1 – How to open blank browser window using selenium java?

**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

2 – How to maximize browser window using selenium java?

**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

3 – How to enter url in browser using selenium java?

**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

4 – How to get url of website using selenium java?

**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 String url = driver.getCurrentUrl();  
 System.*out*.println(url);  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

5 – How to get title of the page using selenium java?

**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 String title = driver.getTitle();  
 System.*out*.println(title);  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

6 – How to close only single browser window using selenium java?

**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 Thread.*sleep*(**3000**);  
 driver.close();  
 }  
}

7 – How to close all browser windows using selenium java?

**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

8 – How to click on an element using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 WebElement element = driver.findElement(By.*xpath*(**"//input[@id='confirm']"**));  
 element.click();  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

9 – How to get text from a web element using selenium java?

import org.openqa.selenium.By;  
import org.openqa.selenium.WebDriver;  
import org.openqa.selenium.WebElement;  
import org.openqa.selenium.chrome.ChromeDriver;  
  
public class Test {  
 public static void main(String[] args) throws InterruptedException {  
 WebDriver driver = new ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get("https://omayo.blogspot.com/");  
 WebElement element = driver.findElement(By.*xpath*("//div[@itemprop='description articleBody']"));  
 String text = element.getText();  
 System.*out*.println(text);  
 Thread.*sleep*(3000);  
 driver.quit();  
 }  
}

10 – Verify that button is enabled or disabled using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 WebElement element = driver.findElement(By.*xpath*(**"//button[@id='but2']"**));  
 **boolean** buttonStatus1 = element.isEnabled();  
 System.*out*.println(**"Button status : "** + buttonStatus1);  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

11 – Verify that element is displayed/visible on webpage using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 WebElement element = driver.findElement(By.*xpath*(**"//input[@value='HiddenButton']"**));  
 **boolean** elementStatus1 = element.isDisplayed();  
 System.*out*.println(**"Element status : "** + elementStatus1);  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

12 – Verify that checkbox is selected or not using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 WebElement element = driver.findElement(By.*xpath*(**"//input[@id='checkbox2']"**));  
 **boolean** checkboxStatus1 = element.isSelected();  
 System.*out*.println(**"Checkbox status : "** + checkboxStatus1);  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

13 – How to navigate from one url to another url using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 Thread.*sleep*(**3000**);  
 driver.navigate().to(**"https://www.google.com/"**);  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

14 – How to clear text from textbox using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 WebElement element = driver.findElement(By.*xpath*(**"(//textarea)[2]"**));  
 element.clear();  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

15 – How to enter text into textbox using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 WebElement element = driver.findElement(By.*xpath*(**"(//textarea)[2]"**));  
 element.clear();  
 element.sendKeys(**"My name is Darshan"**);  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

16 – Do we need browser driver to be downloaded locally before selenium test?

* Required locally **(4.10.0)** < **selenium 4.11.0** <= Not required locally

17 – How to click on browser back button using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 driver.navigate().to(**"https://www.google.com/"**);  
 driver.navigate().back();  
 driver.navigate().forward();  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

18 – How to click on browser next button using selenium java?

19 – How to refresh webpage using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 driver.navigate().refresh();  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

20 – How to get HTML source code of a webpage using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 String text = driver.getPageSource();  
 System.*out*.println(text);  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

21 – How to get tag name of an element using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 WebElement element = driver.findElement(By.*xpath*(**"//\*[@id='link1']"**));  
 String str1 = element.getTagName();  
 System.*out*.println(str1);  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

22 – How to get an attribute value using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 WebElement element = driver.findElement(By.*xpath*(**"//\*[@id='link1']"**));  
 String str1 = element.getAttribute(**"href"**);  
 System.*out*.println(str1);  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

23 – How to open a browser window in full screen mode using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().fullscreen();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

24 – How to get size of a button using selenium java?

25 – How to get height and width of a button using selenium java?

**import** org.openqa.selenium.\*;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 WebElement element = driver.findElement(By.*xpath*(**"//button[@id='but2']"**));  
 Dimension size = element.getSize();  
 System.*out*.println(size);  
 System.*out*.println(size.height);  
 System.*out*.println(size.width);  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

26 – How to get location of a web element using selenium java?

27 – How to get value of x and y axis of a web element using selenium java?

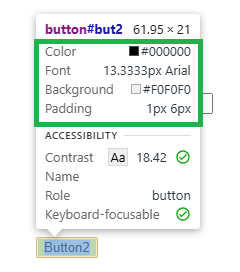
**import** org.openqa.selenium.\*;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 WebElement element = driver.findElement(By.*xpath*(**"//button[@id='but2']"**));  
 Point location = element.getLocation();  
 System.*out*.println(location);  
 System.*out*.println(location.x);  
 System.*out*.println(location.y);  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

28 – How to find multiple elements on a webpage using selenium java?

**import** org.openqa.selenium.\*;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** java.util.List;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 List<WebElement> elements = driver.findElements(By.*xpath*(**"//a"**));  
 **for** (WebElement element: elements){  
 **if** (element.getText().length()>**0**){  
 System.*out*.println(element.getAttribute(**"href"**));  
 }  
 }  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

29 – How to get css value of a web element using selenium java?

**import** org.openqa.selenium.\*;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** java.util.List;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 WebElement element = driver.findElement(By.*xpath*(**"//button[@id='but2']"**));  
 String value1 = element.getCssValue(**"Font"**);  
 String value2 = element.getCssValue(**"Color"**);  
 String value3 = element.getCssValue(**"Background"**);  
 System.*out*.println(value1);  
 System.*out*.println(value2);   
 System.*out*.println(value3);  
 Thread.*sleep*(**3000**);   
 driver.quit();  
 }  
}



30 – How to open Chrome/Firefox/Edge browser using selenium java?

import org.openqa.selenium.WebDriver;  
import org.openqa.selenium.chrome.ChromeDriver;  
import org.openqa.selenium.edge.EdgeDriver;  
import org.openqa.selenium.firefox.FirefoxDriver;  
  
public class Test {  
 public static void main(String[] args) throws InterruptedException {  
 WebDriver driver = new ChromeDriver();  
*// WebDriver driver = new FirefoxDriver();  
// WebDriver driver = new EdgeDriver();* driver.manage().window().maximize();  
 driver.get("https://omayo.blogspot.com/");  
 Thread.*sleep*(3000);  
 driver.quit();  
 }  
}

31 – How to open selected browser using selenium java?

**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.openqa.selenium.edge.EdgeDriver;  
**import** org.openqa.selenium.firefox.FirefoxDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {

WebDriver driver = **null**;  
 String browser = **"chrome"**;

**if** (browser.equalsIgnoreCase(**"chrome"**)){  
 driver = **new** ChromeDriver();  
 }  
 **else if**(browser.equalsIgnoreCase(**"firefox"**)){  
 driver = **new** FirefoxDriver();  
 }  
 **else if**(browser.equalsIgnoreCase(**"edge"**)){  
 driver = **new** EdgeDriver();  
 }  
 **else** {  
 driver = **new** ChromeDriver();  
 }  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

32 – How to handle multiple browser windows/tab using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** java.util.Iterator;  
**import** java.util.Set;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
  
 WebElement link1 = driver.findElement(By.*xpath*(**"//a[@id='link2'][normalize-space()='SeleniumTutorial']"**));  
 link1.click();  
  
 WebElement link2 = driver.findElement(By.*xpath*(**"//a[normalize-space()='Open a popup window']"**));  
 link2.click();  
  
 Set<String> allWindows = driver.getWindowHandles();  
  
 **for** (String singleWindow : allWindows) {  
 driver.switchTo().window(singleWindow);  
 **if** (driver.getTitle().equalsIgnoreCase(**"New Window"**)) {  
 WebElement element = driver.findElement(By.*xpath*(**"//h3"**));  
 Thread.*sleep*(**3000**);  
 System.*out*.println(element.getText());  
 }  
 }  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
  
 }  
}

33 – How to click on OK button on javascript alert/popup using selenium java?

**import** org.openqa.selenium.Alert;  
**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://the-internet.herokuapp.com/javascript\_alerts"**);  
  
 WebElement element = driver.findElement(By.*xpath*(**"//button[text()='Click for JS Prompt']"**));  
 element.click();  
  
 Alert popup = driver.switchTo().alert();  
 popup.accept();  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

34 – How to click on Cancel button on javascript alert/popup using selenium java?

**import** org.openqa.selenium.Alert;  
**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://the-internet.herokuapp.com/javascript\_alerts"**);  
  
 WebElement element = driver.findElement(By.*xpath*(**"//button[text()='Click for JS Prompt']"**));  
 element.click();  
  
 Alert popup = driver.switchTo().alert();  
 popup.dismiss();  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

35 – How to get text from javascript alert/popup using selenium java?

**import** org.openqa.selenium.Alert;  
**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://the-internet.herokuapp.com/javascript\_alerts"**);  
  
 WebElement element = driver.findElement(By.*xpath*(**"//button[text()='Click for JS Prompt']"**));  
 element.click();  
  
 Alert popup = driver.switchTo().alert();  
 String str1 = popup.getText();  
 System.*out*.println(str1);  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

36 – How to send text on javascript alert/popup using selenium java?

