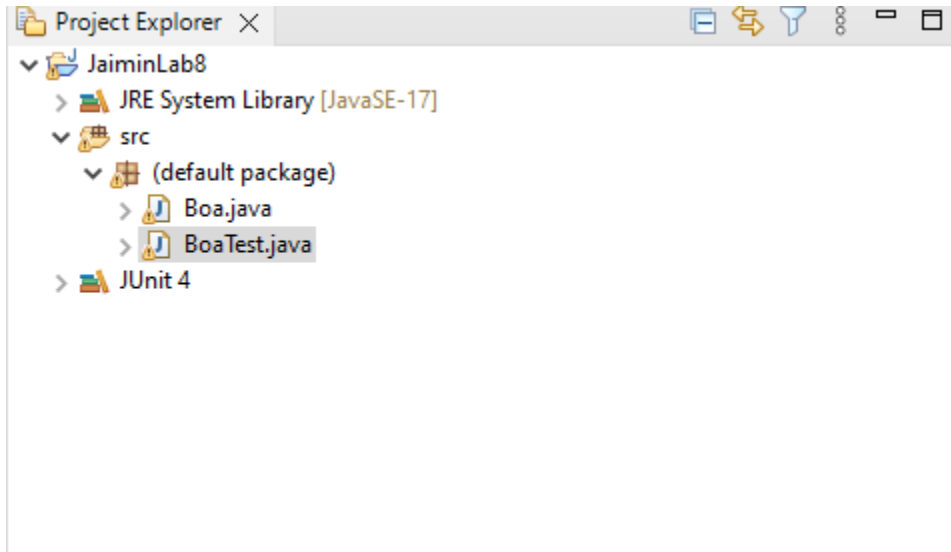


Software Engineering (IT314)

