1. What is X-Path in selenium?

* X-Path is defined as XML path
* It is a syntax or language for finding any element on the web page using XML path expression

1. What is the standard approach of syntax for creating X-Path?

* X-path = //Tag Name[@Attribute=’value’]

1. Why used X-Path locator in selenium?

* X-Path is used to find the location of any element on a webpage using HTML DOM structure

1. How many attribute to find out element on webpage?

* **X-Path locators**: find different elements on a webpage
* **ID**: To find the element location by ID of the element
* **Class** : To find the element by Class Name of the element
* **Name**: To find the element by Name of the element
* **Link Text** : To find the element by text of the link
* **X-Path** : X-Path required for finding the dynamic element and traverse between various elements of the webpage
* **CSS-Path** : CSS path also locate elements having no name, may be class or ID

1. What are the Types of X-Path?

* **Absolute X-Path** : It is the direct way to find the element, the key characteristics of X-Path is begins it with the single forward slash(/), which means you can select the element from the root
* Disadvantage of the absolute X-Path is that if there are any changes made in the path of the element then that X-Path gets failed
* It starts with the double forward slash(//), which mean it can search the element anywhere at the webpage
* You can starts from the middle of the HTML DOM structure and no need to write long X-Path

1. What are X-Path Axes?

* X-Path Axes are the methods used to find dynamic elements, which dynamically change on refresh or any other operations
* Few axes methods are commonly used in selenium Web-driver like – following, child, parent, ancestor, sibling, preceding, self etc
* **Following** : select all elements in the document of current node
* X-Path = //\*[@type=’text’]//following::input[1]
* **Ancestor** : the ancestor axis selects all ancestor element [like grandparent, parent etc]
* X-Path = //\*[@type=’Test’]//ancestor::div[1]/div[2]
* **Child** : selects all children elements of the current node
* X-Path = //\*[@id=’Test class’]//child::li or [1]
* **Preceding** : select all nodes that come before the current node
* **Following sibling** : Select the following siblings of the context node
* **Parent** : Selects the parent of the current node
* **Self** : indicates the node itself

1. What is Contains () in selenium?

* Contains is a method used in X-Path expression, it is used when the value of any attribute change dynamically
* X-Path = //\*[contains(text(), ’content will be here’)]

1. Using OR & AND operator in X-Path?

* OR : whether 1st or 2nd condition should be true, means any one condition should be true to find the element
* X-Path = //\*[@type = ‘submit ’ OR @name=’boneset’]
* AND : both conditions should be true to find out the element, It fails to find element if any one condition is false
* X-Path = //\*[@type = ‘submit ’ OR @name=’boneset’]

1. When used Start-with function?

* Start-with is used to find out the element whose attribute change dynamically or also we can find the element whose attribute value is static
* Like initial text is same, in this case we can use Start-With expression

1. What is locator?

* Locator can be termed as an address that identifies a web element uniquely within the webpage
* Locator are the HTML properties of a web element which tells the selenium about the web element it need to perform action on

1. Types of locators or attributes?

* ID
* Class-Name
* Name
* Link-Text
* X-Path
* CSS-Selector attributes:
* Using ID: find the element location by ID of the element---[#]
* Using Name Class: To find the element by Class Name of the element--- [.]
* Using Attribute ---tagName[attribute=’value’]
* Using multiple ---tagName[attribute1=’value1’][attribute2=’value2’]
* Contains ---\*
* Starts-with---^
* Ends –with---$

1. What is CSS selector?

* CSS selector is combination of an element which is identify the element of within a webpage

1. What are the different between X-Path and CSS Selector?

* CSS has more advantage then X-Path
* CSS is much more faster and simpler then the X-Path
* In IE X-Path works very slow, where as CSS works faster