Software Engineering
(IT314)

Lab - 8
(Unit Testing With JUnit)

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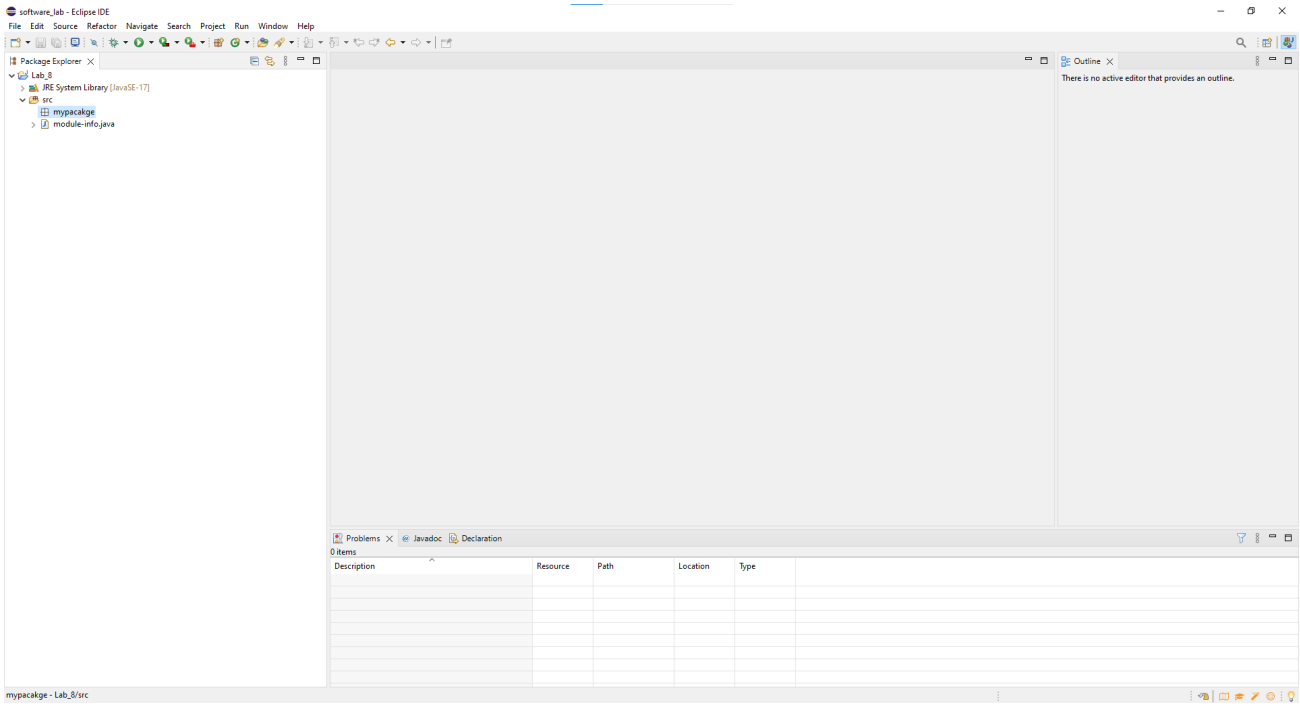