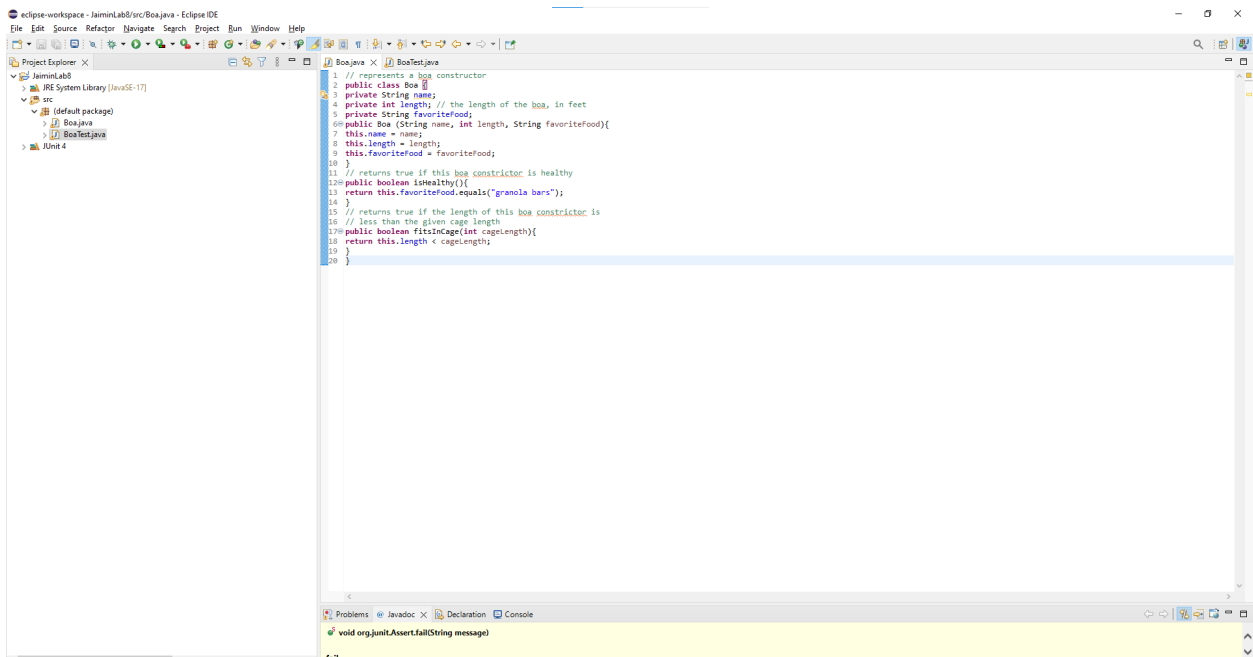
Name : Jaimin Rathwa

ID : 202001423

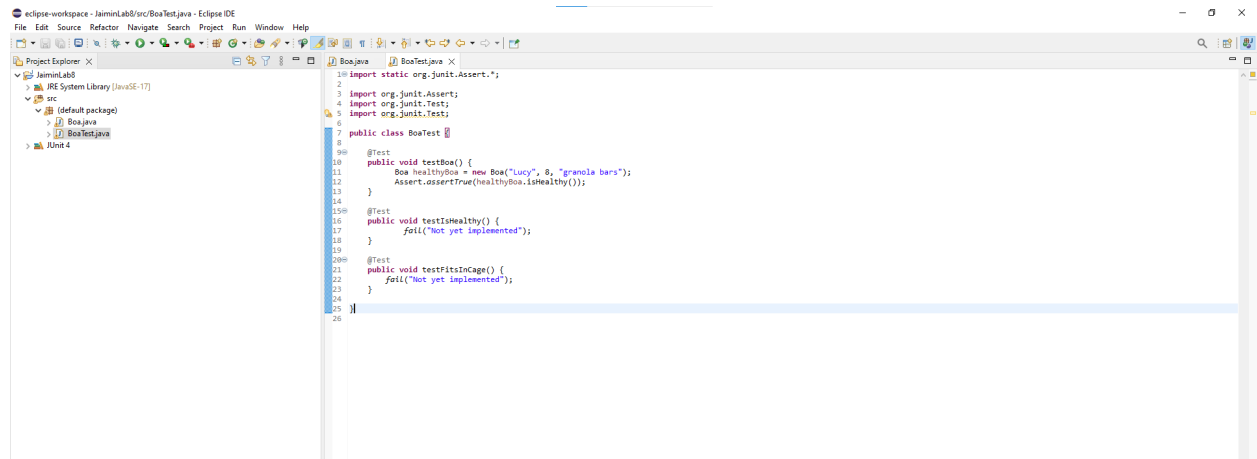
1> Creating a new eclipse project and a package within the project