**import** org.openqa.selenium.Alert;  
**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://the-internet.herokuapp.com/javascript\_alerts"**);  
  
 WebElement element = driver.findElement(By.*xpath*(**"//button[text()='Click for JS Prompt']"**));  
 element.click();  
  
 Alert popup = driver.switchTo().alert();  
 popup.sendKeys(**"My name is darshan"**);  
 popup.accept();  
   
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

37 – How to select an option from dropdown based on text using selenium java?

**import** org.openqa.selenium.Alert;  
**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.openqa.selenium.support.ui.Select;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
  
 WebElement dropdown = driver.findElement(By.*xpath*(**"//select[@id='drop1']"**));  
 Select select = **new** Select(dropdown);  
 select.selectByVisibleText(**"doc 3"**);  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

38 – How to select an option from dropdown based on index using selenium java?

import org.openqa.selenium.Alert;  
import org.openqa.selenium.By;  
import org.openqa.selenium.WebDriver;  
import org.openqa.selenium.WebElement;  
import org.openqa.selenium.chrome.ChromeDriver;  
import org.openqa.selenium.support.ui.Select;  
  
public class Test {  
 public static void main(String[] args) throws InterruptedException {  
  
 WebDriver driver = new ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get("https://omayo.blogspot.com/");  
  
 WebElement dropdown = driver.findElement(By.*xpath*("//select[@id='drop1']"));  
 Select select = new Select(dropdown);  
 select.selectByIndex(2);  
  
 Thread.*sleep*(3000);  
 driver.quit();  
 }  
}

39 – How to select an option from dropdown based on value attribute using selenium java?

import org.openqa.selenium.By;  
import org.openqa.selenium.WebDriver;  
import org.openqa.selenium.WebElement;  
import org.openqa.selenium.chrome.ChromeDriver;  
import org.openqa.selenium.support.ui.Select;  
  
public class Test {  
 public static void main(String[] args) throws InterruptedException {  
  
 WebDriver driver = new ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get("https://omayo.blogspot.com/");  
  
 WebElement dropdown = driver.findElement(By.*xpath*("//select[@id='drop1']"));  
 Select select = new Select(dropdown);  
 select.selectByValue("abc");  
  
 Thread.*sleep*(3000);  
 driver.quit();  
 }  
}

40 – How to select multiple options on multi-selection box based on displayed text/label using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.openqa.selenium.support.ui.Select;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
  
 WebElement dropdown = driver.findElement(By.*xpath*(**"//select[@id='multiselect1']"**));  
 Select select = **new** Select(dropdown);  
 select.selectByVisibleText(**"Volvo"**);  
 select.selectByVisibleText(**"Swift"**);  
 select.selectByVisibleText(**"Hyundai"**);  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

41 – How to select multiple options on multi-selection box based on index using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.openqa.selenium.support.ui.Select;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
  
 WebElement dropdown = driver.findElement(By.*xpath*(**"//select[@id='multiselect1']"**));  
 Select select = **new** Select(dropdown);  
 select.selectByIndex(**0**);  
 select.selectByIndex(**1**);  
 select.selectByIndex(**2**);  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

42 – How to select multiple options on multi-selection box based on value attribute using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.openqa.selenium.support.ui.Select;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
  
 WebElement dropdown = driver.findElement(By.*xpath*(**"//select[@id='multiselect1']"**));  
 Select select = **new** Select(dropdown);  
 select.selectByValue(**"volvox"**);  
 select.selectByValue(**"swiftx"**);  
 select.selectByValue(**"audix"**);  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

43 – How to deselect an option on multi-selection box based on visible text/index/value attribute/deselect all options using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.openqa.selenium.support.ui.Select;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
  
 WebElement dropdown = driver.findElement(By.*xpath*(**"//select[@id='multiselect1']"**));  
 Select select = **new** Select(dropdown);  
 select.selectByVisibleText(**"Volvo"**);  
 select.selectByIndex(**1**);  
 select.selectByValue(**"volvox"**);  
  
 select.deselectByVisibleText(**"Volvo"**);  
 select.deselectByIndex(**2**);  
 select.deselectByValue(**"volvox"**);  
  
 select.deselectAll();  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

44 – How to wait for each and every element until it is present in DOM using selenium java?

***Disadvantage: Implicit wait only verify that element is present in DOM or not, it won’t verify whether element is displayed and clickable or not.***

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.JavascriptExecutor;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.openqa.selenium.support.ui.ExpectedConditions;  
**import** org.openqa.selenium.support.ui.Select;  
**import** org.openqa.selenium.support.ui.WebDriverWait;  
  
**import** java.time.Duration;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 driver.manage().timeouts().implicitlyWait(Duration.*ofSeconds*(**10**));  
  
 WebElement dropdown = driver.findElement(By.*xpath*(**"//button[@class='dropbtn']"**));  
 dropdown.click();  
  
 WebElement flipkart = driver.findElement(By.*xpath*(**"//a[text()='Flipkart']"**));  
 flipkart.click();  
  
 Thread.*sleep*(**5000**);  
 driver.quit();  
 }  
}

45 – How to wait for only specific element up to specific time period until it is clickable/visible using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.JavascriptExecutor;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.openqa.selenium.support.ui.ExpectedConditions;  
**import** org.openqa.selenium.support.ui.Select;  
**import** org.openqa.selenium.support.ui.WebDriverWait;  
  
**import** java.time.Duration;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
  
 WebElement dropdown = driver.findElement(By.*xpath*(**"//button[@class='dropbtn']"**));  
 dropdown.click();  
  
*// WebDriverWait wait = new WebDriverWait(driver, Duration.ofSeconds(10));  
// WebElement flipkart = wait.until(ExpectedConditions.visibilityOfElementLocated(By.xpath("//a[text()='Flipkart']")));  
// flipkart.click();*

WebDriverWait wait = **new** WebDriverWait(driver, Duration.*ofSeconds*(**10**));  
 WebElement flipkart = wait.until(ExpectedConditions.*elementToBeClickable*(By.*xpath*(**"//a[text()='Flipkart']"**)));  
 flipkart.click();

Thread.*sleep*(**5000**);  
 driver.quit();  
 }  
}

46 – How to perform operation on an element inside frame and come back to outside frame using selenium java?

import org.openqa.selenium.By;  
import org.openqa.selenium.WebDriver;  
import org.openqa.selenium.WebElement;  
import org.openqa.selenium.chrome.ChromeDriver;  
  
public class Test {  
 public static void main(String[] args) throws InterruptedException {  
  
 WebDriver driver = new ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get("https://demo.automationtesting.in/Frames.html");  
  
 WebElement frame1 = driver.findElement(By.*xpath*("//iframe[@id='singleframe']"));  
 driver.switchTo().frame(frame1);  
 Thread.*sleep*(3000);  
  
 WebElement textbox = driver.findElement(By.*xpath*("//input[@type='text']"));  
 textbox.sendKeys("Darshan");  
 Thread.*sleep*(3000);  
  
 driver.switchTo().defaultContent();  
 WebElement header = driver.findElement(By.*xpath*("//header[@id='header']//h1"));  
 System.*out*.println(header.getText());  
 driver.quit();  
 }  
}

47 – How to hover mouse on an element using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.openqa.selenium.interactions.Actions;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
  
 WebElement element = driver.findElement(By.*xpath*(**"//span[@id='blogsmenu']"**));  
  
 Actions actions = **new** Actions(driver);  
 actions.moveToElement(element).perform();  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

48 – How to hover mouse and click on an element using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.openqa.selenium.interactions.Actions;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
  
 WebElement menu = driver.findElement(By.*xpath*(**"//span[@id='blogsmenu']"**));  
 WebElement link = driver.findElement(By.*xpath*(**"//span[text()='Selenium143']"**));  
  
 Actions actions = **new** Actions(driver);  
 actions.moveToElement(menu).click(link).perform();  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

49 – How to drag and drop an element in slidebar using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.openqa.selenium.interactions.Actions;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/p/page3.html"**);  
  
 WebElement leftSlideBar = driver.findElement(By.*xpath*(**"//a[@aria-labelledby='price-min-label']"**));  
  
 Actions actions = **new** Actions(driver);  
 actions.dragAndDropBy(leftSlideBar,**200**,**0**).perform();  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

50 – How to right click on an element using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.openqa.selenium.interactions.Actions;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
  
 WebElement element = driver.findElement(By.*xpath*(**"//input[@name='q']"**));  
  
 Actions actions = **new** Actions(driver);  
 actions.contextClick(element).perform();  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

51 – How to double click on an element using selenium java?

**import** org.openqa.selenium.Alert;  
**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.openqa.selenium.interactions.Actions;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
  
 WebElement element = driver.findElement(By.*xpath*(**"//button[normalize-space()='Double click Here']"**));  
  
 Actions actions = **new** Actions(driver);  
 actions.doubleClick(element).perform();  
  
 Alert popup = driver.switchTo().alert();  
 String txt = popup.getText();  
 System.*out*.println(txt);  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

52 – How to drag and drop an element from source location to target location using selenium java?

