**Automation**

**1.what is automation testing?**

Automation testing uses automation tools to write and execute test cases, no manual involvement is necessary for executing an automated test suite. Testers prefer automation tools to write test scripts and test cases and then group into test suites.

**2.advantages of automation testing?**

* Time saving
* Remove the chances of human error.
* Improved precision

**3.what is selenium?**

Selenium is a robust test automation suite that is used for automating web-based applications. It supports multiple browsers, programming languages, and platforms.

**4.what are selenium components?**

* Selenium IDE
* Selenium WebDriver
* Selenium Grid
* Selenium Rc Componenet

**5.what is selenium IDE?**

 Selenium IDE is an open-source test automation tool that works on record and playback principles.

**6.what is Selenium WebDriver?**

* It is a core selenium library, which is available in different languages
* It is used for automating the all test cases
* It doesn’t have a capability of executing the test cases parallelly.
* It will achieved in 2 ways

1. Selenium Grid
2. TestNG

**7.what is selenium Grid?**

It is parallel execution of test cases.

**8.what is Selenium RC Component?**

 Selenium Remote Control(RC) is officially deprecated by Selenium and it used to work using javascript to automate web applications.

**9.advantages of selenium?**

1. Selenium is open source and free to use without any licensing cost.
2. It supports multiple languages like Java, Ruby, Python, etc.
3. Selenium supports multi-browser testing.
4. Using the Selenium IDE component, non-programmers can also write automation scripts.

**10.disadvantages of selenium?**

* **It is no**t consistent, it works in some system, sometime it won’t work
* **There is** no built in reporting here.
* **Data** parameterized.
* We cannot run the test cases parallelly.
* We cannot work in different logic
* Partially supports for dialog boxes.

**11.describe about Selenium Architecture?**

🡪in notes(refer)

🡪selenium script

12. **What is the syntax to launch the browser in Selenium WebDriver?**

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

Same as, safari, firefox, opera, internet explorer.

**13. difference b/w WebDriver & ChromeDriver?**

WebDriver🡪it is an interface in selenium(root interface)

ChromeDriver🡪implementing class of WebDriver.

Same as, safari, opera and etc.

🡪ChromeDriver can have a webDriver methods and also have a own methods.

**14. driver.get(); ?**

🡪the method is used to load a URL.

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

**🡪** window got maximize to fit in my laptop screen

15. **What is the difference between driver.get() and driver.navigate().to() commands?**

|  |  |
| --- | --- |
| **driver.get()** | **driver.navigate().to()** |
| It is used to navigate particular page and wait for page to load. | **It is used to navigate particular page, does not wait for page to load.** |
| **It doesn’t maintain browser history** | **IT will maintain browser history to navigate forward and back.** |

16. **What are the different navigation commands used in Selenium WebDriver?**

*// Navigate directly to some URL*

driver.navigate().to("https://www.techlistic.com/p/java.html");

*// Navigate Back*

driver.navigate().back();

*// Navigate Forward*

driver.navigate().forward();

*// Refresh Page*

driver.navigate().refresh();

17. **What is the difference between driver.close() and driver.quit() Selenium WebDriver?**

**i. driver.close() -**It is used to close the current browser window.

**ii. driver.quit() -**It is used to close all the browser windows which are opened by Selenium and safely ends the session. (Destroys the WebDriver instance)

18. **What are the different types of locators in Selenium?**

* ID
* Class Name
* Name
* Tagname
* linkText
* partial Linktext
* Xpath
* CSS selector
* DOM

19. **What are the different types of Drivers available in WebDriver?**

* FirefoxDriver
* InternetExplorerDriver
* ChromeDriver
* SafariDriver
* OperaDriver
* AndroidDriver
* IPhoneDriver

20. **How to enter the text in a text field using Selenium WebDriver?**

**We can enter text in Selenium by using sendKeys() command**.

driver.findElement(By.xpath("/some/xpath")).sendKeys("Some Value");

*// OR*

*// Implementation with WebElement*

WebElement FIRSTNAME = driver.findElement(By.id("some-id"));

FIRSTNAME.sendKeys("Any Text value");

**21.what is Xpath?**

Xpath is used to locate the webelements.

