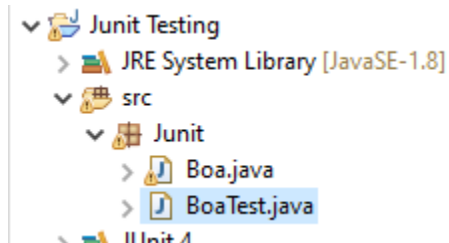


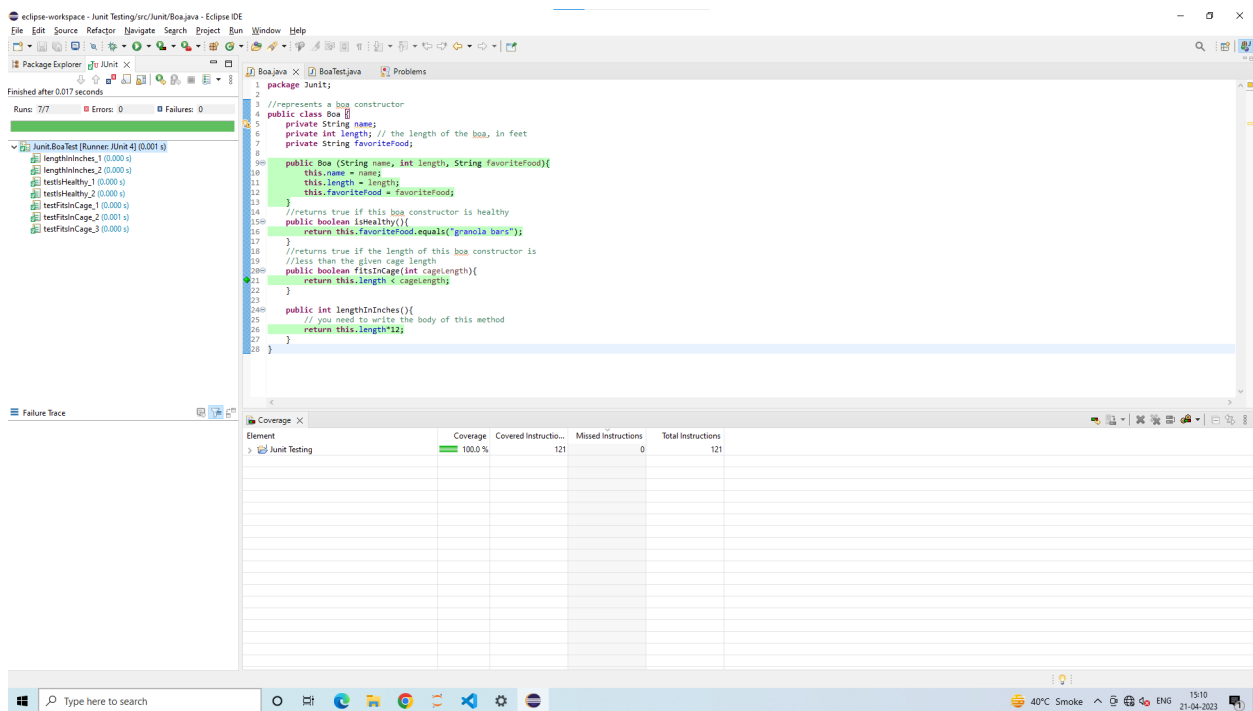
Name: Rishit Shah  
Student ID: 202001411

## Software Engineering Lab 8

### 1) Creating new Java project:



### 2) Boa.java file:



### 3) BoaTest.java file:

→ Created 7 test cases:

2 for checking isHealthy() function

2 for checking lengthInches() function  
3 for fitsInCage() function

eclipse-workspace - Junit Testing/src/junit/BoaTest.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer: JUnit X

Finished after 0.017 seconds

Runs: 7/7 Errors: 0 Failures: 0

JUnit: BoaTest (Runner: JUnit4) (0.001 s)

- lengthInches\_1 (0.000 s)
- lengthInches\_2 (0.000 s)
- testIsHealthy\_1 (0.000 s)
- testIsHealthy\_2 (0.000 s)
- testFitsInCage\_1 (0.000 s)
- testFitsInCage\_2 (0.001 s)
- testFitsInCage\_3 (0.000 s)

```
1 package junit;  
2  
3 import static org.junit.Assert.*;  
4  
5 public class BoaTest {  
6  
7     private Boa jen;  
8     private Boa ken;  
9  
10    @Before  
11    public void setUp() throws Exception {  
12        jen = new Boa("Jennifer", 2, "grapes");  
13        ken = new Boa("Kenneth", 3, "graciosa bars");  
14    }  
15  
16    @Test  
17    public void testIsHealthy_1() {  
18        boolean output = jen.isHealthy();  
19        assertEquals(output, false);  
20    }  
21  
22    @Test  
23    public void testIsHealthy_2() {  
24        boolean output = ken.isHealthy();  
25        assertEquals(output, true);  
26    }  
27  
28    @Test  
29    public void testFitsInCage_1() {  
30        boolean output = jen.fitsInCage(5);  
31        assertEquals(output, true);  
32    }  
33  
34    @Test  
35    public void testFitsInCage_2() {  
36        boolean output = jen.fitsInCage(1);  
37        assertEquals(output, false);  
38    }  
39  
40    @Test  
41    public void testFitsInCage_3() {  
42        boolean output = ken.fitsInCage(4);  
43        assertEquals(output, false);  
44    }  
45  
46    @Test  
47    public void lengthInches_1() {  
48        int output = jen.lengthInches();  
49        assertEquals(output, 24);  
50    }  
51  
52    @Test  
53    public void lengthInches_2() {  
54        int output = ken.lengthInches();  
55        assertEquals(output, 36);  
56    }  
57  
58    }  
59
```

Failure Trace

Element	Coverage	Covered Instructions	Missed Instructions	Total Instructions
Junit Testing	100.0 %	121	0	121

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eclipse-workspace - Junit Testing/src/junit/BoaTest.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer: JUnit X

Finished after 0.017 seconds

Runs: 7/7 Errors: 0 Failures: 0

JUnit: BoaTest (Runner: JUnit4) (0.001 s)

- lengthInches\_1 (0.000 s)
- lengthInches\_2 (0.000 s)
- testIsHealthy\_1 (0.000 s)
- testIsHealthy\_2 (0.000 s)
- testFitsInCage\_1 (0.000 s)
- testFitsInCage\_2 (0.001 s)
- testFitsInCage\_3 (0.000 s)

```
25  
26    assertEquals(output, true);  
27  
28    @Test  
29    public void testFitsInCage_1() {  
30        boolean output = jen.fitsInCage(5);  
31        assertEquals(output, true);  
32    }  
33  
34    @Test  
35    public void testFitsInCage_2() {  
36        boolean output = jen.fitsInCage(4);  
37        assertEquals(output, false);  
38    }  
39  
40    @Test  
41    public void testFitsInCage_3() {  
42        boolean output = jen.fitsInCage(2);  
43        assertEquals(output, false);  
44    }  
45  
46    @Test  
47    public void lengthInches_1() {  
48        int output = jen.lengthInches();  
49        assertEquals(output, 24);  
50    }  
51  
52    @Test  
53    public void lengthInches_2() {  
54        int output = ken.lengthInches();  
55        assertEquals(output, 36);  
56    }  
57  
58    }  
59
```

Failure Trace

Element	Coverage	Covered Instructions	Missed Instructions	Total Instructions
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