**import** org.openqa.selenium.Alert;  
**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.openqa.selenium.interactions.Actions;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"http://www.dhtmlgoodies.com/scripts/drag-drop-custom/demo-drag-drop-3.html"**);  
  
 WebElement sourceElement = driver.findElement(By.*xpath*(**"//div[@id='box7']"**));  
 WebElement targetElement = driver.findElement(By.*xpath*(**"//div[@id='box101']"**));  
  
 Actions actions = **new** Actions(driver);  
 actions.dragAndDrop(sourceElement, targetElement).perform();  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

53 – How to open a website from another website in a new tab using selenium java?

**import** org.openqa.selenium.\*;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.openqa.selenium.interactions.Actions;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://www.selenium.dev/"**);  
  
 WebElement element = driver.findElement(By.*xpath*(**"//span[text()='Downloads']"**));  
  
 Actions actions = **new** Actions(driver);  
 actions.keyDown(Keys.*CONTROL*).click(element).perform();  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

54 – How to press Enter key on login button using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.Keys;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.openqa.selenium.interactions.Actions;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://tutorialsninja.com/demo/index.php?route=account/login"**);  
  
 WebElement element = driver.findElement(By.*xpath*(**"//input[@id='input-email']"**));  
 Actions action = **new** Actions(driver);  
 action.sendKeys(element, **"test@test.com"**).sendKeys(Keys.*TAB*).sendKeys(**"12345"**).sendKeys(Keys.*ENTER*).perform();  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

55 – How to press two keys at the same time using selenium java?

**import** org.openqa.selenium.\*;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.openqa.selenium.interactions.Actions;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
  
 WebElement element = driver.findElement(By.*xpath*(**"//textarea[@id='ta1']"**));  
 element.sendKeys(**"My name is Darshan"**);  
 element.sendKeys(Keys.*chord*(Keys.*CONTROL*, **"z"**));  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

**import** org.openqa.selenium.\*;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.openqa.selenium.interactions.Actions;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 WebElement element = driver.findElement(By.*xpath*(**"//textarea[@id='ta1']"**));  
 Actions actions = **new** Actions(driver);  
 element.sendKeys(**"Darshan"**);  
 actions.keyDown(Keys.*CONTROL*).sendKeys(**"z"**).perform();  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

**Notes:**

* ***sendKeys() – press and release it***
* ***keyDown() – press and hold a key***
* ***keyUp() – release key***

56 – How to take screenshot using selenium java?

**import** org.apache.commons.io.FileUtils;  
**import** org.openqa.selenium.\*;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**import** java.io.\*;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException, IOException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
  
 File file = ((TakesScreenshot)driver).getScreenshotAs(OutputType.*FILE*);  
 FileUtils.*copyFile*(file, **new** File(**"results//test.jpg"**));  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

***Note: For FileUtils class – we need to add maven dependency in pom.xml***

<dependency>

<groupId>commons-io</groupId>

<artifactId>commons-io</artifactId>

<version>2.18.0</version>

</dependency>

57 – How to select a value from auto suggestive dropdown using selenium java?

**import** org.openqa.selenium.\*;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.openqa.selenium.interactions.Actions;  
**import** org.openqa.selenium.support.ui.ExpectedConditions;  
**import** org.openqa.selenium.support.ui.WebDriverWait;  
**import** java.time.Duration;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://www.makemytrip.com/"**);  
  
 WebDriverWait wait = **new** WebDriverWait(driver, Duration.*ofSeconds*(**10**));  
 WebElement closeButton = wait.until(ExpectedConditions.*elementToBeClickable*(By.*xpath*(**"//span[@data-cy='closeModal']"**)));  
 closeButton.click();  
  
 WebElement fromFieldDropdown = driver.findElement(By.*xpath*(**"//input[@id='fromCity']"**));  
 fromFieldDropdown.click();  
  
 WebElement fromField = driver.findElement(By.*xpath*(**"//input[@placeholder='From']"**));  
 fromField.sendKeys(**"surat"**);  
 Thread.*sleep*(**2000**);  
   
 Actions action = **new** Actions(driver);  
 action.sendKeys(Keys.*DOWN*).sendKeys(Keys.*ENTER*).build().perform();  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

58 – How to select a past/future date from calendar using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.openqa.selenium.support.ui.ExpectedConditions;  
**import** org.openqa.selenium.support.ui.WebDriverWait;  
**import** java.time.Duration;  
**import** java.time.LocalDate;  
**import** java.time.Month;  
**import** java.time.format.DateTimeFormatter;  
**import** java.util.Locale;  
  
**public class** Test {  
  
 **public static** LocalDate dateConverter(String date, String pattern) {  
 **return** LocalDate.*parse*(date, DateTimeFormatter.*ofPattern*(pattern, Locale.*ENGLISH*));  
 }  
  
 **static int** *currentYear*;  
 **static int** *currentMonth*;  
  
  
 **public static int**[] getCurrentMonthYear(WebDriver driver) {  
 *currentYear* = Integer.*parseInt*(driver.findElement(By.*xpath*(**"//span[@class='ui-datepicker-year']"**)).getText());  
 String currentMonthText = driver.findElement(By.*xpath*(**"//span[@class='ui-datepicker-month']"**)).getText();  
 *currentMonth* = Month.*valueOf*(currentMonthText.toUpperCase()).getValue();  
 **return new int**[]{*currentYear*, *currentMonth*};  
 }  
  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://seleniumpractise.blogspot.com/2016/08/how-to-handle-calendar-in-selenium.html"**);  
  
 WebElement datePicker = driver.findElement(By.*xpath*(**"//input[@id='datepicker']"**));  
 datePicker.click();  
  
 WebDriverWait wait = **new** WebDriverWait(driver, Duration.*ofSeconds*(**10**));  
 wait.until(ExpectedConditions.*visibilityOfElementLocated*(By.*xpath*(**"//div[@id='ui-datepicker-div']"**)));  
  
 LocalDate expectedDate = *dateConverter*(**"05-07-2022"**, **"dd-MM-yyyy"**);  
 *currentYear* = *getCurrentMonthYear*(driver)[**0**];  
 *currentMonth* = *getCurrentMonthYear*(driver)[**1**];  
  
 **while** (*currentYear* != expectedDate.getYear() || *currentMonth* != expectedDate.getMonthValue()) {  
 **if** (*currentYear* > expectedDate.getYear() || (*currentYear* == expectedDate.getYear() && *currentMonth* > expectedDate.getMonthValue())) {  
 driver.findElement(By.*xpath*(**"//a[@data-handler='prev']"**)).click();  
 } **else** {  
 driver.findElement(By.*xpath*(**"//a[@data-handler='next']"**)).click();  
 }  
 *currentYear* = *getCurrentMonthYear*(driver)[**0**];  
 *currentMonth* = *getCurrentMonthYear*(driver)[**1**];  
 }  
  
 driver.findElement(By.*xpath*(**"//a[text()='"** + expectedDate.getDayOfMonth() + **"']"**)).click();  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

59 – How to select only future dates from calendar using selenium java?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.JavascriptExecutor;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.openqa.selenium.support.ui.ExpectedConditions;  
**import** org.openqa.selenium.support.ui.WebDriverWait;  
**import** java.time.Duration;  
**import** java.time.LocalDate;  
**import** java.time.Month;  
**import** java.time.format.DateTimeFormatter;  
  
**public class** Test {  
  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://www.hyrtutorials.com/p/calendar-practice.html"**);  
  
 WebElement datePicker = driver.findElement(By.*xpath*(**"//input[@id='fifth\_date\_picker']"**));  
 ((JavascriptExecutor) driver).executeScript(**"arguments[0].scrollIntoView(true);"**, datePicker);  
 Thread.*sleep*(**2000**);  
 datePicker.click();  
   
 WebDriverWait wait = **new** WebDriverWait(driver, Duration.*ofSeconds*(**10**));  
 wait.until(ExpectedConditions.*visibilityOfElementLocated*((By.*xpath*(**"//div[@id='ui-datepicker-div']"**))));  
  
 String expectedDateString = **"02-02-2025"**;  
 LocalDate expectedDate = LocalDate.*parse*(expectedDateString, DateTimeFormatter.*ofPattern*(**"dd-MM-yyyy"**));  
  
 **if** (expectedDate.isBefore(LocalDate.*now*())) {  
 System.*out*.println(**"Please enter a future date."**);  
 driver.quit();  
 **return**; *// Exit the program if the date is in the past* }  
  
 **int** currentYear = Integer.*parseInt*(driver.findElement(By.*xpath*(**"//span[@class='ui-datepicker-year']"**)).getText());  
 **int** currentMonth = Month.*valueOf*(driver.findElement(By.*xpath*(**"//span[@class='ui-datepicker-month']"**)).getText().toUpperCase()).getValue();  
  
 **while** (currentYear != expectedDate.getYear() || currentMonth != expectedDate.getMonthValue()) {  
 driver.findElement(By.*xpath*(**"//a[@data-handler='next']"**)).click();  
 currentYear = Integer.*parseInt*(driver.findElement(By.*xpath*(**"//span[@class='ui-datepicker-year']"**)).getText());  
 currentMonth = Month.*valueOf*(driver.findElement(By.*xpath*(**"//span[@class='ui-datepicker-month']"**)).getText().toUpperCase()).getValue();  
 }  
  
 driver.findElement(By.*xpath*(**"//a[text()='"** + expectedDate.getDayOfMonth() + **"']"**)).click();  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

60 – Print each and every data from the table?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.WebElement;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
 **int** totalRows = driver.findElements(By.*xpath*(**"//table[@id='table1']//tr"**)).size();  
 **int** totalColumns = driver.findElements(By.*xpath*(**"//table[@id='table1']//th"**)).size();  
  
 **for** (**int** i = **0**; i < totalRows; i++) {  
 **for** (**int** j = **0**; j < totalColumns; j++) {  
 **if** (i == **0**) {  
 WebElement element = driver.findElement(By.*xpath*(**"//table[@id='table1']//th["** + (j + **1**) + **"]"**));  
 System.*out*.print(element.getText());  
 } **else** {  
 WebElement element1 = driver.findElement(By.*xpath*(**"//table[@id='table1']//tr["** + (i) + **"]//td["** + (j + **1**) + **"]"**));  
 System.*out*.print(element1.getText());  
 }  
 System.*out*.print(**" "**);  
 }  
 System.*out*.println();  
 }  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

61 – How to display location name based on a person name in a table?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
  
 String name = **"Manish"**;  
 String location = driver.findElement(By.*xpath*(**"//table[@id='table1']//tr[td[text()=**\"**"**+ name + **"**\"**]]/td[3]"**)).getText();  
 System.*out*.println(name + **" is located at "** + location);  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

62 – What is maven and why we use that?