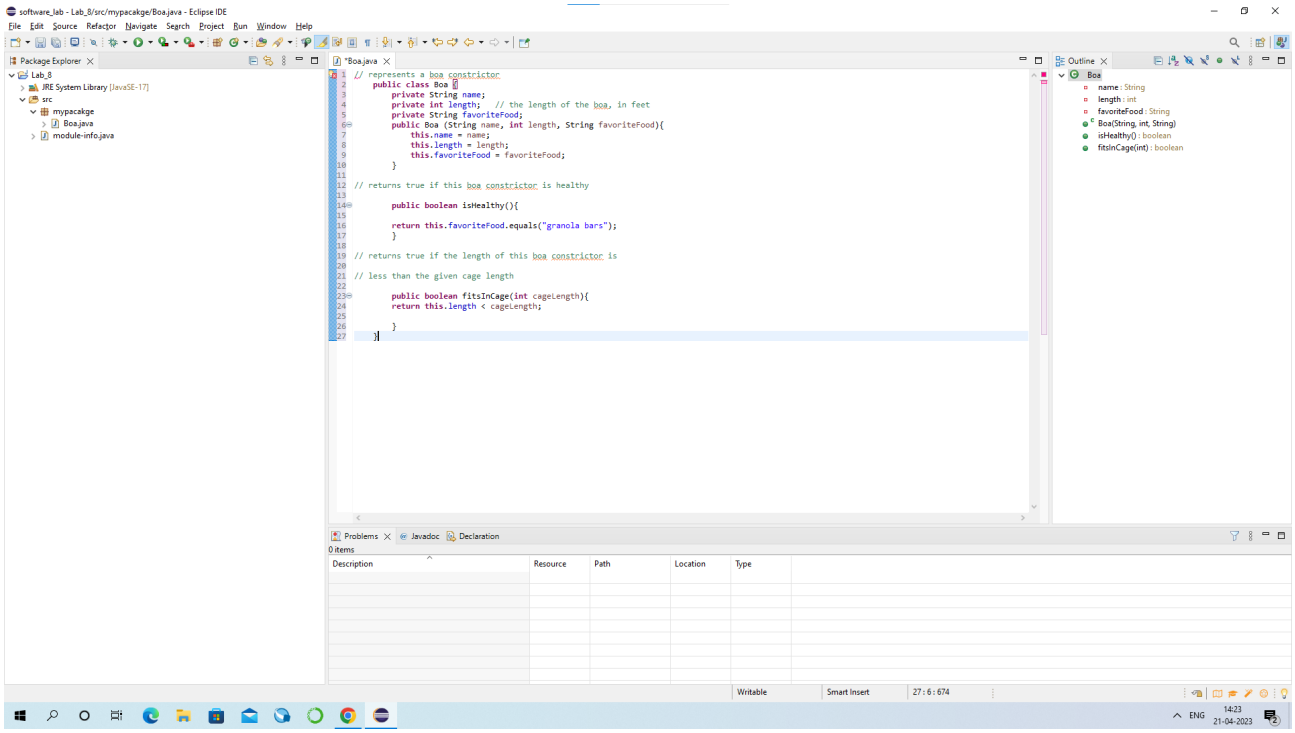
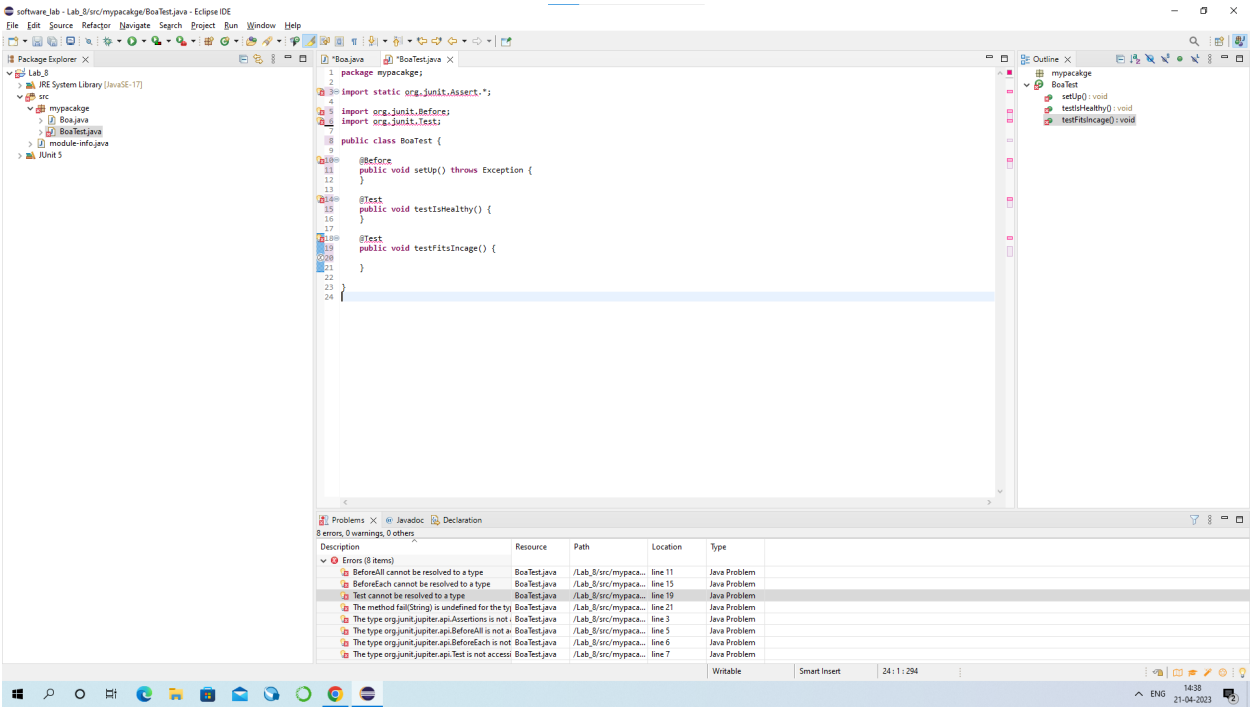
1. Create a new Eclipse project and also a package named `mypackage`



