

JUNIT

- JUNIT—Java Unit Testing.
- JUNIT is a one kind of framework.

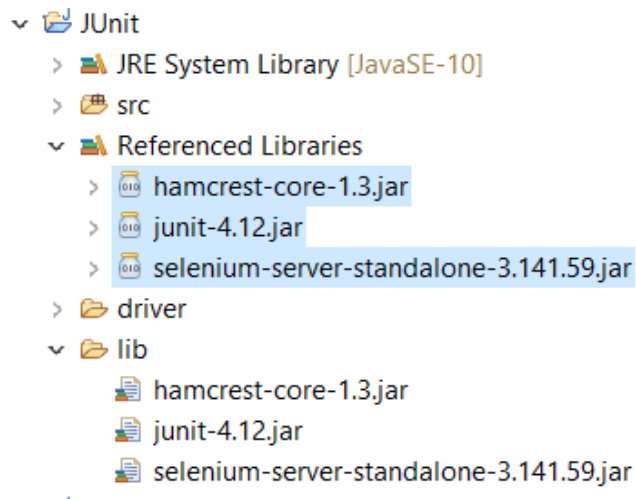
ADVANTAGE OF JUNIT:

- Easy to set the verification point
- Easy to verify the business Logic
- User Friendly
- Easy to identify positive, negative, failed and skipped test cases.

Here there is no main method we are using some annotations.

STEPS:

- Download the junit jar
“JUnit 4.12.jar”
If we were facing any error in junit while run the test case then need to download one more jar file.
“Hamcrest-core-1.3.jar”
- Add the junit jar in the eclipse build path



ANNOTATIONS IN JUNIT:

- @BeforeClass
- @Before

- @Test
- @After
- @AfterClass
- @Ignore
- @RunWith
- @Suite

@BeforeClass:

The annotated method will be run before the first test method in the class is invoked.

Before Class method should be static.

@AfterClass:

The annotated method will be run after all the test method will be executed.

After Class method should be static.

@Before:

The annotated method will be run before invoke the each and every test method.

@After:

The annotated method will be run after each and every test method will be executed.

@Test:

The annotated method is a part of test case.

“@Test is considered as the main method.”

Without @Test we can't run the program but without remaining annotation we can run the program.

“If we are having multiple @Test, the methods will be executed based upon the ascending order of the method name.”

Rules:

All method should be public

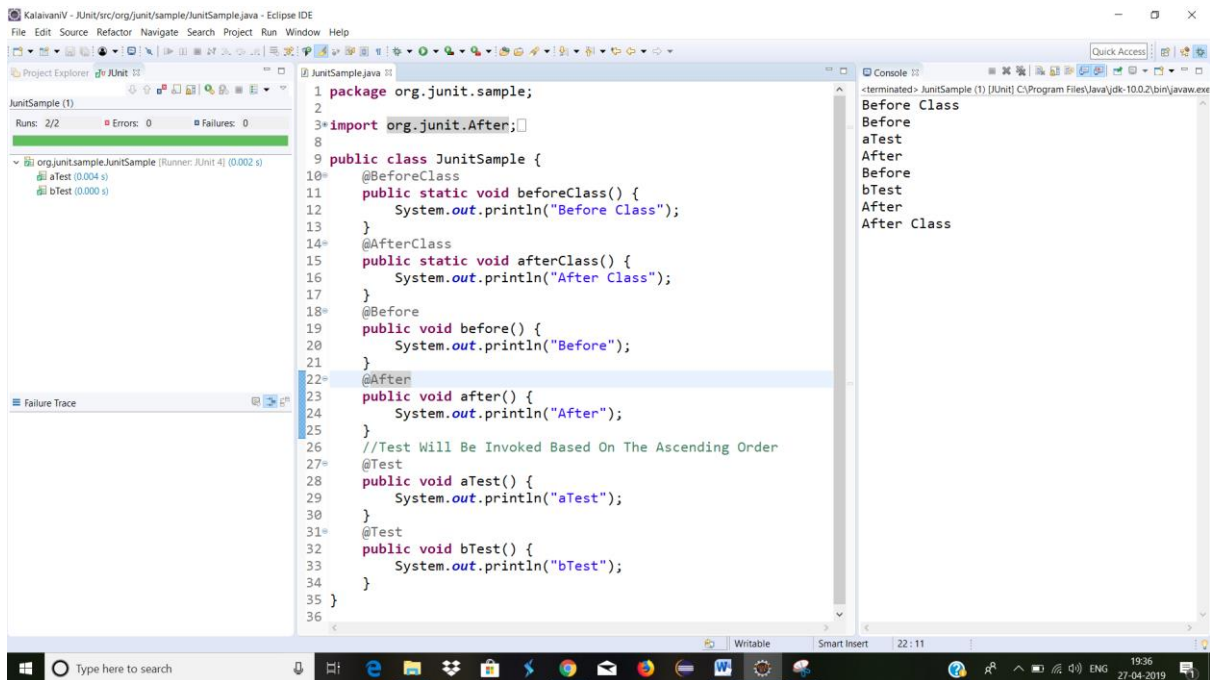
@BeforeClass and @AfterClass method should be public static

