



JUnit Assertion Statements



What is JUnit assert ?

- Assert is a class offered by Junit that contains a number of assertion methods helpful for creating test cases and identifying test failure.
- Assert methods are used to determine whether the test case passed or failed.
- It is given by the class `org.junit.Assert`, which extends the `java.lang.Object` class.

Some examples of assert statements:

- `assertEquals(Expected , actual)` helps to check the equality of two primitives/objects are equal.

`assertEquals("hello" , "hello")` ✓

`assertEquals("hello" , "hi")` ✗

- `assertEquals(Expected, actual, 0.001)`: the delta parameter here helps to prevent issues with round-off errors when performing floating point comparisons.

Some examples of assert statements:

- `assertArrayEquals(expected, actual)` helps to check if the array is equal or not.

```
Int[] arr1 = {1, 2, 3} Int[] arr2 = {4, 5, 6}
```

```
assertArrayEquals(arr1, arr1) ✓
```

```
assertArrayEquals(arr1, arr2) ✗
```

- You can also compare the values at an index:

```
assertEquals(expected[i], actual[i])
```

Some examples of assert statements:

- `assertTrue(condition)` helps to check if the condition is true.

Eg: `int a = 10` and `b = 12`

`assertTrue(a < b)` ✓

`assertTrue(b < a)` ✗

- `assertFalse(condition)` helps to check if the condition is false.

Eg: `int a = 10` and `b = 12`

`assertFalse(a < b)` ✗

`assertFalse(b < a)` ✓

Some examples of assert statements:

- `assertNull(Object)`

It helps to check if the object is null.

- `assertNotNull(Object)`

It helps to check if the object is not null.

- `assertSame(Expected,Actual)`

It helps to check if the two objects are referring to same the object.

- `assertNotSame(Expected,Actual)`

It helps to check if the two objects are not referring to the same object.