**What is Maven?**

* Maven is a **build automation tool**.

**Why we use maven?**

* It is used to **simplify the build process** by automatically downloading required dependencies and plugins from a central repository.
* Basically, we use **pom.xml** file to configure required dependencies, plugins, and other project metadata based on specific version.

63 – What is WebDriverManager and why we use that?

**What is WebDriverManager?**

* WebDriverManager is **a Java library**.

**Why we use WebDriverManager?**

* If we use WebDriverManager then we don't need to manually download and configure browser driver.

**Note:**

* From selenium 4.11, we don’t need to install any browser driver.

**import** io.github.bonigarcia.wdm.WebDriverManager;  
**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
  
**public class** Test {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriverManager.*chromedriver*().setup();  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://omayo.blogspot.com/"**);  
   
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

64 – Automate end to end scenario?

**import** org.openqa.selenium.By;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.testng.Assert;  
  
**public class** Sample {  
 **public static void** main(String[] args) **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://tutorialsninja.com/demo/index.php?route=account/login"**);  
  
 *// Login page* driver.findElement(By.*xpath*(**"//input[@name='email']"**)).sendKeys(**"darshan@test.com"**);  
 driver.findElement(By.*xpath*(**"//input[@name='password']"**)).sendKeys(**"Aq@1234567890"**);  
 driver.findElement(By.*xpath*(**"//input[@value='Login']"**)).click();  
  
 *// Search product* driver.findElement(By.*xpath*(**"//input[@name='search']"**)).sendKeys(**"HP"**);  
 driver.findElement(By.*xpath*(**"//div[@id='search']//button "**)).click();  
  
 *// Add to cart product* driver.findElement(By.*xpath*(**"//a[text()='HP LP3065']//following::span[text()='Add to Cart']"**)).click();  
 Thread.*sleep*(**1000**);  
 driver.findElement(By.*xpath*(**"//button[@id='button-cart']"**)).click();  
 String expectedSuccessMessage = **"Success: You have added HP LP3065 to your shopping cart!"**;  
 Thread.*sleep*(**1000**);  
 String actualSuccessMessage = driver.findElement(By.*xpath*(**"//div[contains(@class,'alert')]"**)).getText();  
 Assert.*assertTrue*(actualSuccessMessage.contains(expectedSuccessMessage));  
  
 *// Go to card* driver.findElement(By.*xpath*(**"//span[@id='cart-total']"**)).click();  
 driver.findElement(By.*xpath*(**"//strong[text()='Checkout']"**)).click();  
 Thread.*sleep*(**1000**);  
 driver.findElement(By.*xpath*(**"//input[@id='button-payment-address']"**)).click();  
 Thread.*sleep*(**1000**);  
 driver.findElement(By.*xpath*(**"//input[@id='button-shipping-address']"**)).click();  
 Thread.*sleep*(**1000**);  
 driver.findElement(By.*xpath*(**"//input[@id='button-shipping-method']"**)).click();  
 Thread.*sleep*(**1000**);  
 driver.findElement(By.*xpath*(**"//input[@name='agree']"**)).click();  
 Thread.*sleep*(**1000**);  
 driver.findElement(By.*xpath*(**"//input[@id='button-payment-method']"**)).click();  
 Thread.*sleep*(**1000**);  
 driver.findElement(By.*xpath*(**"//input[@id='button-confirm']"**)).click();  
  
 *// Order purchased* Thread.*sleep*(**1000**);  
 String expectedSuccessMessage1 = **"Your order has been placed!"**;  
 String actualSuccessMessage1 = driver.findElement(By.*xpath*(**"//div[@id='content']/h1"**)).getText();  
 Assert.*assertEquals*(actualSuccessMessage1, expectedSuccessMessage1);  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

65 – What is TestNG and why we use that?

**What is TestNG?**

* TestNG is a testing framework for Java.

**Why we use TestNG?**

* Without main method we can execute the tests from IDE,
* print test results in console,
* generate report,
* supports annotations,
* parallel execution,
* test grouping,
* data-driven testing

**We need to add below dependency in pom.xml**

<**dependency**>  
 <**groupId**>org.testng</**groupId**>  
 <**artifactId**>testng</**artifactId**>  
 <**version**>7.10.2</**version**>  
 <**scope**>test</**scope**>  
</**dependency**>

66 – How to run test scenario without main method inside java class using TestNG?

* By adding **TestNG** annotations **(@Test)** on top of the normal method, it defined that this method is belongs to TestNG framework

**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.testng.annotations.Test;  
  
**public class** Sample {  
  
 @Test  
 **public void** purchaseFlow() **throws** InterruptedException {  
 WebDriver driver = **new** ChromeDriver();  
 driver.manage().window().maximize();  
 driver.get(**"https://tutorialsninja.com/demo/index.php?route=account/login"**);  
  
 Thread.*sleep*(**3000**);  
 driver.quit();  
 }  
}

67 – How to execute a specific test scenario, before and after each and every method using testNG?

**import** org.testng.annotations.AfterMethod;  
**import** org.testng.annotations.BeforeMethod;  
**import** org.testng.annotations.Test;  
  
@Test  
**public class** Sample {  
  
 @BeforeMethod  
 **public void** openBrowser(){  
 System.*out*.println(**"Open browser"**);  
 }  
  
 **public void** firstMethod(){  
 System.*out*.println(**"first method"**);  
 }  
  
 **public void** secondMethod(){  
 System.*out*.println(**"second method"**);  
 }  
  
 **public void** thirdMethod(){  
 System.*out*.println(**"third method"**);  
 }  
  
 @AfterMethod  
 **public void** closeBrowser(){  
 System.*out*.println(**"Close browser"**);  
 }  
  
}

68 – How to execute a specific test scenario, before and after each and every class using testNG?

**import** org.testng.annotations.\*;  
  
@Test  
**public class** Sample {  
  
 @BeforeClass  
 **public void** openBrowser(){  
 System.*out*.println(**"Open browser"**);  
 }  
  
 **public void** firstMethod(){  
 System.*out*.println(**"first method"**);  
 }  
  
 **public void** secondMethod(){  
 System.*out*.println(**"second method"**);  
 }  
  
 **public void** thirdMethod(){  
 System.*out*.println(**"third method"**);  
 }  
  
 @AfterClass  
 **public void** closeBrowser(){  
 System.*out*.println(**"Close browser"**);  
 }  
  
}

69 – How to execute a test scenario by specific order using TestNG?

**import** org.testng.annotations.Test;  
  
**public class** Sample {  
  
 @Test(priority = **3**)  
 **public void** firstMethod() {  
 System.*out*.println(**"first method"**);  
 }  
  
 @Test(priority = **2**)  
 **public void** secondMethod() {  
 System.*out*.println(**"second method"**);  
 }  
  
 @Test(priority = **1**)  
 **public void** thirdMethod() {  
 System.*out*.println(**"third method"**);  
 }  
  
 @Test(priority = **0**)  
 **public void** fourthMethod() {  
 System.*out*.println(**"fourth browser"**);  
 }  
  
}

70 – How to skip a test scenario using TestNG?

**import** org.testng.SkipException;  
**import** org.testng.annotations.Test;  
  
@Test  
**public class** Sample {  
  
 **public void** firstMethod() {  
 **throw new** SkipException(**"Skipping this test"**);  
 }  
  
 **public void** secondMethod() {  
 System.*out*.println(**"second method"**);  
 }  
  
 **public void** thirdMethod() {  
 System.*out*.println(**"third method"**);  
 }  
  
}

71 – How to fail a test scenario using TestNG?

**import** org.testng.Assert;  
**import** org.testng.SkipException;  
**import** org.testng.annotations.Test;  
  
@Test  
**public class** Sample {  
  
 **public void** firstMethod() {  
 Assert.*fail*(**"Failing this test"**);  
 }  
  
 **public void** secondMethod() {  
 System.*out*.println(**"second method"**);  
 }  
  
 **public void** thirdMethod() {  
 System.*out*.println(**"third method"**);  
 }  
  
}

72 – How to validate actual and expected results using TestNG?