Order of the annotation:

@BeforeClass

@Before

@Test (aTest) (Based on ascending order)
@ After
@Before
@Test (bTest) (Based on ascending order)
@ After
@ AfterClass

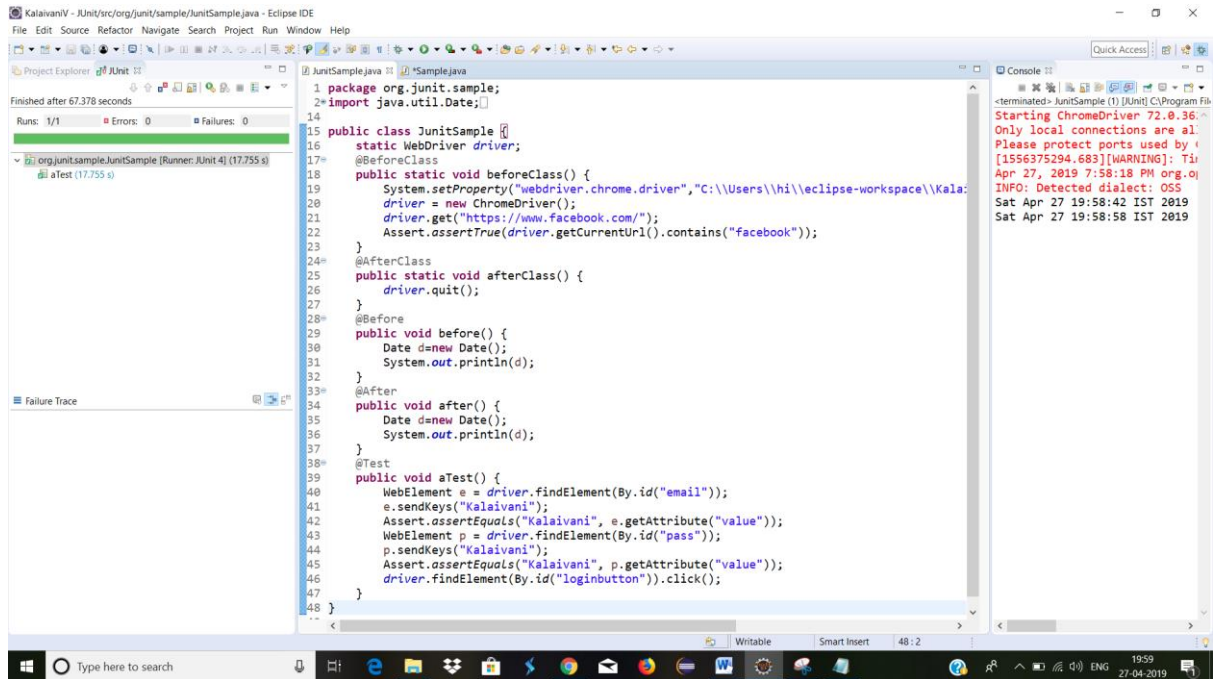


Assert and Verify:

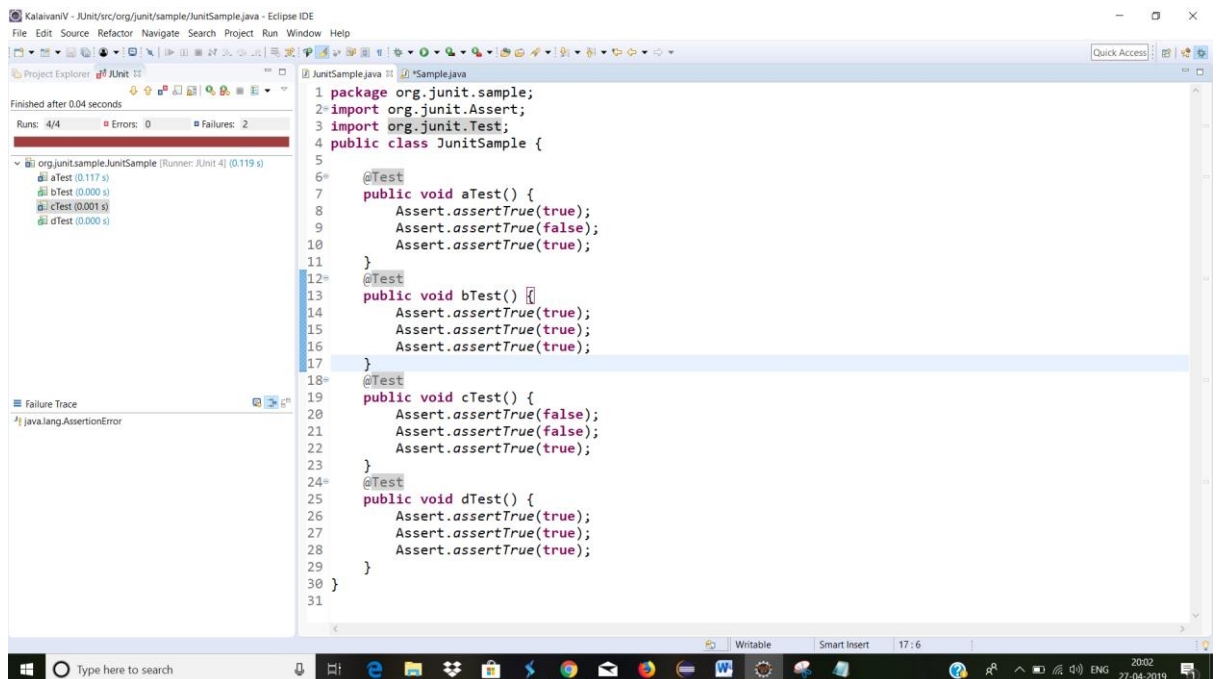
- "Assert" mean validation fails the execution of that particular test method is stopped and the test method is marked as failed and it will go to next test.
- "Verify", mean the test method continues execution even after the failure of an assertion statement. Although the test method will still be marked as failed but the remaining statements of the test method will be executed normally.

Class Name: Assert

Method Name: assertTrue (Boolean condition)
assertEquals (Expected, Actual)