* It navigates through DOM with the help of elements and their attributes for identification.
* It also help for locates the unique elements
* It is slower than other locators

**22.Two ways of Xpath?**

* Absolute Xpath
* Relative Xpath

**23.difference b/w absolute Xpath and Relative Xpath?**

**absolute Xpath:**

Single slash is used to create Xpath with absolute path, Xpath would be created to start selection from top of HTML page.

🡪It is always recommended to use relative xpath rather than absolute xpath

**Relative Xpath:**

 Double slash is used to create Xpath with relative path, Xpath finds matching element in every corner of DOM.

**24.Syntax of Relative Xpath?**

1. //tagname[@attribute=’value’]
2. //tagname[text()=’value’}
3. //tagname[contains(text(),’value’)]
4. //tagname[@id=’value’] | //tagname[@id=’value’]
5. //tagname[@id=’value’ and //tagname[@id=’value’]

**25.Syntax of CSS Selectors?**

* By id

🡪tagname#id

* By class🡪 tagname.classname
* By attribute 🡪 tagname[attribute=’value’]

**26.difference b/w LinkText() and Partial LinkText()?**

*🡪driver.findElement(By.linkText(“Google”)).click();*

The command finds the element using link text and then click on that element and thus the user would be re-directed to the corresponding page.

🡪*driver.findElement(By.partialLinkText(“Goo”)).click();*

PartialLinkText() finds the web element with the specified substring and then clicks on it.

**27.What is use of Clear() method?**

It is used to clear the values in the textbox.

**28. When do we use findElement() and findElements()?**

**findElement():**findElement() is used to find the first element in the current web page matching to the specified locator value. Take a note that only first matching element would be fetched.

**Syntax:**

*WebElement element = driver.findElements(By.xpath(“//div[@id=’example’]//ul//li”));*  
**findElements():**findElements() is used to find all the elements in the current web page matching to the specified locator value. Take a note that all the matching elements would be fetched and stored in the list of WebElements.

**Syntax:**  
*List <WebElement> elementList = driver.findElements(By.xpath(“//div[@id=’example’]//ul//li”));*

**29.describe about previous version of selenium?**

In notes.

**30.  How to find more than one web element in the list?**

**🡪** we have to store the all links in list of web elements and then access it using for loop or for each loop

**31.  How to get the background color or size of the font with Selenium WebDriver?**

WebElement HEADING = driver.findElement(By.id("some-id"));

String color = HEADING.getCssValue("color");

System.out.println(color);

32. **How to validate any error/success message in Selenium WebDriver?**

Selenium provides getText() command to validate the error message.

String textValue = driver.findElement(By.xpath("/some/xpath")).getText();

**33.difference b/w radio button and checkbox?**

* Radio button will select only one value
* Check box will select as many values.

**34. How to check whether the radio button is checked or not?**

**Selenium** will provide isSelected() command

isSelected is nothing but it will check the specific value is selected or not.

It will return a Boolean value.

WebElement gender = driver.findElement(By.id("some-radio-button-id"));

**boolean** isGenderSelected = gender.isSelected();

**35.what is Webelement?**

Driver.findElement is return a webElement that’s why we store it in a WebElement.

**36.how to handle drop down?**

🡪In selenium to handle drop down , there is class calles Select class.

🡪we have to inform selenium ,where the drop down is present.

Select sel=new Select(driver.findEleme);

**37.Three ways to select drop down in selenium**

1. SelectByIndex(index start from 0)\
2. SelectByValue(“6”);
3. SelctByVisibletext(“Black”);

**38.get all the options from the drop down?**

🡪getOptions()- it will return list of webelements

🡪for(WebElement val:sel.getAllSelectedOptions())—it will return all the options

{

Val.getText();

}

🡪sel.deselectAll();

**39. How to check whether the text is present/visible or not on the page?**

We can check the presence of text on a page by using **isDisplayed()** command.

WebElement loginButton = driver.findElement(By.id("some-id"));

**boolean** isLoginDisplayed = loginButton.isDisplayed();

**40. Why we aren't recommended to use Thread.sleep() in Selenium?**

Thread.sleep() pauses the execution flow of the thread for a particular time, which is not the ideal way to wait. Instead of that some of the Selenium wait should be used.

41.**what is Wait in selenium?**

🡪fast to accessing a web elements in a web page

**42. What are the different wait commands in Selenium WebDriver?**

* Implicit wait
* Explicit wait
* Fluent wait

**43.what is implicit wait?**

**🡪**it is also called global wait

🡪Implicit wait is applicable for all the the web elements for that browser session.

