Day 1 Questions:

1. Difference between driver.quit() and driver.close()?

***driver.close()*** – It closes the the browser window on which the focus is set.

***driver.quit()*** – It basically calls driver.dispose method which in turn closes all the browser windows and ends the WebDriver session gracefully.

You should use driver.quit whenever you want to end the program. It will close all opened browser window and terminates the WebDriver session. If you do not use driver.quit at the end of program, WebDriver session will not close properly and files would not be cleared off memory. This may result in memory leak errors.

2. Difference between Set and List?

***List:***

Lists generally *allow duplicate* objects. Lists must be *ordered*, and are therefore accessible by index.

Implementation classes include: ArrayList, LinkedList, Vector

***Set:***

Sets do *not allow duplicate* objects. *Most implementations are unordered*, but it is implementation specific.

Implementation classes include: HashSet (unordered), LinkedHashSet (ordered), TreeSet (ordered by natural order or by provided comparator)

3. Write the code to swap 2 numbers without using temprory variable?

***METHOD 1: Addition subtraction method***

A = A + B

B = A - B

A = A - B

***METHOD 2: XOR GATE***

A = A ^ B

B = A ^ B

A = A ^ B

Day 2 Questions:

1. What are the locators one can use in selenium to locate the Web Elements?

Selenium webdriver uses 8 locators to find the elements on web page. The following are the list of object identifier or locators supported by selenium.

Prioritized the list of locators to be used when scripting:

***id*** - > Select element with the specified @id attribute.

***name*** - > Select first element with the specified @name attribute.

***linkText*** - > Select link (anchor tag) element which contains text matching the specified link text

***partialLinkText*** - > Select link (anchor tag) element which contains text matching the specified partial link text

***tagName*** - > Locate Element using a Tag Name

***className*** - > Locate Element using a @class attribute. class value when having space cannot be used

***cssSelector*** - > Select the element using css selectors

***xpath*** - > Locate an element using an XPath expression.

2. Difference between Thread.sleep() and implcit wait?

***implicit wait*** - It's global setting applicable for all elements and if element appear before specified time than script will start executing otherwise script will throw NoSuchElementException. Best way to use in setup method. Only affect *By.findElement().*

***Thread.sleep()*** - It will sleep time for script, not good way to use in script as it's sleep without condition.

3. List at least 5 methods which can be used on a String object. Also write one line about it. For example: str1.equals(str2) checks if the strings str1 and str2 ore equal, if equal it returns 'true', else 'false'.

**String Methods:**

char ***charAt***(int index) - Returns the character at the specified index.

int ***compareTo***(String anotherString) - Compares two strings lexicographically.

String ***concat***(String str) - Concatenates the specified string to the end of this string.

boolean ***endsWith***(String suffix) - Tests if this string ends with the specified suffix.

int ***length***() - Returns the length of this string.

String ***replace***(char oldChar, char newChar) - Returns a new string resulting from replacing all occurrences of oldChar in this string with newChar.

String ***replaceAll***(String regex, String replacement) - Replaces each substring of this string that matches the given regular expression with the given replacement.

Day 3 Questions:

1. What Languages are supported for the selenium development?

java csharp python ruby php perl

javascript

2. Name all the methods impacted by the time specified in driver.manage().timeouts().implicitlyWait()?

Only affect By.findelement() and its methods.

3. Name 5 different exceptions you had in selenium webdriver? Give the exact name. For Example, you should respond as UnhandledAlertException (not as unhandled alert exception)

***NoSuchElementException*** : FindBy method can’t find the element.

***StaleElementReferenceException*** : This tells that element is no longer appearing on the DOM page.

***TimeoutException***: This tells that the execution is failed because the command did not complete in enough time.

***ElementNotVisibleException***: Thrown to indicate that although an element is present on the DOM, it is not visible, and so is not able to be interacted with

***ElementNotSelectableException***: Thrown to indicate that may be the element is disabled, and so is not able to select.

4. Write a logic to find out the second largest number in given series. For example:

input: {23, 45, 67, 12, 56} Output: 56

**Logic:**

1. Implement any of the sorting techniques (bubbleSort, insertionSort, bucketSort, heapSort, mergeSort, selectionSort) or do a simple Array.sort()
2. Print the array with required index.