2> Creating a class for Boa

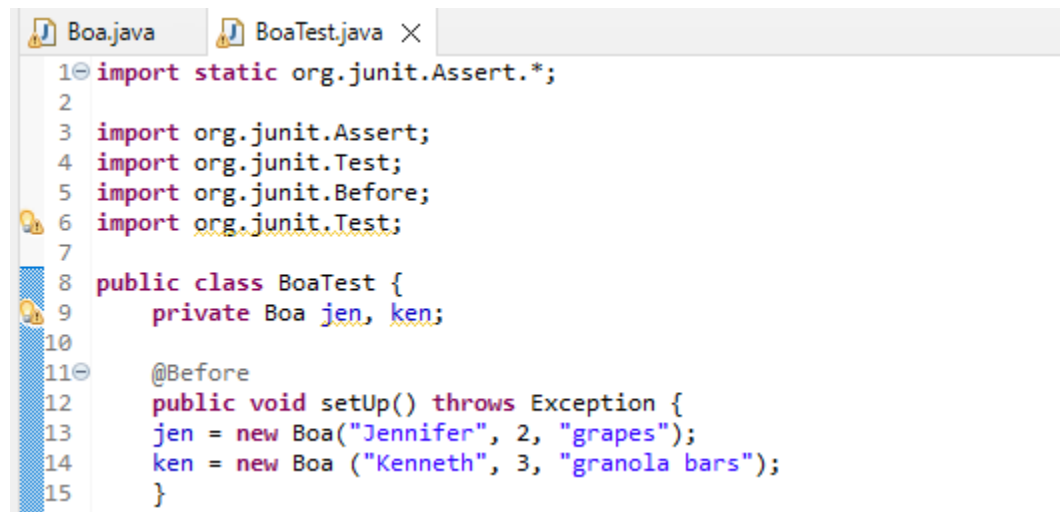


3> Creating a junit test case with methods isHealthy and fitsInCage.



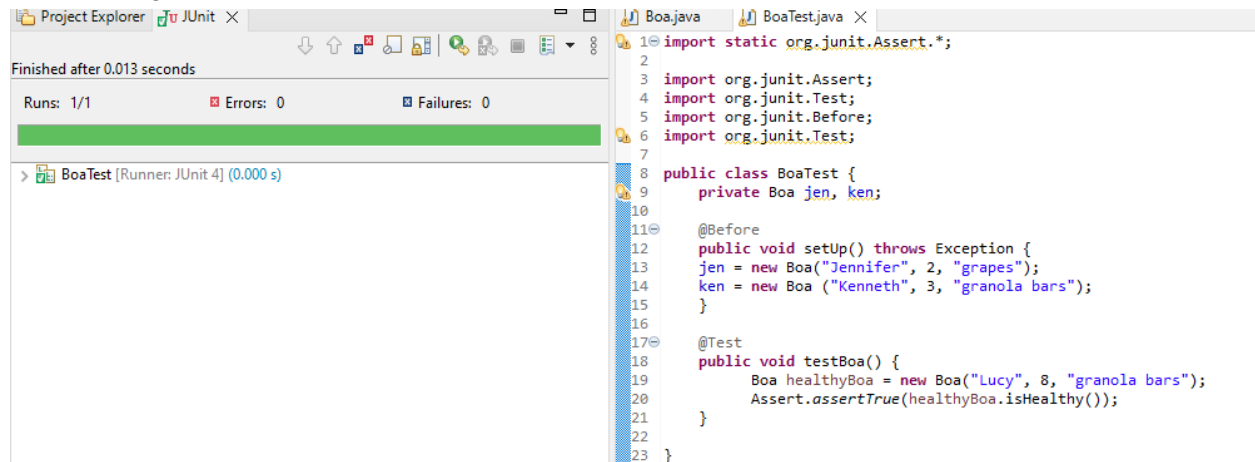
```
1 import static org.junit.Assert.*;
2
3 import org.junit.Assert;
4 import org.junit.Test;
5 import org.junit.Test;
6
7 public class BoaTest {
8
9     @Test
10     public void testBoa() {
11         Boa healthyBoa = new Boa("Lucy", 8, "granola bars");
12         Assert.assertTrue(healthyBoa.isHealthy());
13     }
14
15     @Test
16     public void testIsHealthy() {
17         fail("Not yet implemented");
18     }
19
20     @Test
21     public void testFitsInCage() {
22         fail("Not yet implemented");
23     }
24
25 }
```

4> Creating setup method and annotating with @Before and creating jen and ken objects of Boa class.

