fields.
      * Click the Login button.
      * Wait for the page to load and verify successful login (e.g., check if the dashboard appears).
      * Stop the recording by clicking "Stop Recording" in Selenium IDE.
      * Save the test case with a meaningful name (e.g., LoginTest).
  + Step 5: Execute the Test Script
    - * Click the "Run Current Test" button to execute the test.
      * Observe the execution—Selenium IDE will simulate user actions and attempt to log in.
      * If the test passes, a green checkmark appears next to each step.
      * If the test fails, a red cross appears, indicating errors.
  + Step 6: Analyse the Test Results
    - * Check the Log Panel at the bottom of Selenium IDE for test execution details.
      * View error messages (if any) and debug issues.
      * Modify test scripts if necessary (e.g., add waits for elements to load).
      * Re-run the test after making corrections.

# Website Tested:

# <https://monkeytype.com/login>

# Selenium IDE: Install by clicking “Add to Firefox” Button.

# Test Script:

# Test Log:

# Learning Outcome:

## Writing Modular Code: Learned how to write reusable and modular methods for basic arithmetic operations.

## User Input Validation: Gained experience in handling invalid inputs gracefully to enhance user experience.

## Test-Driven Development: Developed and ran test cases to ensure the correctness of individual components.