🡪it is used to set a wait time(10 secs) for automation script to wait for an element of a page before throwing an exception.

🡪you can increase or decrease the wait time as per your requirement.

**44.what is explicit wait?**

**🡪it is** also called conditional wait, it directs selenium webdriver for wait until the condition is met.

🡪explicit wait applicable for a specific web elements

🡪it is not applicable for all web elements

**45.what is fluent wait?**

**🡪explicit and** fluent wait are mostly similar ,the only difference is ,

🡪you can mention the interval/polling time

🡪you can mention the time frame(interval at which WebElement is checked)

**46. What is the syntax for the implicit, explicit, and fluent wait?**

**Implicit wait:**

Driver.manage().timeouts().implicitlyWait(Duration.ofSeconds(10));

**Prev versions of selenium**

driver.manage().timeouts().implicitlyWait(10,TimeUnit.SECONDS);

**explicit wait:**

WebElementsearchBox=*driver*.findElement(By.*name*("q"));

//WebDriverWait wait = new WebDriverWait(driver,10)); (Previous version of Selenium)

WebDriverWait wait = **new** WebDriverWait(*driver*,Duration.*ofSeconds*(15));

wait.until(ExpectedConditions.*presenceOfElementLocated*(By.*name*("q123")));

wait.until(ExpectedConditions.*visibilityOf*(searchBox));

searchBox.sendKeys("Explicit wait");

**fluent wait:**

FluentWait<WebDriver> wait = **new** FluentWait<WebDriver>(*driver*)

.withTimeout(Duration.*ofSeconds*(20)) //maximum timeout

.pollingEvery(Duration.*ofSeconds*(1)); //interval timeout

wait.until(ExpectedConditions.*presenceOfElementLocated*(By.*name*("q123")));

**47. Can you name some of the Selenium exceptions?**

* TimeoutException
* WebDriverException
* NoAlertPresentException
* NoSuchWindowException
* NoSuchElementException

48.  **How can you find if an element in displayed on the screen?**

WebDriver facilitates the user with the following methods to check the visibility of the web elements. These web elements can be buttons, drop boxes, checkboxes, radio buttons, labels etc.

1. isDisplayed()
2. isSelected()
3. isEnabled()

49. **How can we get a text of a web element?**

Get command is used to retrieve the inner text of the specified web element. The command doesn’t require any parameter but returns a string value.

**Syntax:**  
String Text = driver.findElement(By.id(“Text”)).getText();

**50. How to select value in a dropdown?**

The value in the dropdown can be selected using WebDriver’s Select class.

3 types:

🡪selectByIndex

🡪SelectByValue

🡪SelectByvisibleText

**51. How to click on a hyper link using linkText?**

**Ans:** link text and Partial LinkText (describe)

**52.what Is alert?**

🡪windows that appears top of that , not within the window

53.**types of alerts?**

* **Information alert**(only one option)
* **Confirmation alert(**you can give a value and click on ok button)
* **Entering something inside(ok/cancel)**

**54.window and alert?**

🡪selenium would be able to perform within the window.

🡪alert would be able to perform top of the window, so that we have to inform selenium.so we can use 5 alert methods.

**55. alert methods?**

1. switchTo().alert();
2. **obj.getText()**
3. sendkeys
4. **accept**
5. dismiss

**alert is a class.**

**Switching** control from browser to web page

**Alert prompt=**driver.switchTo().alert();

**56. How can we handle web-based pop-up?**

🡪webDriver provides efficient way to handle these pop ups using alert interface.

driver.switchTo().alert().getText();

1. obj.getText()🡪it returns a text that displayed in alert box
2. sendkeys🡪the method is entering the string pattern to the alert box
3. accept🡪click on ok button as soon as the pop ups window appears
4. dismiss🡪click on cancel button as soon as pop ups window appears

**57.what is frame?**

**🡪**frame is nothing but able to show some more contents

Iframe🡪inline frame

It is used to insert another document within the current HTML document

**58.three methods to using frame?**

1. Selecting iframe using id

driver.switchTo().frame(“ID of the frame“);

1. Locating iframe using tagName

driver.switchTo().frame(driver.findElements(By.tagName(“iframe”).get(0));

1. Location iframe using index

**Inside index 3 methods**

**🡪**frame(index)- driver.switchTo().frame(0);

🡪frame(name of frame)- driver.switchTo().frame(“name of the frame”);

🡪frame (Webelement element)

59.**come back to the parent window in frames?**

**It will** come back to the main html page

driver.switchTo().defaultcontent();

60. **What different types of testing can be done using Selenium?**

Selenium is basically used for Functional testing and it doesn't support non-functional testing like Performance testing, UI testing, Usability testing, or Security testing. And in functional testing, it is mostly used for automating

* Regression Testing
* Smoke Testing
* Sanity Testing

61.**window handle?**

If I’m clicking the link/any option it will open new window.