2. Create a class for a Boa and add a test code for it



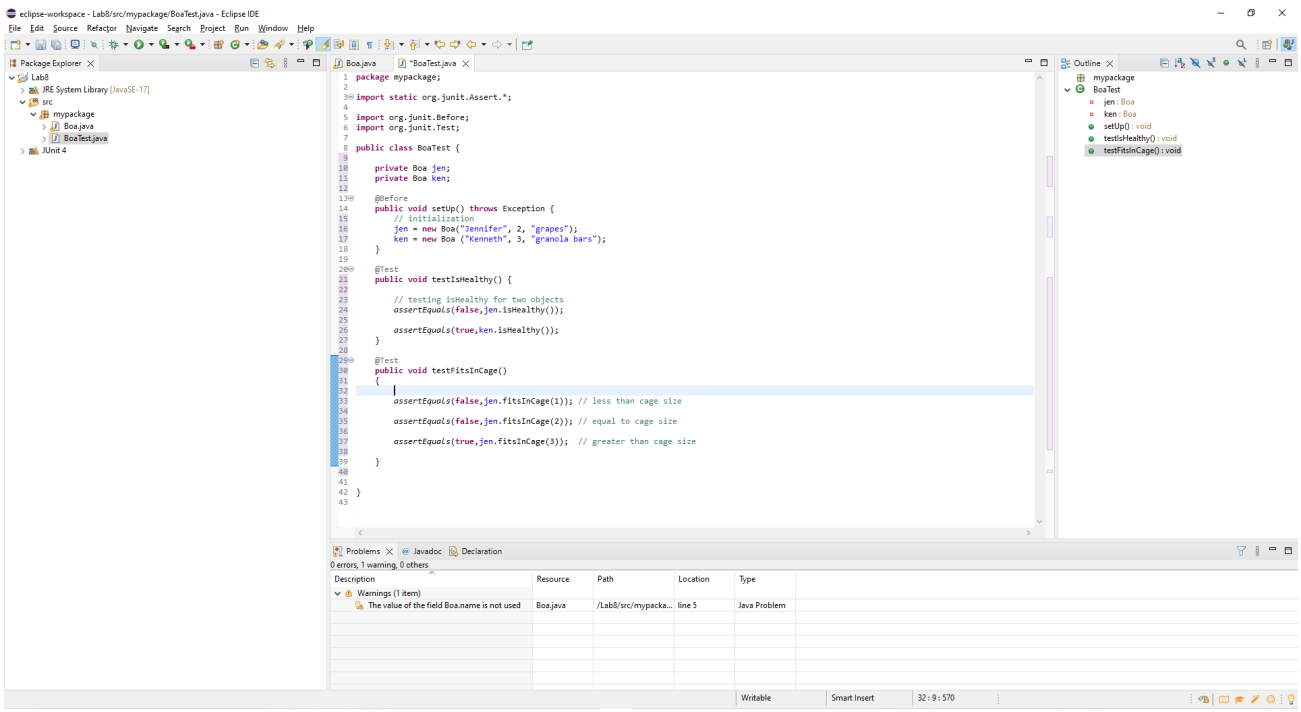
3. Create a JUnit test file for the Boa Class named `BoaTest`