**import** org.testng.Assert;  
**import** org.testng.annotations.Test;  
  
**public class** Sample {  
  
 @Test  
 **public void** firstMethod() {  
 Assert.*assertEquals*(**"Darshan"**, **"Darshan"**);  
 Assert.*assertNotEquals*(**"Darshan"**, **"Test"**);  
 Assert.*assertTrue*(**10**<**20**);  
 Assert.*assertFalse*(**10**>**20**);  
 }

}

73 – How to execute all testcases(classes) in single go using ***TestNG***?

* We need to add all the test classes in **testing.xml** file

**testing.xml**

*<?*xml version**="1.0"** encoding**="UTF-8"***?>***<!DOCTYPE** suite **SYSTEM "http://testng.org/testng-1.0.dtd"*>***<**suite** name**="Feature1"**>  
 <**test** name**="Module1"**>  
 <**classes**>  
 <**class** name**="pack1.First"**/>  
 <**class** name**="pack1.Second"**/>  
 <**class** name**="pack1.Third"**/>  
 <**class** name**="pack2.Fourth"**/>  
 <**class** name**="pack2.Fifth"**/>  
 <**class** name**="pack2.Sixth"**/>  
 <**class** name**="pack3.Seventh"**/>  
 </**classes**>  
 </**test**>  
</**suite**>

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

**src/test/java/pack1/First.java**

**package** pack1;  
**import** org.testng.annotations.Test;  
  
**public class** First {  
  
 @Test  
 **public void** firstMethod(){  
 System.*out*.println(**"first method"**);  
 }  
}

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

**src/test/java/pack1/Second.java**

**public class** Second {  
  
 @Test  
 **public void** secondMethod() {  
 System.*out*.println(**"second method"**);  
 }  
}

***Note: Same for other classes***

74 – How to run few testcases and exclude few testcases from execution using ***TestNG***?

**testing.xml**

*<?*xml version**="1.0"** encoding**="UTF-8"***?>***<!DOCTYPE** suite **SYSTEM "http://testng.org/testng-1.0.dtd"*>***<**suite** name**="Feature1"**>  
 <**test** name**="Module1"**>  
 <**classes**>  
 <**class** name**="pack1.First"**/>  
*<!-- <class name="pack1.Second"/>-->  
<!-- <class name="pack1.Third"/>-->* <**class** name**="pack2.Fourth"**/>  
 <**class** name**="pack2.Fifth"**/>  
 <**class** name**="pack2.Sixth"**/>  
 <**class** name**="pack3.Seventh"**/>  
 </**classes**>  
 </**test**>  
</**suite**>

75 – How to execute a specific test scenario, before and after each and every ***group of testcases*** using testNG?

**testing.xml**

*<?*xml version**="1.0"** encoding**="UTF-8"***?>***<!DOCTYPE** suite **SYSTEM "http://testng.org/testng-1.0.dtd"*>***<**suite** name**="Feature1"**>  
 <**test** name**="Module1"**>  
 <**classes**>  
 <**class** name**="pack1.First"**/>  
 <**class** name**="pack1.Second"**/>  
 <**class** name**="pack1.Third"**/>  
 </**classes**>  
 </**test**>  
</**suite**>

------------- **src/test/java/pack1/First.java**---------------------

**package** pack1;  
**import** org.testng.annotations.AfterTest;  
**import** org.testng.annotations.BeforeTest;  
**import** org.testng.annotations.Test;  
  
**public class** First {  
  
 @Test  
 **public void** firstMethod() {  
 System.*out*.println(**"first method"**);  
 }  
  
 @BeforeTest  
 **public void** beforeMethod() {  
 System.*out*.println(**"Before group of testcases"**);  
 }  
  
 @AfterTest  
 **public void** afterMethod() {  
 System.*out*.println(**"After group of testcases"**);  
 }  
}

------------- **src/test/java/pack1/Second.java**---------------------

**public class** Second {  
 @Test  
 **public void** secondMethod() {  
 System.*out*.println(**"second method"**);  
 }  
}

76 – How to execute a specific test scenario, before and after each and every ***group of test suites*** using testNG?

*<?*xml version**="1.0"** encoding**="UTF-8"***?>***<!DOCTYPE** suite **SYSTEM "http://testng.org/testng-1.0.dtd"*>***<**suite** name**="Feature1"**>  
 <**test** name**="Module1"**>  
 <**classes**>  
 <**class** name**="pack1.First"**/>  
 <**class** name**="pack1.Second"**/>  
 </**classes**>  
 </**test**>  
  
 <**test** name**="Module2"**>  
 <**classes**>  
 <**class** name**="pack1.Third"**/>  
 </**classes**>  
 </**test**>  
</**suite**>

------------- **src/test/java/pack1/First.java**---------------------

**package** pack1;  
**import** org.testng.annotations.\*;  
  
**public class** First {  
  
 @Test  
 **public void** firstMethod() {  
 System.*out*.println(**"first method"**);  
 }  
  
 @BeforeSuite  
 **public void** beforeMethod() {  
 System.*out*.println(**"Before group of test suite"**);  
 }  
  
 @AfterSuite  
 **public void** afterMethod() {  
 System.*out*.println(**"After group of test suite"**);  
 }  
  
}

------------- **src/test/java/pack1/Second.java**---------------------

**public class** Second {  
 @Test  
 **public void** secondMethod() {  
 System.*out*.println(**"second method"**);  
 }  
}

**testing.xml**

77 – How to comment in ***testing.xml*** file?

**testing.xml**

<?xml version**="1.0"** encoding**="UTF-8"**?>  
**<!DOCTYPE** suite **SYSTEM "http://testng.org/testng-1.0.dtd">**<**suite** name**="Feature1"**>  
 <**test** name**="Module1"**>  
 <**classes**>  
 <**class** name**="pack1.First"**/>  
<!-- <class name="pack1.Second"/>-->  
<!-- <class name="pack1.Third"/>-->  
 </**classes**>  
 </**test**>  
</**suite**>

78 – How to exclude only a specific method from a class during test execution using **TestNG**?

**testing.xml**

*<?*xml version**="1.0"** encoding**="UTF-8"***?>***<!DOCTYPE** suite **SYSTEM "http://testng.org/testng-1.0.dtd"*>***<**suite** name**="Feature1"**>  
 <**test** name**="Module1"**>  
 <**classes**>  
 <**class** name**="pack1.First"**>  
 <**methods**>  
 <**exclude** name**="firstMethod"**/>  
 </**methods**>  
 </**class**>  
 <**class** name**="pack1.Sample"**/>  
 </**classes**>  
 </**test**>  
</**suite**>

------------- **src/test/java/pack1/First.java**---------------------

**package** pack1;  
**import** org.testng.annotations.\*;  
  
**public class** First {  
  
 @Test  
 **public void** firstMethod() {  
 System.*out*.println(**"first method"**);  
 }  
  
 @Test  
 **public void** secondMethod() {  
 System.*out*.println(**"second method"**);  
 }  
  
}

79 – How to include only a specific method from a class during the test execution using ***TestNG***?

**testing.xml**

*<?*xml version**="1.0"** encoding**="UTF-8"***?>***<!DOCTYPE** suite **SYSTEM "http://testng.org/testng-1.0.dtd"*>***<**suite** name**="Feature1"**>  
 <**test** name**="Module1"**>  
 <**classes**>  
 <**class** name**="pack1.First"**>  
 <**methods**>  
 <**include** name**="firstMethod"**/>  
 </**methods**>  
 </**class**>  
 <**class** name**="pack1.Sample"**/>  
 </**classes**>  
 </**test**>  
</**suite**>

------------- **src/test/java/pack1/First.java**---------------------

**package** pack1;  
**import** org.testng.annotations.\*;  
  
**public class** First {  
  
 @Test  
 **public void** firstMethod() {  
 System.*out*.println(**"first method"**);  
 }  
  
 @Test  
 **public void** secondMethod() {  
 System.*out*.println(**"second method"**);  
 }  
}

80 – How to include a specific method which starts with some specific name using ***TestNG***?

**testing.xml**

*<?*xml version**="1.0"** encoding**="UTF-8"***?>***<!DOCTYPE** suite **SYSTEM "http://testng.org/testng-1.0.dtd"*>***<**suite** name**="Feature1"**>  
 <**test** name**="Module1"**>  
 <**classes**>  
 <**class** name**="pack1.First"**>  
 <**methods**>  
 <**include** name**="testLogin.\*"**/>  
 </**methods**>  
 </**class**>  
 </**classes**>  
 </**test**>  
</**suite**>

------------- **src/test/java/pack1/First.java**---------------------

**package** pack1;  
**import** org.testng.annotations.\*;  
  
**public class** First {  
  
 @Test  
 **public void** testLogin1Method() {  
 System.*out*.println(**"testLogin1Method"**);  
 }  
  
 @Test  
 **public void** testLogin2Method() {  
 System.*out*.println(**"testLogin2Method"**);  
 }

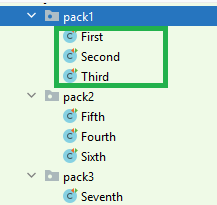
@Test  
 **public void** testDashboard1Method() {  
 System.*out*.println(**"testDashboard1Method"**);  
 }  
  
}

81 – How to execute all testcases from a specific package using ***TestNG***?