**62.Two methods of window handle?**

* Driver.windowHandle();
* Driver.windowHandles();

**63.difference b/w window handle() and window handles()?**

**window handle():**

**🡪**unique string of an each window.identify which window is it.

🡪it returns unique string of a current window.

**window handles():**

**🡪**it returns the unique string of an all windows opened by the webdriver session.

**64.parent window?**

**String** parent=driver.windowHandle();

It will have window handle or window id for current window.

**65.when we use driver.windowHandles()?**

If I’m using the windowHandles before clicking the option there is no use of it, because it return only one window, that’s why we used windowHandles after clicking the button/option.

**66.why it is stored in a set?**

--> each window has unique id, that’s why we used set.

🡪because it allows only unique values

🡪doesn’t allow duplicates

We need to inform selenium, switch the control from parent window to newly opened window(child window).so we can use for each loop.

In program, not mandatory to come back the parent window

**67.  How to switch frames in Selenium WebDriver?**

Switch frames can be done using switchTo() method.

// Move to frame

driver.switchTo().frame("Target Web element");

**68.what is action class?**

**🡪**action class is used to handle keyboard and mouse events.

 You need to import **org.openqa.selenium.interactions.Action**s

69. **What are its commands?**

This class includes keyboard and mouse actions such as double click, right-click, drag & drop, mouse hover, and clicking multiple elements.

### **70.** **What are the keyboard and mouse events in Selenium WebDriver?**

**i. Keyboard events: You can press any key of the keyboard,**

* Key Up
* Key Down
* sendKeys()

**ii. Mouse events:**

* click()
* doubleClick()
* contextClick()
* clickAndHold()
* dragAndDrop()
* moveToElement()
* moveByOffset(x, y)
* release()

71. **How do double-click and right-click in Selenium WebDriver?**

(revise)

72. **How to drag and drop an element in Selenium?**

Action.dragAndDrop(source,target);

Action.build().perform();

73.**benefits of Actions class?**

1. Support keyboard and mouse actions
2. Enhanced user interactions
3. Cross-browser capability
4. Integration with explicit wait

**74.what is javascript?**

🡪**it is** a front end programming language,   
🡪it is a intermediate web browser of convert our program.

75.**what is javascript executor?**

**🡪**javascript executor is used to execute javascript commands in selenium

🡪javascript is an interface , it is used to perform some actions

76.**why we use javascript executor?**

**🡪**we don’t have any readymade methods in selenium to perform scroll down,up actions, so we use javascript executor to perform these actions.

Javascriptexecutor js=( Javascriptexecutor)driver;

77.**what are all the methods in javascript executor?**

* **Vertical Scrolldown**

js.executeScript(“window.scrollTo(0,1000);”);

* **Vertical scrollUp**

js.executeScript(“window.scrollTo(0,-500);”);

* **Get titile of the page**

Syso(js.executeScript(“return document.title;”));

* **Scroll down to the bottom of the page**

js.executeScript(“window.scrollTo(0,document.body.scrollHeight);”);

* **Scroll up to the top of the page**

js.executeScript(“window.scrollTo(0,0);”);

* **Scroll into view of webelement**

WebElement footerText= *driver*.findElement(By.*xpath*("//strong[text()='GreenKart']"));

js.executeScript("arguments[0].scrollIntoView(true);", footerText);

**78. how to Pass value to a text box without using sendkeys() in javascript executor?**

WebElement searchText=*driver*.findElement(By.*name*("q"));

js.executeScript("arguments[0].value='Javascriptexecutor';", searchText);

**79.how to click on a webelement () in javascript executor?**

WebElement imageClick=*driver*.findElement(By.*linkText*("Images")); js.executeScript("arguments[0].click();", imageClick);

80.**how to upload a files in selenium?**

**🡪**I want to upload a files in selenium using sendkeys.

🡪once I upload the files , I want to check the file is uploaded or not(use if condition)

*driver*.findElement(By.*id*("file-upload")).sendKeys(

“path”));

**81.what is TESTNG?**

**🡪TestNG** is a unit testing framework(done by developer)

🡪TestNg is used to control the execution flow of automation framework using TestNg.