4. Added code for `setUp` method

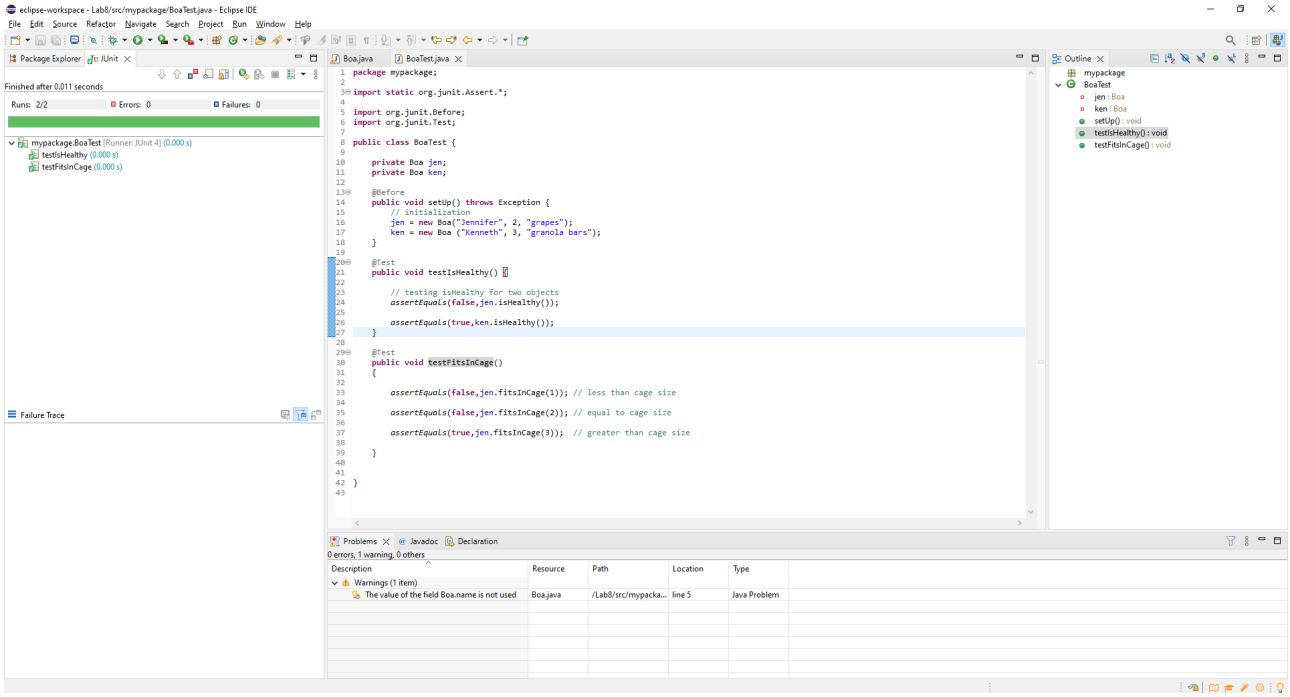
```
@Before
public void setUp() throws Exception {
     jen = new Boa("Jennifer", 2, "grapes");
     ken = new Boa ("Kenneth", 3, "granola bars");
}
```

5. Tests for the given two functions `testIsHealthy` and `testFitsInCage`



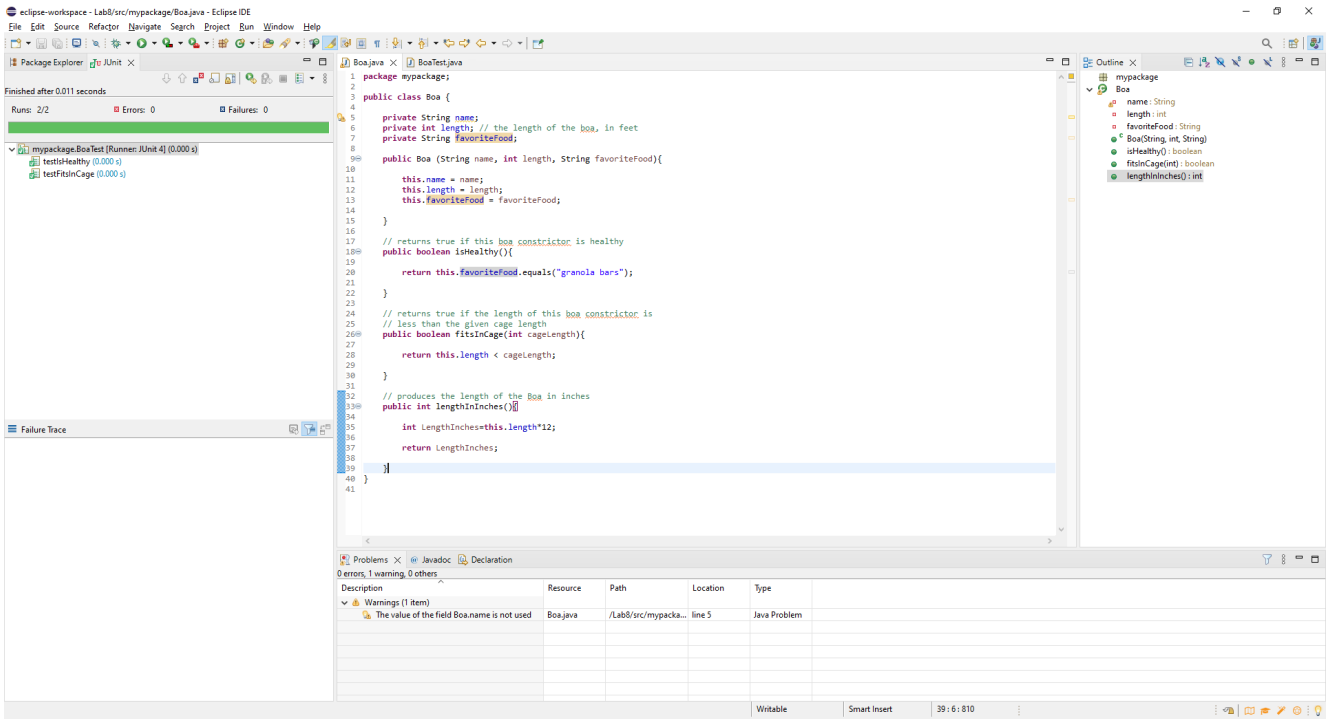
- It is not necessary to develop tests for both ken and jen objects in order to test the fitsInCage() method because the function is the same for both, and the results of test cases depend only on whether the specified length is greater than, less than, or equal to the actual length of the object. In both situations, the behavior will be comparable.

