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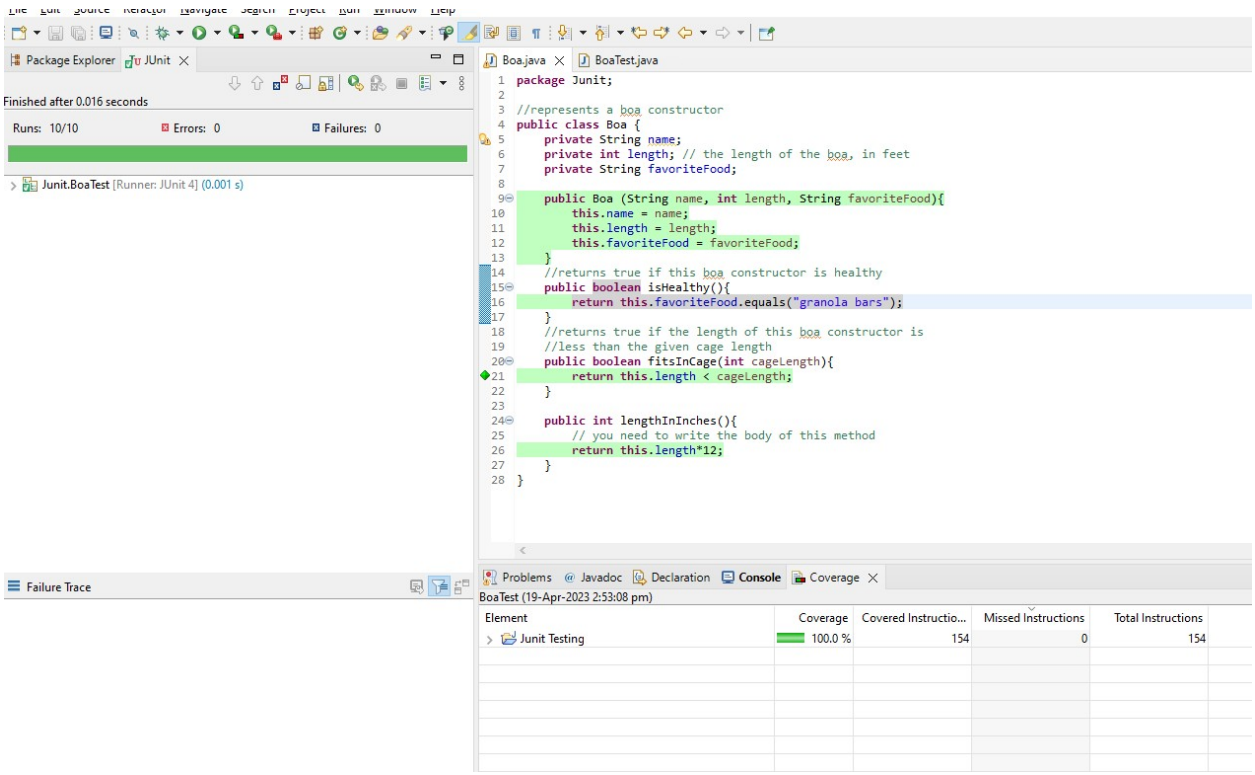
IT314 - LAB-08

1] Boa.java

Code:

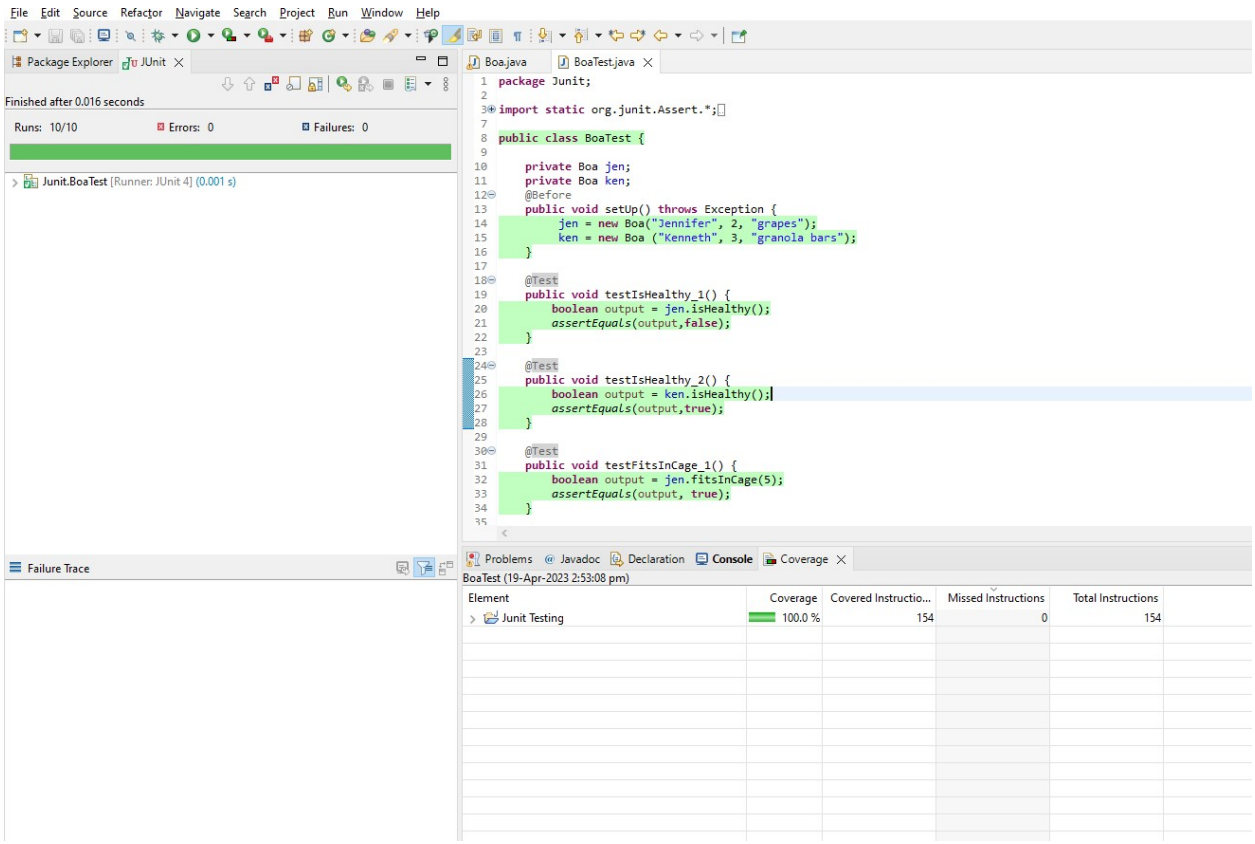
```
public class Boa {
	private String name;
	private int length; // the length of the boa, in feet
	private String favoriteFood;
	public Boa (String name, int length, String favoriteFood){
		this.name = name;
		this.length = length;
		this.favoriteFood = favoriteFood;
	}
	// returns true if this boa constrictor is healthy
	public boolean isHealthy(){
		return this.favoriteFood.equals("granola bars");
	}
```

```
        // returns true if the length of this boa constrictor is
        // less than the given cage length
        public boolean fitsInCage(int cageLength){
                return this.length < cageLength;
        }
}
```



2] BoaTest.java file:

Created 10 test cases: 2 for checking isHealthy() function, 6 for fitsInCage() function and 2 for lengthInInches() function