🡪Ng—Next Generation

🡪TestNg is inspired from Junit.

**82.Advantages of TestNg?**

* Its provide some mechanism to run failed testcases.
* In selenium native method doesn’t have any reporting mechanism,

🡪testNg provides a default reporting.

* In selenium we can’t group the testcases.

🡪using TestNg we can group all sanity, smoke testcases to be executed.

* we can execute the specific testcases multiple times.
* TestNg offers a annotation to control the execution flow.
* We can execute the Testcases parallely.
* There is no need to use Public Static void main()

🡪PSVM()-local to java

🡪Testng is local to @Test annotation.

**83.Types of TestNg annotation?**

1. **BeforeSuite**
2. AfterSuite
3. BeforeTest
4. Aftertest
5. BeforeClass
6. AfterClass
7. **BeforeMethod**
8. **AfterMethod**
9. **@Test**

**84.definition of TestNg annotations?**

1. **BeforeSuite**

**🡪**this will be executed only once before entire automation suite.

1. AfterSuite

🡪**🡪**this will be executed only once after entire automation suite.

1. BeforeTest

🡪this will be executed only once before entire test(sanity, regression test etc,)

1. Aftertest

**🡪**🡪this will be executed only once after entire test(sanity, regression test etc,)

1. BeforeClass

🡪this will e executed only once before all @Test annotation methods in the class

1. AfterClass

🡪🡪this will e executed only once after all @Test annotation methods in the class

1. **BeforeMethod**

**🡪this** will be executed before each @Test annotation method

1. **AfterMethod**

**🡪🡪this** will be executed after each @Test annotation method

1. **@Test**

**85. what is the use of @Test annotation method?**

🡪we cannot execute the testcases without using @test annotation method in TestNg.

🡪it is a mandatory annotation.

🡪all other annotations are optional

**86.what is Junit?**

**🡪**junit is unit testing framework introduced by apache, Junit is based on java.

**87. Can WebDriver test Mobile applications?**

🡪WebDriver cannot test mobile applications, webdriver is web-based testing tool, therefore applications on the mobile browsers can be tested.

**88.what are the attributes inside the @Test annotation method?**

* Priority
* Enabled
* alwaysRun
* dependsOnMethod

**89.what is the order of execution in TestNg?**

**🡪**in TestNg it can be executed based on alphabetical order of a method name.

**90.what is priority?**

**🡪**for example if I have 4 testcases under @Test annotation method, if I give the priority=1 to the 2nd testcase()🡪 it will be executed first based on the priority.

**91.what is enabled?**

**🡪**by default all the testcases enabled attribute value would be true.

🡪but if I don’t want to execute specific @Test annotation method, I give (enabled=false), this method won’t be executed ,even though priority=1 , it won’t be executed.

**92.what is alwaysRun attribute?**

**🡪**all the testcases executed by default, the value is equal to true.

🡪it is used for group concepts.

**93. what is dependsOnMethod?**

**🡪**here, the specific testcase is based on another testcase.

🡪dependsOnMethod is executed first, eventhough the priority is set as last, it will be executed first.

**94.what is Test Assertion?**

**🡪**Assertion is nothing but validation.

**95.Two type of Assertion?**

1. Hard assertion
2. Soft assertion

**🡪99% of** organization is used hard assertion.

* **1%**  is used soft assertion.

**96.what is Hard Assertion?**

**🡪**if I’m executing a program ,if any failure occurs it will immediately come out of the program and throw an exception.

**97.what is Soft assertion?**

**🡪 for** example there are 10 steps in the code, error occurs in 5th step, but it will continue the execution.

🡪there is no need to execute 6th to 10th step, that’s why we don’t use sort assertion.

**98.Types of Hard Assertion?**

1. AssertEquals
2. AssertnotEquals
3. AssertTrue
4. AssertFalse

**99.details about hard Assertion?**

**🡪**Assert is class from Testng

Assert.equals(driver.getTitle(),expectedtitle);

Asser.assertFalse(driver.getTitle().equals(expectedTitle);

[Here,if the condition is false, then only performed search results,

If the condition is true, it will throw an exception.]