**testing.xml**

*<?*xml version**="1.0"** encoding**="UTF-8"***?>***<!DOCTYPE** suite **SYSTEM "http://testng.org/testng-1.0.dtd"*>***<**suite** name**="Feature1"**>  
 <**test** name**="Module1"**>  
 <**packages**>  
 <**package** name**="pack1"**/>  
 </**packages**>  
 </**test**>  
</**suite**>

***Note: Pack1 includes three classes***



82 – How to execute testcases based on groups using ***testNG***?

**testing.xml**

*<?*xml version**="1.0"** encoding**="UTF-8"***?>***<!DOCTYPE** suite **SYSTEM "http://testng.org/testng-1.0.dtd"*>***<**suite** name**="Feature1"**>  
 <**test** name**="Module1"**>  
 <**groups**>  
 <**run**>  
 <**include** name**="smoke"**/>  
 </**run**>  
 </**groups**>  
  
 <**classes**>  
 <**class** name**="pack1.First"**/>  
 <**class** name**="pack1.Second"**/>  
 <**class** name**="pack1.Third"**/>  
 </**classes**>  
 </**test**>  
</**suite**>

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

**package** pack1;  
**import** org.testng.annotations.\*;  
  
**public class** First {  
  
 @Test(groups = {**"smoke"}**)  
 **public void** firstMethod() {  
 System.*out*.println(**"first method"**);  
 }  
  
}

**public class** Second {  
  
 @Test(groups = {**"regression"}**)  
 **public void** secondMethod() {  
 System.*out*.println(**"second method"**);  
 }  
}

----------------------------------  
**public class** Third {  
  
 @Test(groups = {**"smoke"}**)  
 **public void** thirdfMethod() {  
 System.*out*.println(**"third method"**);  
 }  
}

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

83 – How to wait until a specific method to be executed using ***TestNG***?

**package** pack1;  
**import** org.testng.annotations.\*;  
  
**public class** Sample {  
  
 @Test  
 **public void** firstMethod() {  
 System.*out*.println(**"first method"**);  
 }  
  
 @Test(dependsOnMethods = {**"thirdMethod"**,**"firstMethod"**})  
 **public void** secondMethod() {  
 System.*out*.println(**"second method"**);  
 }  
  
 @Test  
 **public void** thirdMethod() {  
 System.*out*.println(**"third method"**);  
 }  
  
}

84 – How to skip testcase using ***TestNG***?

**package** pack1;  
**import** org.testng.annotations.\*;  
  
**public class** Sample {  
  
 @Test  
 **public void** firstMethod() {  
 System.*out*.println(**"first method"**);  
 }  
  
 @Test(enabled = **false**)  
 **public void** secondMethod() {  
 System.*out*.println(**"second method"**);  
 }  
  
 @Test  
 **public void** thirdMethod() {  
 System.*out*.println(**"third method"**);  
 }  
  
}

85 – How to throw an exception if a method is not being executed within specified time duration using ***TestNG***?

**package** pack1;  
**import** org.testng.annotations.\*;  
  
**public class** Sample {  
  
 @Test  
 **public void** firstMethod() {  
 System.*out*.println(**"first method"**);  
 }  
  
 *// If this method is not being executed within 5 secs then it will throw an exception* @Test(timeOut = **5000**)  
 **public void** secondMethod() **throws** InterruptedException {  
 System.*out*.println(**"second method"**);  
 Thread.*sleep*(**6000**);  
 }  
  
}

***Error:***

***org.testng.internal.thread.ThreadTimeoutException: Method pack1.Sample.secondMethod() didn't finish within the time-out 5000***

86 – How to pass test level parameter from ***testing.xml*** file to ***java class***?

***testng.xml***

<**suite** name**="Suite1"**>  
 <**test** name**="Test1"**>  
 <**parameter** name**="username"** value**="Admin"**/>  
 <**parameter** name**="password"** value**="Admin@123"**/>  
 <**classes**>  
 <**class** name**="pack1.First"**/>  
 </**classes**>  
 </**test**>  
 <**test** name**="Test2"**>  
 <**parameter** name**="username"** value**="Viewer"**/>  
 <**parameter** name**="password"** value**="Viewer@123"**/>  
 <**classes**>  
 <**class** name**="pack1.Second"**/>  
 </**classes**>  
 </**test**>  
</**suite**>

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

***First.java***

**package** pack1;  
**import** org.testng.annotations.Parameters;  
**import** org.testng.annotations.Test;  
  
**public class** First {  
  
 @Test  
 @Parameters({**"username"**, **"password"**})  
 **public void** method1(String username, String password){  
 System.*out*.println(**"Username is :"** +username);  
 System.*out*.println(**"Password is :"** +password);  
 }  
}

***Second.java***

**package** pack1;  
**import** org.testng.annotations.Parameters;  
**import** org.testng.annotations.Test;  
  
**public class** Second {  
  
 @Test  
 @Parameters({**"username"**, **"password"**})  
 **public void** method1(String username, String password){  
 System.*out*.println(**"Username is :"** +username);  
 System.*out*.println(**"Password is :"** +password);  
 }  
}

87 – How to pass suite level parameter from ***testing.xml*** file to ***java class***?

***testng.xml***

<**suite** name**="Suite1"**>  
 <**parameter** name**="username"** value**="Admin"**/>  
 <**parameter** name**="password"** value**="Admin@123"**/>  
 <**test** name**="Test1"**>  
 <**classes**>  
 <**class** name**="pack1.First"**/>  
 </**classes**>  
 </**test**>  
 <**test** name**="Test2"**>  
 <**classes**>  
 <**class** name**="pack1.Second"**/>  
 </**classes**>  
 </**test**>  
</**suite**>

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

***First.java***

**package** pack1;  
**import** org.testng.annotations.Parameters;  
**import** org.testng.annotations.Test;  
  
**public class** First {  
  
 @Test  
 @Parameters({**"username"**, **"password"**})  
 **public void** method1(String username, String password){  
 System.*out*.println(**"Username is :"** +username);  
 System.*out*.println(**"Password is :"** +password);  
 }  
}

***Second.java***

**package** pack1;  
**import** org.testng.annotations.Parameters;  
**import** org.testng.annotations.Test;  
  
**public class** Second {  
  
 @Test  
 @Parameters({**"username"**, **"password"**})  
 **public void** method1(String username, String password){  
 System.*out*.println(**"Username is :"** +username);  
 System.*out*.println(**"Password is :"** +password);  
 }  
}

88 – How to pass data using ***data provider*** using ***TestNG***?

***Example1:***

**package** pack1;  
**import** org.testng.annotations.DataProvider;  
**import** org.testng.annotations.Test;  
  
**public class** First {  
  
 @Test(dataProvider = **"data1"**)  
 **public void** method1(String username) {  
 System.*out*.println(**"Username : "** + username);  
 }  
  
 @DataProvider(name = **"data1"**)  
 **public** String[] getData1() {  
 String[] str1 = **new** String[]{**"admin"**, **"viewer"**, **"operator"**};  
 **return** str1;  
 }  
}

***Example2:***

**package** pack1;  
**import** org.testng.annotations.DataProvider;  
**import** org.testng.annotations.Test;  
  
**public class** First {  
  
 @Test(dataProvider = **"data1"**)  
 **public void** method1(String username) {  
 System.*out*.println(**"Username : "** + username);  
 }  
  
 @DataProvider(name = **"data1"**)  
 **public** Object[][] getData1() {  
 Object[][] data = **new** Object[][]{{**"admin"**}, {**"viewer"**}, {**"operator"**}};  
 **return** data;  
 }  
}

89 – How to pass data using ***data provider*** using ***TestNG (Example3)?***

***Example3:***

**package** pack1;  
**import** org.testng.annotations.DataProvider;  
**import** org.testng.annotations.Test;  
  
**public class** First {  
  
 @Test(dataProvider = **"data1"**)  
 **public void** method1(String username, String password) {  
 System.*out*.println(**"Username : "** + username);  
 System.*out*.println(**"Password : "** + password);  
 }  
  
 @DataProvider(name = **"data1"**)  
 **public** Object[][] getData1() {  
 Object[][] data = **new** Object[][]{{**"admin"**,**"Admin@123"**}, {**"viewer"**,**"viewer@123"**}, {**"operator"**,**"op@123"**}};  
 **return** data;  
 }  
}

***Note: Dataprovider method should return Array or Iterator object***

90 – What is data driven testing and why we use that?

1. What is data driven testing?
   * Data driven testing is a **testing methodology.**
2. Why we use that?
   * We can pass different-different testdata to the same testcase without changing the logic using Excel/CSV/JSON.

***Example:***

**package** pack1;  
**import** org.testng.annotations.DataProvider;  
**import** org.testng.annotations.Test;  
  
**public class** First {  
  
 @Test(dataProvider = **"data1"**)  
 **public void** method1(String username, String password) {  
 System.*out*.println(**"Username : "** + username);  
 System.*out*.println(**"Password : "** + password);  
 }  
  
 @DataProvider(name = **"data1"**)  
 **public** Object[][] getData1() {  
 Object[][] data = **new** Object[][]{{**"admin"**,**"Admin@123"**}, {**"viewer"**,**"viewer@123"**}, {**"operator"**,**"op@123"**}};  
 **return** data;  
 }  
}

91 – What is ***TestNG Listeners*** and why we use that?