File Edit Source Refactor Navigate Search Project Run Window Help
Package Explorer JUnit
Finished after 0.016 seconds
Runs: 10/10
Errors: 0
Failures: 0
Junit.BoaTest [Runner: JUnit 4] (0.001 s)
Failure Trace
Boa.java
BoaTest.java
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 @Before
10 public void setUp() throws Exception {
11 jen = new Boa("Jennifer", 2, "grapes");
12 ken = new Boa ("Kenneth", 3, "granola bars");
13 }
14
15 @Test
16 public void testIsHealthy_1() {
17 boolean output = jen.isHealthy();
18 assertEquals(output,false);
19 }
20
21 @Test
22 public void testIsHealthy_2() {
23 boolean output = ken.isHealthy();
24 assertEquals(output,true);
25 }
26
27 @Test
28 public void testFitsInCage_1() {
29 boolean output = jen.fitsInCage(5);
30 assertEquals(output, true);
31 }
32
Problems Javadoc Declaration Console Coverage
BoaTest (19-Apr-2023 2:53:08 pm)
Element
Coverage
Covered Instructio...
Missed Instructions
Total Instructions
Junit Testing
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154
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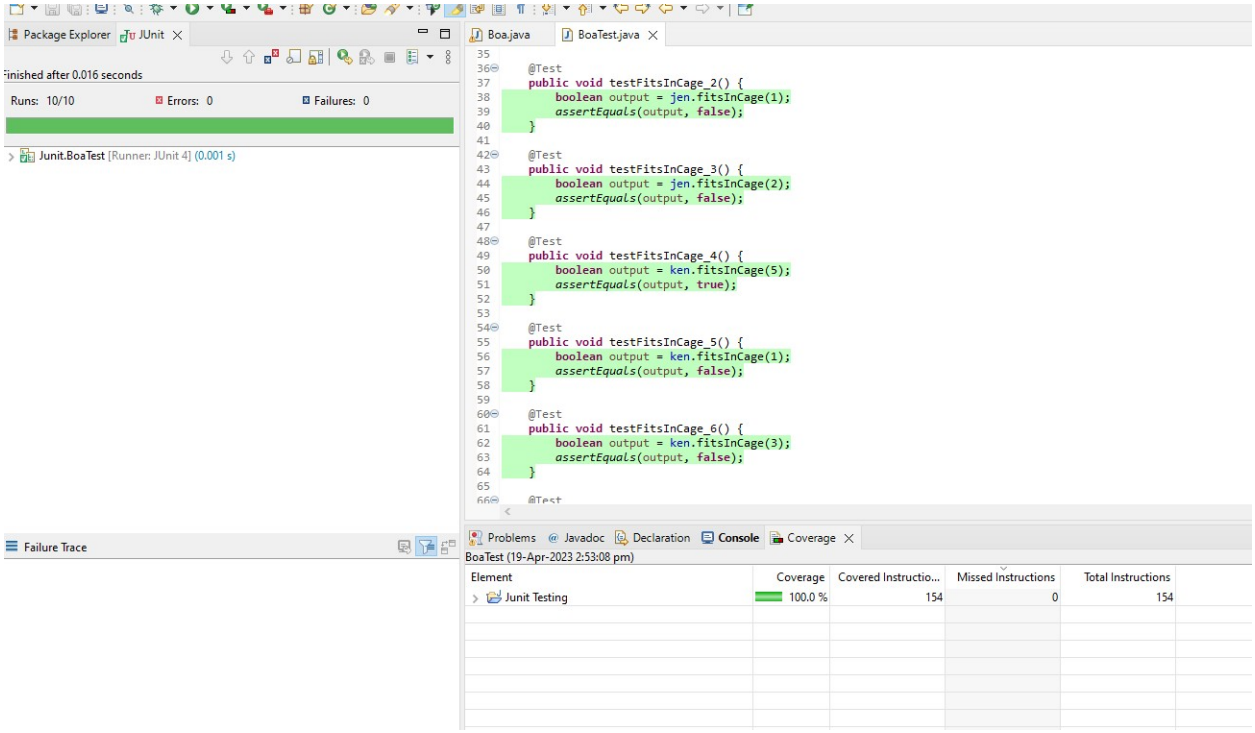
154