**Code:**

package algorithm;

import org.testng.annotations.Test;

public class Sort {

@Test

public void bubbleSort(){

int [] intArray = {23, 45, 67, 12, 56} ;

int i = 0;

int j = 0;

int arraySize = intArray.length;

for(i=0; i<arraySize-1; i++){

boolean flag =false;

for(j=0;j<arraySize-1; j++){

if(intArray[j]<intArray[j+1]){

intArray = swap(j,j+1,intArray);

flag = true;

}

}

if(!flag){

break;

}

}

for(int x:intArray){

System.out.print(x + " ");

}

System.out.println();

System.out.println("The 2nd Largest Number is: "+intArray[1])

}

public int[] swap(int a, int b, int numberArray[]){

int temp = 0;

temp = numberArray[a];

numberArray[a] = numberArray[b];

numberArray[b] = temp;

return numberArray;

}

}

Day 4 Questions:

1. In what Language Selenium is written/ developed?

Ans: Java

2. Difference between Assert and Verify?

Ans: Assert will verify the condition and will stop execution if the condition fails.

Verify will verify the condition and will continue execution irrespective of the output.

3. Difference between web based and desktop based application? Is web browser a web based or desktop based application?

Ans: An application accessed in a HTTP network through a web browser is a web based app. Usually the accessed software resides in Server and can be accessed from anywhere, from any system. Require internet connection to access the network.

e.g: <http://www.google.com>

An application installed in our local machine/personal computer is a desktop based app.

The application can only be accessed in our system. The applications mostly don’t need internet connection to work on.

e.g: MS Office

Web Browser is a desktop based application.To access a web based application we need to install web browser in our personal computer.

4. What happens in the background after you type in the URL in the web browser and before the web page loads? (Hint: HTTP, DNS)

Ans:

1. You **type an URL** into address bar in your preferred browser.
2. The browser **parses the URL** to find the protocol, host, port, and path.
3. It **forms a HTTP request** (that was most likely the protocol)
4. To reach the host, it first needs to **translate**the human readable host**into an IP number**, and it does this by doing a DNS lookup on the host
5. Then a **socket needs to be opened** from the user’s computer to that IP number, on the port specified (most often port 80)
6. When a connection is open, the **HTTP request is sent** to the host
7. The host **forwards the request** to the server software (most often Apache) configured to listen on the specified port
8. The **server inspects the request** (most often only the path), and **launches the server plugin needed** to handle the request (corresponding to the server language you use, PHP, Java, .NET, Python?)
9. The plugin gets access to the full request, and starts to prepare a HTTP response.
10. To construct the response a **database**is (most likely) **accessed**. A database search is made, based on parameters in the path (or data) of the request
11. Data from the database, together with other information the plugin decides to add, is**combined into a long string** of text (probably HTML).
12. The plugin **combines**that data with some Meta data (in the form of HTTP headers), and**sends the HTTP response** back to the browser.
13. The browser receives the response, and **parses the HTML** (which with 95% probability is broken) in the response
14. A **DOM tree is built** out of the broken HTML
15. **New requests are made** to the server for each new resource that is found in the HTML source (typically images, style sheets, and JavaScript files). Go back to step 3 and repeat for each resource.
16. **Stylesheets are parsed**, and the rendering information in each gets attached to the matching node in the DOM tree
17. **Javascript is parsed and executed**, and DOM nodes are moved and style information is updated accordingly
18. The browser **renders the page** on the screen according to the DOM tree and the style information for each node
19. **You see** the page on the screen

5. I have dropdown (select tag), I want to print all the values inside the dropdown except the 1st value in the list, How do I print those values with and without using for each loop?

Ans: Foreach method:

Select dropDown = new Select(driver.findElementById("ID"));

for (int i=1; i<dropDown.getSize();i++){

System.out.println(dropDown)

}

String firstValue = dropDown.getValueByIndex(0);

dropdownList.remove(firstValue);

Day 5 Questions:

1. There are multiple frames in a webpage. Say three frames one within another, how will you find an element in the inner most frame?

2. My application have 1000 test cases in total. On an average it takes 45 minutes to automate 1 test case. How much time will you allot to automate all the test cases?

3. What is the IDE you are using? Share more details about it?

4. Write a code to take and store 4 screen shots for the 4 windows in 4th homework?

5. Difference between JVM and JRE.

Day 6 Questions:

1. List the browsers, OS supported by the selenium?

2. What is selenese? List few Selenese Commands?

3. What are the disadvantags of using Selenium as testing tool?

4. What are the test types supported by Selenium?

5. Given the length of all 3 sides of a triangle. write a program to find if the triangle is Pythagorean Right-angled Triangle.

Day 7 Questions:

1. One line description on Maven, JUnit, TestNG?

2. write a program to find out if the given String is a palindrome?

3. Write a program to find out if the given number is a palindrome?

Day 8 Questions:

1. Write a program to reverse the given String:

"!!!SNOITSEUQ YLIAD POTS ESAELP"

2. How much time, data (in MB) is utilized in downloading this "Daily Questions Series" image before deleting it?

3. Write a program to find out number of vowels in "I am not participating in Daily Questions. Its just a waste of time."