🡪AssertTrue and false is validation inside the web page.

**100.what is TestNg groups?**

**🡪Grouping** is all similar things to one category.

* Grouping is set of testcases as we want.

**101.TestNg Groups?**

**🡪**we have 2 testlevel in TestNg groups

* Suite level
* Test level

**102.Suite level:**

If I have a 2 programs under TestNg groups, each program have a sanity ,smoke and regression testing.if I mention the tag name is <test name=”sanityTest”/>.

<include=”sanity”/>

<exclude=”smoke”>

🡪in suite level it will run only the sanity test cases in both the programs.

**103.Test level:**

If I have a 2 programs under TestNg groups, each program have a sanity ,smoke and regression testing. In Test level, I have to mention two test tag under the xml file.

1.<test name=”sanityTest”/>

<include=”sanity”/>

2.<test name="smoketest”>

<include=”regression”/>

In this case it will execute both sanity and regression testcases in both the programs.

**104.what is include and exclude?**

**Include** means I will run only the specified test cases

Exclude means it wont run the specified test cases.

In TestNg groups beforemethod and aftermethod wont execute, overcome this I can mention the (alwaysRun=true)

**105.what is the xml structure of both suite level and test level?**

🡪refer the code

**106.what is TestNg parallel?**

**🡪** Normally 1 testcase will run in 1 minute

🡪but when you are incorporate with parallelism 10Tcs will be run in 1 minute.

1/5th of the time .

🡪parallelism is depends on no.of courses in your system.

🡪CPU will run the Tcs parallely.

**107.TestNg parallel levels?**

* Class level
* Method level
* Test level

**108.what is class level in xml?**

In xml file, we have a 2 class name.

<class name=”first program”/>

<class name="second program”/>

🡪two tests (xml) will be executed in parallel.

**109.what is Method level?**

**For ex,**  I have a 2 progerams, test.java and test1.java

In first program I have 3 methods

In 2nd program I have 2 methods

🡪totally 5 TCs will be executed in parallely.

**110.what is test level?**

In xml file I have to create 2 test tag, each tag will have separate program name,

**111.what are the two important attributes in xml file?**

* Parallel=”classes/methods/tests”
* Thread-count=5;

The default size of thread count is 5, you can mention it as 2 (because you have a tests(2 programs, under each program have no.of methods)), it will be executed in 2 times eventhough the thread count value is 5.

**112.what is invocation count?**

🡪 in your program you can mention it in @test annotation

🡪if you want to run the specific test cases multiple times then you can mention the invocation count=4, it will execute the TCs 4 times for specific testcase.

**113.what is Data parametrization?**

Data parametrization is a process of parametrized test scripts in order to pass the multiple data to the application at runtime.

**114.Types of parametrization in TestNg?**

* Parameter annotation
* Data provider

115.**parameter annotation?(less used in organization)**

**🡪**you can give parameters using xml file.

🡪you can give as many parameters in xml file.

<parameter name=”url” value=” “/>

<parameter name=”searchTerm” value=” “/>

🡪here name is key, value should be corresponding value

**116.Data provider?(widely used)**

🡪it will accept as many testcases you want.

🡪we can give our data using data provider.

🡪there is no need to use xml file here

🡪we are using Object[][]

**117.why we use Object[][]?**

**🡪**it will accept all datatypes.

🡪it will return a object[][]

2 ways of Object[][];

**118.which is efficient?(parameter annotation and data provider)**

**🡪**if you want to pass multiple data to the single URL, this is not recommended way, that’s why we use data provider.

**119.what is crossbrowser Testing?**

**🡪**we can execute our testcases in different browsers like chrome, edge etc.,

🡪we are using xml file here

<parameter name=”browser” value=”chrome”/>

<parameter name=”browser” value=”edge”/>

------------------------------------------------------------------------------------------

**Advanced questions:**

**1.Which xpath this preferred and why?**

Relative xpath preferred

**Problem:**

1.Problem in absolute xpath is, if the developer change the code in HTML page or if they delete any node or element in the HTML page we couldn't find the xpath, then xpath is not working so the connection is lost here

2. Another problem is if element is moved from another place then the expert is broken, that is the reason we dont use the absolute xpath.