

# Assert and Verify in Selenium:

- Both assert and Verify in Selenium are used to find out if the given input on the web page exists or not.

## Two things we Assert / Verify using Selenium:

1. Verify / Assert Text Present in Web Page.
2. Verify / Assert Element Present in Web Page.



**stqatools.com**  
SELENIUM | JAVA

# ASSERT & VERIFY IN SELENIUM

## 1. Verify / Assert Text Present in WebPage.

## 2. Verify / Assert WebElement Present in WebPage.

## Verify Text Present :

- Before or after the testing phase, we need to see if specific text is displayed or not.

```
1  if(driver.getPageSource().contains("stqatools"))
2
3  {
4
5  System.out.println("Name is Present");
6
7  }
8
9  else
10
11 {
12
13 System.out.println("Name is not Present");
14
15 }
```

## Assert Text Present :

- We need to stop scripts to stop if certain assertion fails.

```
1  assertTrue(driver.getPageSource().contains("stqatools"));
```

## Verify Element Present :

- Verify element is present or not in Web Page using in-Built methods.

```
1 !driver.findElements(By.id("id")).isEmpty();
2
3 // OR
4
5 if(isElementPresent(By.linkText("Submit_Button"))){
6
7 {
8
9 System.out.println("Submit_Button Link/Button found");
10
11 }
12
13 else
14
15 {
16
17 System.out.println("Submit_Button Link/Button not found");
18
19 }
```

## Assert Element Present :

- Assert element is present or not, If not present then then Halt process.

```
1 assertTrue(isElementPresent(By.cssSelector("div.stqatools")));
```

## Assert:

- When the “assert” command fails, the test execution will be canceled. So when the Assertion fails, then all test steps are skipped / omitted after that line of code.
- The solution to overcome this issue is to use a try-catch block.
- We use try-catch in the block.
- Mostly, the assurance order is used when the final result of the check value should be passed to continue in the next step.
- In simple terms, if the assert condition is true then the program control will execute the next testing phase, but if the situation is wrong, the execution will stop and further testing phase will not be executed.
- Failure of verification The execution of that particular test method is stopped and the test method has been marked as failed.
- When an “assert” fails, the test will be aborted / stopped.

## Example: Verify string using assertTrue.

```
1 String str = driver.findElement(By.xpath("xpath")).getText();
2
3 assertTrue(actualString.contains("specific text"));
```

## Example of Assert:

```
1  import static org.testng.Assert.assertEquals;
2  import java.util.List;
3  import org.openqa.selenium.By;
4  import org.openqa.selenium.WebDriver;
5  import org.openqa.selenium.WebElement;
6  import org.openqa.selenium.chrome.ChromeDriver;
7  import org.testng.Assert;
8
9  public class Assert_Example {
10
11      public static void main(String args[]) {
12
13          String Actual = "Actual";
14          String Expected = "Expected";
15
16          // Assertion Passing
17          Assert.assertTrue(Actual == Actual);
18
19          System.out.println("Passing 1");
20
21          // Assertion failing
22          Assert.fail("Failing 2");
23
24          System.out.println("Failing 2");
25
26          // Check Assert Equals
27          assertEquals(Actual, Expected);
28      }
29 }
```

## Verify:

- When the “Verify” command fails, then execution will continue and logging the failure.
- Mostly, the verification command is used to view non-critical things.
- In cases where we move forward, though the end result of the check value has failed.
- In simple words, there will be no interruption in test execution, even if the verification status is true or false.
- Verify has been verified using the SoftAssert class.
- **softAssert.assertAll();** – Execution will Continue and Execute with other assertions until the last step softAssert.assertAll(); exist.

## Example of Verify:

```
1  import org.testng.asserts.SoftAssert;
2
3  public class Verify_Example {
4
5      public static void main(String args[]) {
6
7          // Creating softAssert object
8          SoftAssert softAssert = new SoftAssert();
```

```

9
10 // Assertion failing
11 softAssert.fail("Failing first assertion");
12
13 System.out.println("Failing 1");
14
15 // AssertAll use to make test case fail in report all scripts will
16 softAssert.assertAll();
17 }
18 }

```

### Output:

```
1 Failing 1
```

### Difference between assert and verify in selenium:

Verify	Assert
<ul style="list-style-type: none"> <li>if “verify” fails, then the test will continue executing and logging the failure.</li> </ul>	<ul style="list-style-type: none"> <li>If the “assert” fails, the test will be aborted and stop execution.</li> </ul>
<ul style="list-style-type: none"> <li>Verify Text Present / Verify Element present using contains If / Else loop.</li> </ul>	<ul style="list-style-type: none"> <li>Assert Text Present / Verify Element present or not using assertTrue method.</li> </ul>
<ul style="list-style-type: none"> <li>Verify can be verified using the SoftAssert class.</li> </ul>	<ul style="list-style-type: none"> <li>Assertion done using “Assert” method.</li> </ul>

### Question 1. What happens if verify is failed in selenium?

- If “verify” method fails then the test will continue executing and logging the failure without any interrupt and end of the result status mark as fail in report.

### Question 2. What happens if Assert is failed in selenium?

- If “Assert” method fails then all test steps after that line of code are skipped and stop execution. Apart from that we can use Try and Catch block to avoid this situation.

### Question 3. What is verification in selenium.

- Verification** is the static practice use in selenium of verifying documents, design, code and program are implemented properly as per requirements.