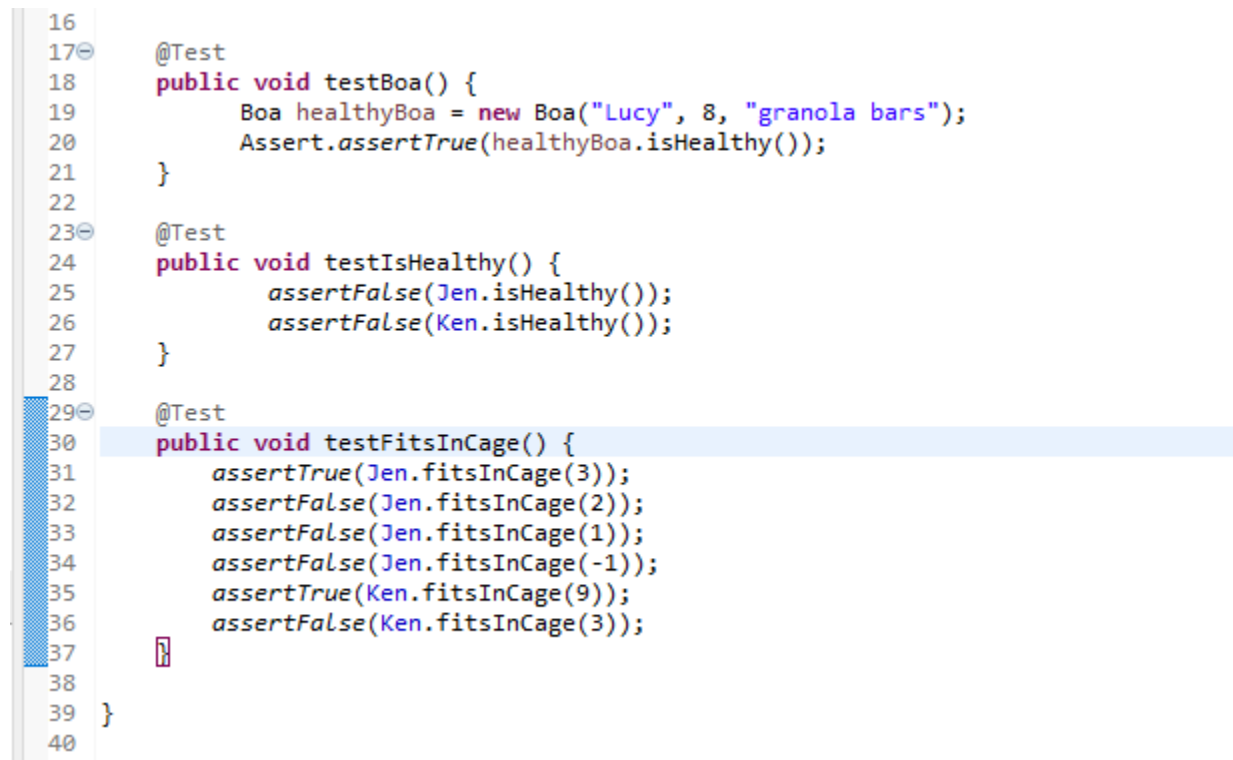


```
1 import static org.junit.Assert.*;
2
3 import org.junit.Assert;
4 import org.junit.Test;
5 import org.junit.Before;
6 import org.junit.Test;
7
8 public class BoaTest {
9     private Boa jen, ken;
10
11     @Before
12     public void setUp() throws Exception {
13         jen = new Boa("Jennifer", 2, "grapes");
14         ken = new Boa ("Kenneth", 3, "granola bars");
15     }
16 }
```