1. What is TestNG Listeners?
   * TestNG listeners are ***special interface*** in TestNG.
2. Why we use that?
   * TestNG listeners keep track on some events such as ***start/end of test suite*** and ***pass/fail/skip of testcases.***

***Note: There are two ways to register TestNG listener***

1. At suite level
2. At class level

92 – How to register ***TestNG listeners*** at suite level?

***First.java***

**package** pack1;  
**import** org.testng.annotations.Test;  
  
**public class** First {  
  
@Test  
**public void** method1() {  
 System.*out*.println(**"first method"**);  
}  
  
@Test  
**public void** method2() {  
 System.*out*.println(**"second method"**);  
 Assert.*fail*(**"testcase is failed"**);  
}  
  
@Test  
**public void** method3() {  
 System.*out*.println(**"third method"**);  
 **throw new** SkipException(**"Skipping testcases"**);  
}  
  
}

***testng.xml***

<**suite** name**="Suite1"**>  
 <**listeners**>  
 <**listener** class-name**="pack1.MyListener"**/>  
 </**listeners**>  
 <**test** name**="Test1"**>  
 <**classes**>  
 <**class** name**="pack1.First"**/>  
 </**classes**>  
 </**test**>  
</**suite**>

***Note: As testng.xml does not allow to use Test(Class) level listeners in testng.xml so we can use @Listerners annotation inside the class for class level Testlistener***

***MyListener.java***

**package** pack1;  
  
**import** org.testng.ITestContext;  
**import** org.testng.ITestListener;  
**import** org.testng.ITestResult;  
  
**public class** MyListener **implements** ITestListener {  
  
 **public void** onStart(ITestContext context) {  
 System.*out*.println(**"Test suite execution started: "** + context.getName());  
 }  
  
 **public void** onFinish(ITestContext context) {  
 System.*out*.println(**"Test suite execution completed : "** + context.getName());  
 }  
  
 **public void** onTestStart(ITestResult result) {  
 System.*out*.println(**"Testcase execution started : "** + result.getName());  
 }  
  
 **public void** onTestSuccess(ITestResult result) {  
 System.*out*.println(**"Testcase passed : "** + result.getName());  
 }  
  
 **public void** onTestFailure(ITestResult result) {  
 System.*out*.println(**"Testcase failed : "** + result.getName());  
 }  
  
 **public void** onTestSkipped(ITestResult result) {  
 System.*out*.println(**"Testcase skipped : "** + result.getName());  
 }  
  
}

92(a) – How to register ***TestNG listeners*** at class level?

***First.java***

**package** pack1;  
**import** org.testng.Assert;  
**import** org.testng.SkipException;  
**import** org.testng.annotations.Listeners;  
**import** org.testng.annotations.Test;  
  
@Listeners(MyListener.**class**)  
**public class** First {  
  
 @Test  
 **public void** method1() {  
 System.*out*.println(**"first method"**);  
 }  
  
 @Test  
 **public void** method2() {  
 System.*out*.println(**"second method"**);  
 Assert.*fail*(**"testcase is failed"**);  
 }  
  
  
 @Test  
 **public void** method3() {  
 System.*out*.println(**"third method"**);  
 **throw new** SkipException(**"Skipping testcases"**);  
 }  
  
}

93 – How to run testcases parallelly ***using testng.xml***?

***First.java***

**package** pack1;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.testng.annotations.Test;  
  
**public class** First {  
  
 @Test  
 **public void** method1() {  
 System.*out*.println(**"The thread ID for chrome is "**+ Thread.*currentThread*().getId());  
 WebDriver driver = **new** ChromeDriver();  
 driver.get(**"https://www.toolsqa.com/testng/testng-parallel-execution/"**);  
 driver.quit();  
 }  
  
 @Test  
 **public void** method2() {  
 System.*out*.println(**"The thread ID for chrome is "**+ Thread.*currentThread*().getId());  
 WebDriver driver = **new** ChromeDriver();  
 driver.get(**"https://www.toolsqa.com/testng/testng-parallel-execution/"**);  
 driver.quit();  
 }  
  
 @Test  
 **public void** method3() {  
 System.*out*.println(**"The thread ID for chrome is "**+ Thread.*currentThread*().getId());  
 WebDriver driver = **new** ChromeDriver();  
 driver.get(**"https://www.toolsqa.com/testng/testng-parallel-execution/"**);  
 driver.quit();  
 }  
  
 @Test  
 **public void** method4() {  
 System.*out*.println(**"The thread ID for chrome is "**+ Thread.*currentThread*().getId());  
 WebDriver driver = **new** ChromeDriver();  
 driver.get(**"https://www.toolsqa.com/testng/testng-parallel-execution/"**);  
 driver.quit();  
 }  
  
 @Test  
 **public void** method5() {  
 System.*out*.println(**"The thread ID for chrome is "**+ Thread.*currentThread*().getId());  
 WebDriver driver = **new** ChromeDriver();  
 driver.get(**"https://www.toolsqa.com/testng/testng-parallel-execution/"**);  
 driver.quit();  
 }  
  
}

***testng.xml (At method level parallel execution) – Run from here***

**<!DOCTYPE** suite **SYSTEM "https://testng.org/testng-1.0.dtd" *>***<**suite** name**="Suite1"**>  
 <**test** name**="Test1"** parallel **= "methods"** thread-count **= "3"**>  
 <**classes**>  
 <**class** name**="pack1.First"**/>  
 </**classes**>  
 </**test**>  
</**suite**>

***testng.xml (At class level parallel execution)***

**<!DOCTYPE** suite **SYSTEM "https://testng.org/testng-1.0.dtd" *>***<**suite** name**="Suite1"**>  
 <**test** name**="Test1"** parallel **= "classes"** thread-count **= "3"**>  
 <**classes**>  
 <**class** name**="pack1.First"**/>  
 <**class** name**="pack1.Second"**/>  
 </**classes**>  
 </**test**>  
</**suite**>

***testng.xml (At tests level parallel execution)***

**<!DOCTYPE** suite **SYSTEM "https://testng.org/testng-1.0.dtd" *>***<**suite** name**="Suite1"** parallel**="tests"** thread-count**="3"**>  
 <**test** name**="Test1"**>  
 <**classes**>  
 <**class** name**="pack1.First"**/>  
 <**class** name**="pack1.Second"**/>  
 </**classes**>  
 </**test**>  
 <**test** name**="Test2"**>  
 <**classes**>  
 <**class** name**="pack1.Third"**/>  
 <**class** name**="pack1.Fourth"**/>  
 </**classes**>  
 </**test**>  
</**suite**>

93(a) – How to run testcases ***parallelly*** using ***TestNG*** ***programmatically***?

***First.java***

**package** pack1;  
**import** org.openqa.selenium.WebDriver;  
**import** org.openqa.selenium.chrome.ChromeDriver;  
**import** org.testng.annotations.Test;  
  
**public class** First {  
  
 @Test  
 **public void** method1() {  
 System.*out*.println(**"The thread ID for chrome is "**+ Thread.*currentThread*().getId());  
 WebDriver driver = **new** ChromeDriver();  
 driver.get(**"https://www.toolsqa.com/testng/testng-parallel-execution/"**);  
 driver.quit();  
 }  
   
}

***testng.xml***

**<!DOCTYPE** suite **SYSTEM "https://testng.org/testng-1.0.dtd" *>***<**suite** name**="Suite1"**>  
 <**test** name**="Test1"**>  
 <**classes**>  
 <**class** name**="pack1.First"**/>  
 </**classes**>  
 </**test**>  
</**suite**>

***TestRunner.java – Run from here***

**package** pack1;  
  
**import** org.testng.TestNG;  
**import** org.testng.xml.XmlSuite;  
**import** java.util.ArrayList;  
**import** java.util.List;  
**public class** TestRunner {  
  
 **public static void** main(String[] args) {  
 TestNG testng = **new** TestNG();  
 List<String> suite = **new** ArrayList<>();  
 suite.add(**"testng.xml"**);  
 *// connect testng object and testng.xml* testng.setTestSuites(suite);  
 testng.setParallel(XmlSuite.ParallelMode.*METHODS*);  
 testng.setThreadCount(**10**);  
 testng.run();  
 }  
  
}

94 – What is selenium grid and why we use it?

1. What is selenium grid?
   * Selenium grid is a one of the components of selenium automation tool.
2. Why we use that?
   * We can run testcases parallelly on different machines (Hub + Nodes)

96 – How to setup Selenium Grid?

1. Register a Hub
   1. Download selenium server standalone jar file
   2. Move jar file into C:// folder
   3. Open cmd prompt and enter command **>>** “***java -jar file.jar -role hub***”
   4. Open grid console [***http://IP\_address:port/grid/console***](http://IP_address:port/grid/console)
2. Connect Node to the Hub
   1. Java should be configured in Node machine
   2. Download selenium server standalone jar file
   3. Download ***chromedriver.exe*** and move into ***C://*** drive
   4. Open cmd prompt and enter command **>>** “***java -Dwebdriver.chrome.driver=”C://chromedriver.exe” -jar file.jar -role webdriver -hub*** [***http://IP\_address:port/grid/register***](http://IP_address:port/grid/register) ***--port 5555*** ”
   5. Now go to ***Hub machine*** and ***refresh*** the grid console
3. What is RemoteWebDriver and why we use that?
4. Write a code
   1. <https://lite.evernote.com/note/8bd86e11-8f71-47b4-99ea-4fece794f639>

97 – How to get data from ***config.properties*** file to java class?

