

# Assignment – 1

## **Q – What is Automation Testing ?**

Ans.

Automation testing is strategy in which tester programmatically runs the test using tool or framework.

Steps:

- Identifying testing components
- Framework design
- Test script
- Test execution
- Test result analysis

Benefits of automation testing :

- Saving cost
- Faster feedback loop
- Better allocation of resource
- High accuracy
- Detects bug earlier
- Re-useable test script
- Increase efficiency
- Ensure consistency

## **Q. - Types of automation testing ? Write names of tools too.**

Ans.

**Testing types :**

- Smoke testing
- Unit testing
- Functional testing
- Integration testing
- Regression testing

**Tools:**

Selenium  
Cucumber  
Appium  
QTB  
Robot framework

## **Q. Why Selenium?**

Ans.

- Cost efficient as it is open source
- 75% projects are accessed via url

- Multiple - OS
- Multi browser
- Multi language
- Multi framework
- Web based automated

### **Q. Why JAVA for Selenium?**

Ans.

- Java is the commonly used programming language for Selenium across the world. There are various reasons why Java is used for Selenium.
- Java is the popularly used language in the IT industry, the Huge community promoting it along with the massive repository of references.
- About 77% of Selenium Tester is using java which makes knowledge sharing very quick and easy.
- In Java, there is an abundance of readily available frameworks, plugins, APIs and libraries that encourage Java for test automation.
- Java makes use of JVM, it is a platform-independent language. It can be used in the Operating environment where JVM is installed.
- Java is statically typed, and the Java IDEs give a set of feedback on errors that you might face while coding.

### **Q. What is JDK, JRE And JVM?**

Ans.

#### **JDK -**

JDK is an acronym for Java Development Kit. The Java Development Kit (JDK) is a software development environment which is used to develop java applications and applets. It physically exists. It contains JRE + development tools.

#### **JRE -**

JRE is an acronym for Java Runtime Environment. It is also written as Java RTE. The Java Runtime Environment is a set of software tools which are used for developing Java applications. It is used to provide the runtime environment. It is the implementation of JVM. It physically exists. It contains a set of libraries + other files that JVM uses at runtime.

#### **JVM -**

JVM (Java Virtual Machine) is an abstract machine. It is called a virtual machine because it doesn't physically exist. It is a specification that provides a runtime environment in which Java bytecode can be executed. It can also run those programs which are written in other languages and compiled to Java bytecode.

