# Module – 5

1. What is Automation Testing?

**Automation Testing** means using software tools to test other software — without doing it by hand every time. Instead of a person clicking buttons and checking if things work, a computer program does it for you.

1. Which Are The Browsers Supported By Selenium Ide?

Supported Browsers by Selenium IDE:

* Mozilla Firefox:

Fully supported.

Selenium IDE was originally a Firefox-only add-on.

* Google Chrome :

Fully supported.

Selenium IDE is available as a Chrome extension.

Not Supported:

* Microsoft Edge
* Safari
* Opera
* Internet Explorer

1. What are the benefits of Automation Testing?

Fast Testing

Automation is much faster than manual testing.

Saves Time

You can run the same test again and again without doing it yourself.

More Accurate

No human mistakes. Results are always the same.

Reusable Tests

One test can be used for many projects.

Better Coverage

You can test more things in less time.

Cost-Effective

Saves money in the long run by reducing manual work.

Early Bug Detection

Finds bugs early after every code change.

Good Reports

Gives proper results, screenshots, and error details.

Works with CI Tools

Can be used with tools like Jenkins for automatic testing.

Parallel Testing

Run many tests at the same time on different devices.

1. What are the advantages of Selenium?

Open Source

Selenium is **free to use**, no cost.

Supports Multiple Browsers

Works with Chrome, Firefox, Edge, Safari, etc.

Cross-Platform

Runs on Windows, Mac, and Linux.

Supports Many Languages

You can write tests in Java, Python, C#, Ruby, and more.

Easy Integration

Works well with tools like TestNG, JUnit, Maven, Jenkins, etc.

Parallel Testing

Can run tests at the same time on different browsers/devices.

Strong Community Support

Many people use it, so you can easily find help and tutorials.

Supports Web Applications

Best for testing web-based applications (not mobile or desktop apps directly).

Flexible and Scalable

Easy to customize and use for large projects.

Regular Updates

Always improving with new features and browser support.

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

|  |  |  |
| --- | --- | --- |
| **Feature** | **Selenium** | **QTP** |
| **Cost** | Free (Open Source) | |  | | --- | |  |  |  | | --- | | Paid (Licensed) | |
| **Supported Browsers** | Chrome, Firefox, Safari, Edge, etc. | Mostly Internet Explorer |
| **Operating Systems** | Windows, Mac, Linux | Windows only |
| **Programming Languages** | Java, Python, C#, Ruby, etc. | Only VBScript |
| **Application Type** | Web applications only | Web and Desktop applications |
| **Tool Integration** | Jenkins, Maven, TestNG, etc. | Limited CI/CD support |
| **Speed and Performance** | Fast and lightweight | Slower and resource-heavy |
| **Community Support** | Large and active | Limited compared to Selenium |
| **Ease of Learning** | Requires programming knowledge | Easier for beginners with VBScript |
| **Cross-Platform Testing** | Yes | No |

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**package** com.webdriver;

**import** org.openqa.selenium.By;

**import** org.openqa.selenium.WebDriver;

**import** org.openqa.selenium.chrome.ChromeDriver;

**public** **class** WebDriverDemo {

**public** **static** **void** main(String[] args) **throws** InterruptedException {

System.*setProperty*("webdriver.chrome.driver", "E:\\Development\\chrome web drive\\chromedriver.exe");

WebDriver driver=**new** ChromeDriver();

driver.get("https://www.tops-int.com/contact-us");

Thread.*sleep*(2000);

driver.manage().window().maximize();

Thread.*sleep*(2000);

driver.findElement(By.*xpath*("//\*[@id=\"inq\_name\"]")).sendKeys("Harshil");

Thread.*sleep*(2000);

driver.findElement(By.*xpath*("//\*[@id=\"inq\_email\"]")).sendKeys("harshilrpanchal0720@gmail.com");

Thread.*sleep*(2000);

driver.findElement(By.*xpath*("//\*[@id=\"inq\_contact\"]")).sendKeys("9316420732");

Thread.*sleep*(2000);

driver.findElement(By.*xpath*("//\*[@id=\"course-page\"]/section[2]/div/div/div[2]/div/div[2]/div/div/form/div[3]/a")).click();

Thread.*sleep*(2000);

driver.close();

}

}