6. Running the Junit test file



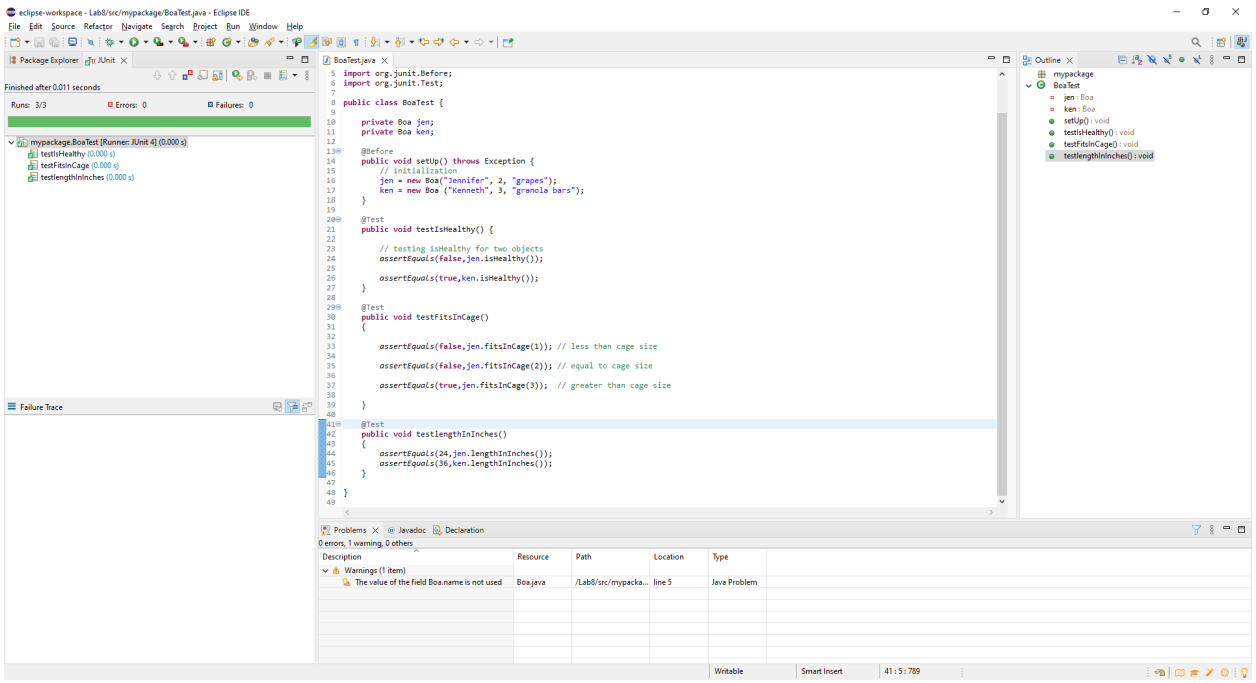
- We can see the both the cases are passing successfully

7. Adding a new method to the Boa class with name `lenghtInInches` to get the length in inches



- The Boa's length is specified in feet, so we need to multiply the length by 12 to convert it to inches and then return the result.

8. Writing another test case for this new method and running the 3 test cases together.



- As a result, test cases have been created for the specified Boa class, and the necessary Junit test cases have been used to test all three methods.