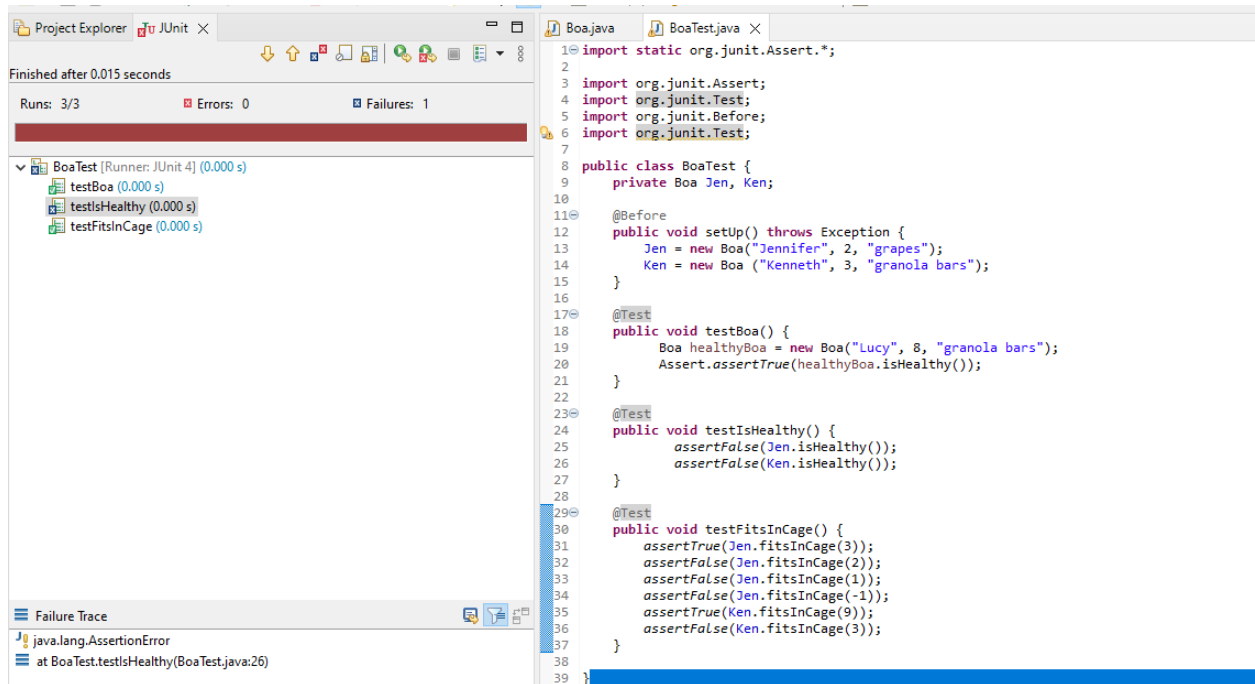
5 > Running Test Case



5> Writing tests for fitsInCage and isHealthy method



6 > Testing both



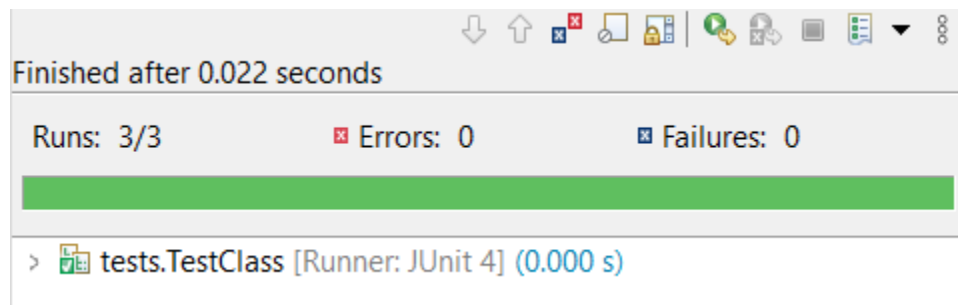
7> Writing code to convert length in inches

```
24 // produces the length of the Boa in inches
25 public int lengthInInches() {
26     return 12*this.length;
27 }
28 }
29 }
```

8> Writing the tests for length in inches.



```
35 |
36 @Test
37 public void testLengthInInches() {
38     assertEquals(24, jen.lengthInInches());
39     assertEquals(36, ken.lengthInInches());
40 }
41 }
```


9> Running Test



The image shows a JUnit test runner interface. At the top, there is a toolbar with various icons for navigation and actions. Below the toolbar, the text "Finished after 0.022 seconds" is displayed. The main area shows the test results: "Runs: 3/3", "Errors: 0", and "Failures: 0". A green progress bar is visible below the results. At the bottom, there is a list of test classes, with "tests.TestClass [Runner: JUnit 4] (0.000 s)" being the first entry.

Finished after 0.022 seconds

Runs: 3/3  Errors: 0  Failures: 0

>  tests.TestClass [Runner: JUnit 4] (0.000 s)