Package Explorer
JUnit
Finished after 0.016 seconds
Runs: 10/10
Errors: 0
Failures: 0
Junit.BoaTest [Runner: JUnit 4] (0.001 s)
Failure Trace
Boa.java
BoaTest.java
@Test
public void testFitsInCage_2() {
boolean output = jen.fitsInCage(1);
assertEquals(output, false);
}
@Test
public void testFitsInCage_3() {
boolean output = jen.fitsInCage(2);
assertEquals(output, false);
}
@Test
public void testFitsInCage_4() {
boolean output = ken.fitsInCage(5);
assertEquals(output, true);
}
@Test
public void testFitsInCage_5() {
boolean output = ken.fitsInCage(1);
assertEquals(output, false);
}
@Test
public void testFitsInCage_6() {
boolean output = ken.fitsInCage(3);
assertEquals(output, false);
}
Problems
Javadoc
Declaration
Console
Coverage
BoaTest (19-Apr-2023 2:53:08 pm)
Element
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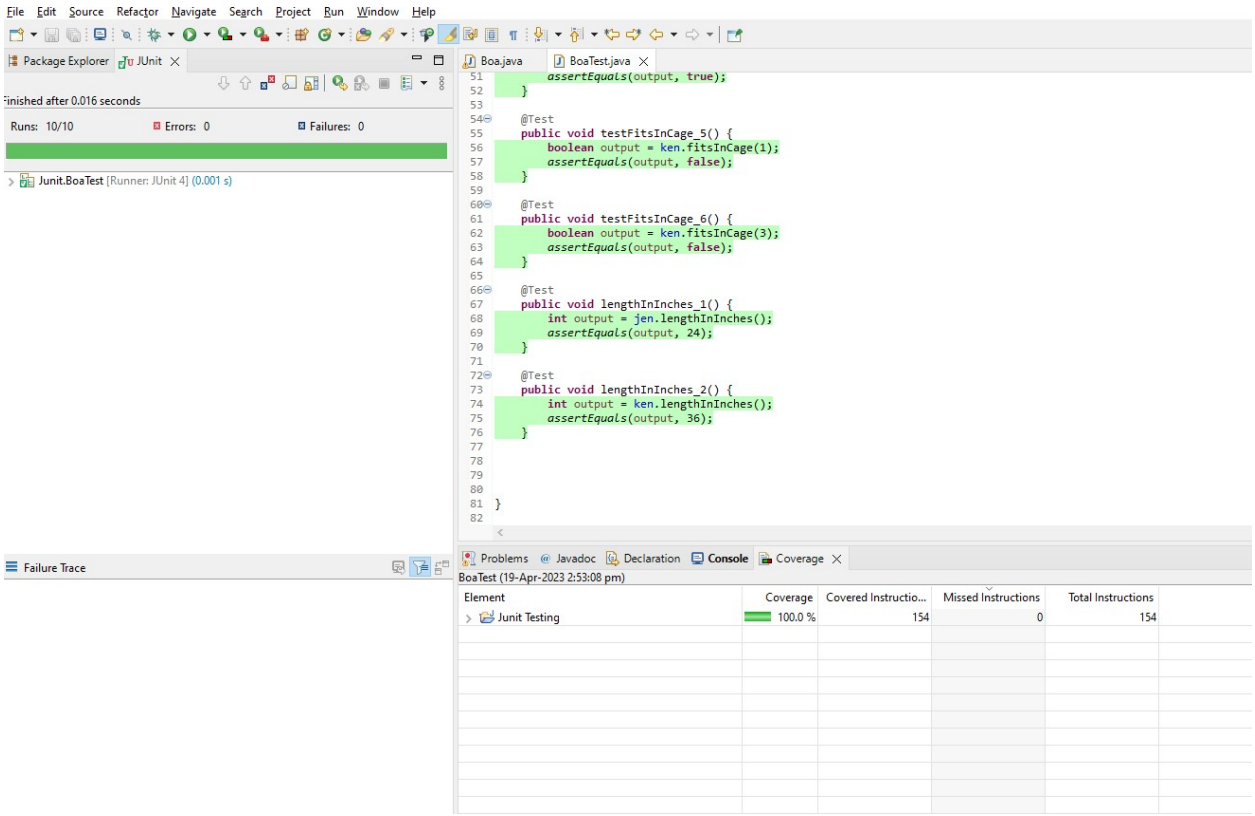
File Edit Source Refactor Navigate Search Project Run Window Help
Package Explorer
JUnit
Finished after 0.016 seconds
Runs: 10/10
Errors: 0
Failures: 0
Junit.BoaTest [Runner: JUnit 4] (0.001 s)
Failure Trace
Boa.java
BoaTest.java
assertEquals(output, true);
}
@Test
public void testFitsInCage_5() {
boolean output = ken.fitsInCage(1);
assertEquals(output, false);
}
@Test
public void testFitsInCage_6() {
boolean output = ken.fitsInCage(3);
assertEquals(output, false);
}
@Test
public void lengthInInches_1() {
int output = jen.lengthInInches();
assertEquals(output, 24);
}
@Test
public void lengthInInches_2() {
int output = ken.lengthInInches();
assertEquals(output, 36);
}
}
Problems
Javadoc
Declaration
Console
Coverage
BoaTest (19-Apr-2023 2:53:08 pm)
Element
Coverage
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Missed Instructions
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