***config.properties***

url=**https://tutorialsninja.com/demo/index.php?route=account/login**username=**darshan@test.com**password=**Aq@1234567890**

***First.java***

**package** pack1;  
**import** org.testng.annotations.Test;  
**import** java.io.FileInputStream;  
**import** java.io.IOException;  
**import** java.util.Properties;  
  
**public class** First {  
  
 @Test  
 **public void** method1() **throws** IOException {  
 Properties prop = **new** Properties();  
 FileInputStream file = **new** FileInputStream(**"config.properties"**);  
 prop.load(file);  
  
 String myURL = prop.getProperty(**"url"**);  
 String myUsername = prop.getProperty(**"username"**);  
 String myPassword = prop.getProperty(**"password"**);  
  
 System.*out*.println(**"URL : "**+myURL);  
 System.*out*.println(**"Username : "**+myUsername);  
 System.*out*.println(**"Password : "**+myPassword);  
 }  
  
}

98 – How to set data from java class to ***config.properties*** file ?

***config.properties (Before execution)***

url=**https://tutorialsninja.com/demo/index.php?route=account/login**username=**darshan@test.com**password=**Aq@1234567890**

***First.java***

**package** pack1;  
**import** org.testng.annotations.Test;  
**import** java.io.FileOutputStream;  
**import** java.io.IOException;  
**import** java.util.Properties;  
  
**public class** First {  
  
 @Test  
 **public void** method1() **throws** IOException {  
 Properties prop = **new** Properties();  
 prop.setProperty(**"name"**,**"Darshan"**);  
 prop.setProperty(**"roll"**,**"15EL069"**);  
 FileOutputStream file = **new** FileOutputStream(**"config.properties"**,**true**);  
 prop.store(file,**"add comment or null value"**);  
 }  
  
}

***config.properties (After execution)***

url=**https://tutorialsninja.com/demo/index.php?route=account/login**username=**darshan@test.com**password=**Aq@1234567890***#add comment or null value  
#Sat Feb 15 12:37:46 IST 2025*name=**Darshan**roll=**15EL069**

99 – What is SelectorsHub and why we use that?

1. What is SelectorsHub?
   * SelectorsHub is a web browser extension.
2. Why we use that?
   * It is used to identify and generate locators for web element quickly.

100 – Explain maven build lifecycle?

***There are 7 steps in maven build lifecycle,***

1. validate – Check project structure is valid or not
2. compile – Compile source code
   * Convert High level language into low level language
   * Compile source code from ***/src/main/java*** folder and put compiled code into ***/target/classes*** folder
3. test – Run the compiled code using testing framework such as TestNG/Junit
4. verify – Check ***integration test results (if any)*** and verifies that it meets ***quality criteria*** or not such as failure rate should be within acceptance threshold value.
5. package – Convert compile code into distributable format such as JAR/WAR file
6. install – Install packaged artifacts into local repository
7. deploy – Deploy packaged artifacts into remote repository

101 – What is ***maven-surefire-plugin*** and why we use that?

1. What is ***maven-surefire-plugin***?
   * ***maven-surefire-plugin*** is a plugin used in maven build automation tool.
2. Why we use that?
   * It is used to run all unit testcases automatically ***(which starts from \*Test.java name)*** during test phase of maven build.
   * Generates Test Reportsunder ***target/surefire-reports*** folder
   * We can ***stop execution on the first test failure*** by adding configuration.
   * Supports ***parallel execution*** by adding configuration.

***Add in pom.xml***

***<plugin>*** *<groupId>org.apache.maven.plugins</groupId>  
 <artifactId>maven-surefire-plugin</artifactId>  
 <version>3.5.2</version>****</plugin>***

***Note:***

1. TestNG does not support CI/CD so, we need Maven surefire plugin to integrate into CI/CD pipeline (Jenkins, GitHub Actions, Azure, AWS etc.)
2. TestNG need manual execution from IDE, while Maven surefire runs all testcases automatically using ***mvn test*** command
3. TestNG provides test cases and surefire detects and executes TestNG testcases automatically.

102 – Maven commands

1. ***mvn clean*** – to ***remove*** existing compiled code from ***target*** folder
2. ***mvn compile*** – to compile source code
3. ***mvn test*** – to run all unit testcases
4. ***mvn clean test*** – it will remove existing compiled code and re-compile whole code and run unit testcases

103 – How to integrate ***testng*** with ***maven surefire plugin***?

**pom.*xml***

<**build**>  
 <**pluginManagement**>  
 <**plugins**>  
 <**plugin**>  
 <**groupId**>org.apache.maven.plugins</**groupId**>  
 <**artifactId**>maven-surefire-plugin</**artifactId**>  
 <**version**>3.5.2</**version**>  
 <**configuration**>  
 <**suiteXmlFiles**>  
 <**suiteXmlFile**>testng.xml</**suiteXmlFile**>  
 </**suiteXmlFiles**>  
 </**configuration**>  
 </**plugin**>  
 </**plugins**>  
 </**pluginManagement**>  
</**build**>

***testng.xml***

*<?*xml version**="1.0"** encoding**="UTF-8"***?>***<!DOCTYPE** suite **SYSTEM "http://testng.org/testng-1.0.dtd"*>***<**suite** name**="Regression"**>  
 <**test** name**="Module1"**>  
 <**classes**>  
 <**class** name**="pack1.FirstTest"**/>  
 <**class** name**="pack1.SecondTest"**/>  
 </**classes**>  
 </**test**>  
</**suite**>

***Note:***

* Once we add ***testng*** configuration in ***maven surefire plugin*** then ***mvn test*** command will run only those testcases which is mentioned in ***testng.xml*** file

104 – What is ***profile*** in ***maven*** and why we use that?

**What is profile:**

* Profile is a one type of the configuration in pom.xml

**Why we use that:**

* By using profile, we can set different configurations for different environments in the same ***pom.xml*** file.
* We can set different ***testng file*** for different testcycle in the same ***pom.xml.***

***regression.xml***

*<?*xml version**="1.0"** encoding**="UTF-8"***?>***<!DOCTYPE** suite **SYSTEM "http://testng.org/testng-1.0.dtd"*>***<**suite** name**="Regression"**>  
 <**test** name**="Module1"**>  
 <**classes**>  
 <**class** name**="pack1.FirstTest"**/>  
 <**class** name**="pack1.SecondTest"**/>  
 <**class** name**="pack1.ThirdTest"**/>  
 </**classes**>  
 </**test**>  
</**suite**>

***smoke.xml***

*<?*xml version**="1.0"** encoding**="UTF-8"***?>***<!DOCTYPE** suite **SYSTEM "http://testng.org/testng-1.0.dtd"*>***<**suite** name**="Regression"**>  
 <**test** name**="Module1"**>  
 <**classes**>  
 <**class** name**="pack1.FirstTest"**/>  
 <**class** name**="pack1.SecondTest"**/>  
 </**classes**>  
 </**test**>  
</**suite**>

**Example*:***

***pom.xml***

<**profiles**>  
 <**profile**>  
 <**id**>profile1</**id**>  
 <**build**>  
 <**pluginManagement**>  
 <**plugins**>  
 <**plugin**>  
 <**groupId**>org.apache.maven.plugins</**groupId**>  
 <**artifactId**>maven-surefire-plugin</**artifactId**>  
 <**version**>3.5.2</**version**>  
 <**configuration**>  
 <**suiteXmlFiles**>  
 <**suiteXmlFile**>regression.xml</**suiteXmlFile**>  
 </**suiteXmlFiles**>  
 </**configuration**>  
 </**plugin**>  
 </**plugins**>  
 </**pluginManagement**>  
 </**build**>  
 </**profile**>  
  
  
 <**profile**>  
 <**id**>profile2</**id**>  
 <**build**>  
 <**pluginManagement**>  
 <**plugins**>  
 <**plugin**>  
 <**groupId**>org.apache.maven.plugins</**groupId**>  
 <**artifactId**>maven-surefire-plugin</**artifactId**>  
 <**version**>3.5.2</**version**>  
 <**configuration**>  
 <**suiteXmlFiles**>  
 <**suiteXmlFile**>smoke.xml</**suiteXmlFile**>  
 </**suiteXmlFiles**>  
 </**configuration**>  
 </**plugin**>  
 </**plugins**>  
 </**pluginManagement**>  
 </**build**>  
 </**profile**>  
</**profiles**>

**Command to Run:**

* ***mvn clean test -P profile1***

105 – What is Jenkins and why we use that?

**What is Jenkins?**

* Jenkins is a automation server.

**Why we use that?**

* It is used in **CI/CD** to ***automate*** the ***software development process*** by building, testing, and deploying applications efficiently.

**Example:**

* Once Developer pushes code to GitHub then Jenkins will automatically trigger a build and runs automation tests (e.g., Selenium for UI automation). If tests pass, Jenkins deploys the application to a staging or production server.

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