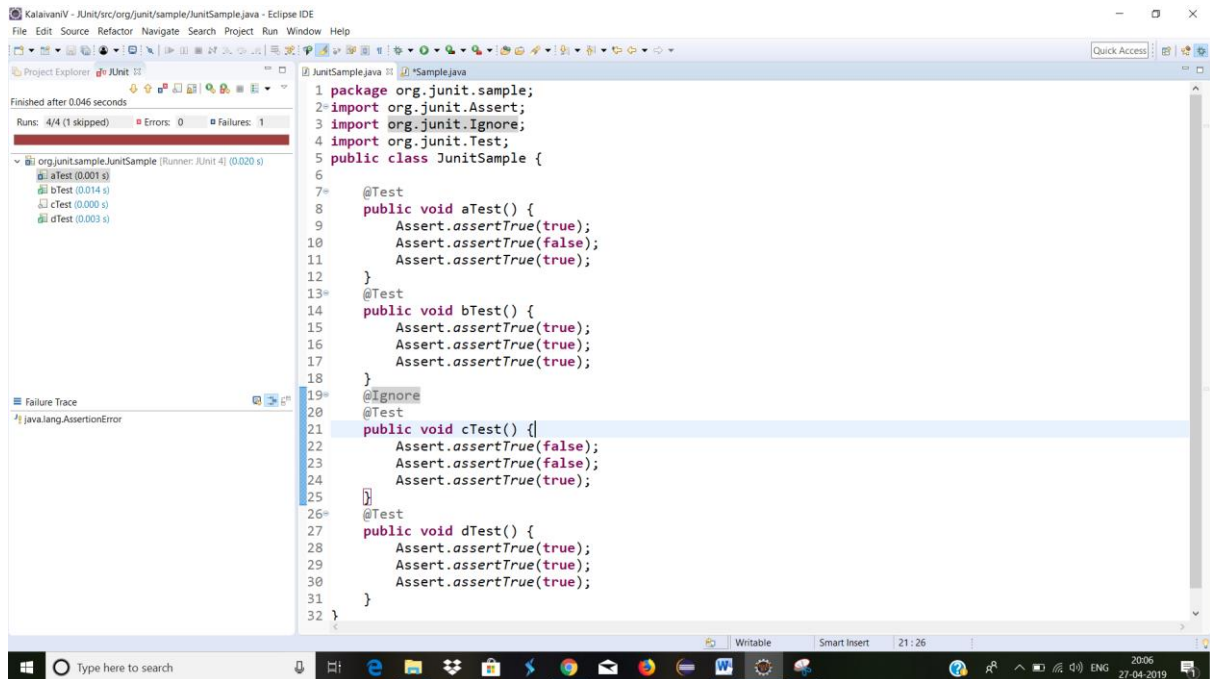
If we are facing any assertion error, the program is not terminated. The particular test only stopped but it will go to next test and the test will be marked as failed.



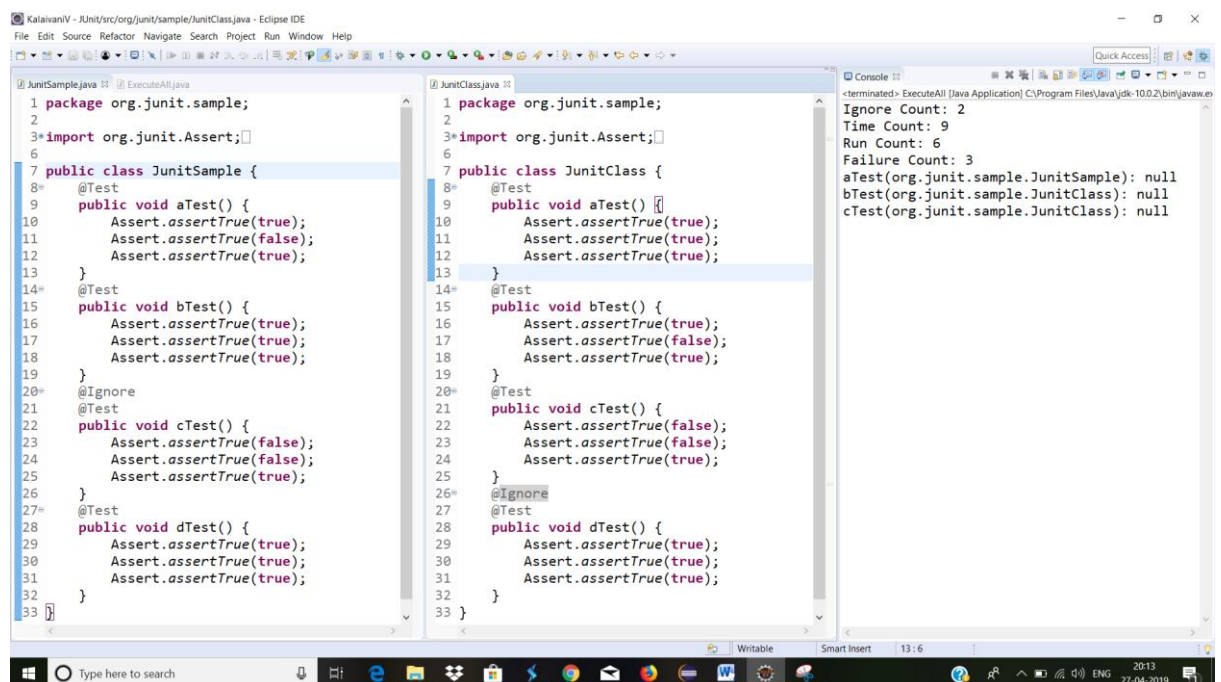
How to ignore the particular Test:

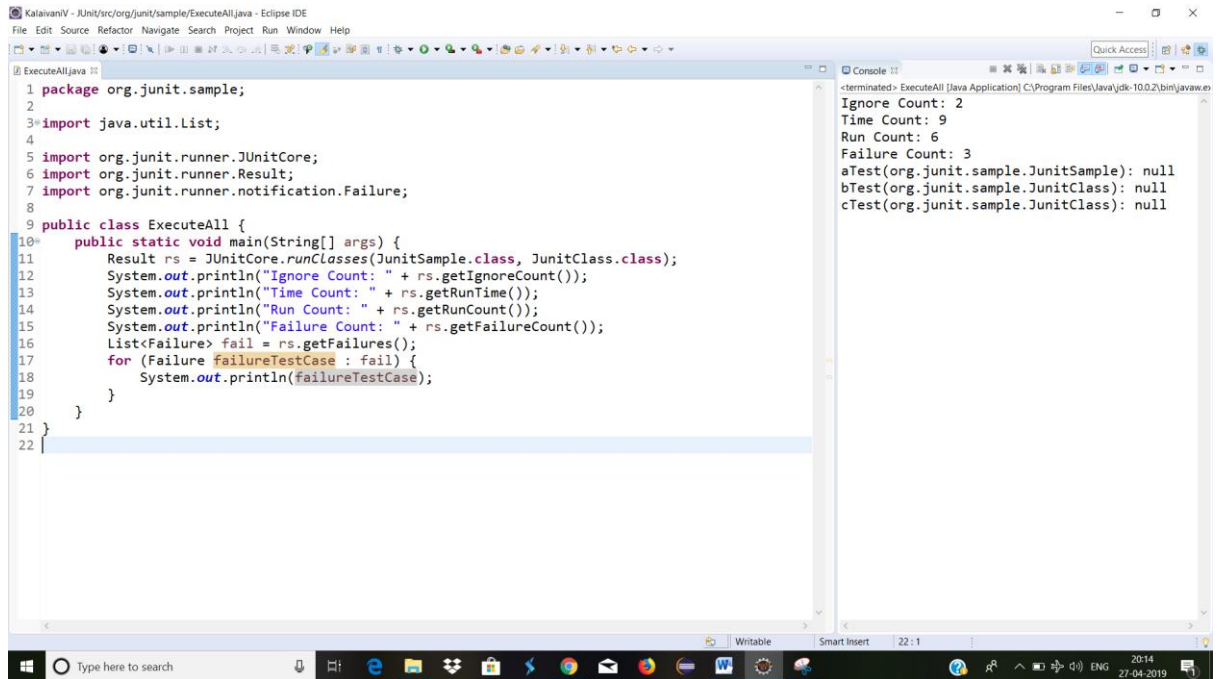
@Ignore:

The annotated method will be used to ignore the particular test from multiple tests.



If we want to count how much test case ignore, failure, time, run and to print the failed test cases.





How to run the multiple classes:

If we want to run multiple test class mean we are using suite class.

- Suite: Collection of test cases.
- Test case: Collection of tests.

