IT314-Software Engineering

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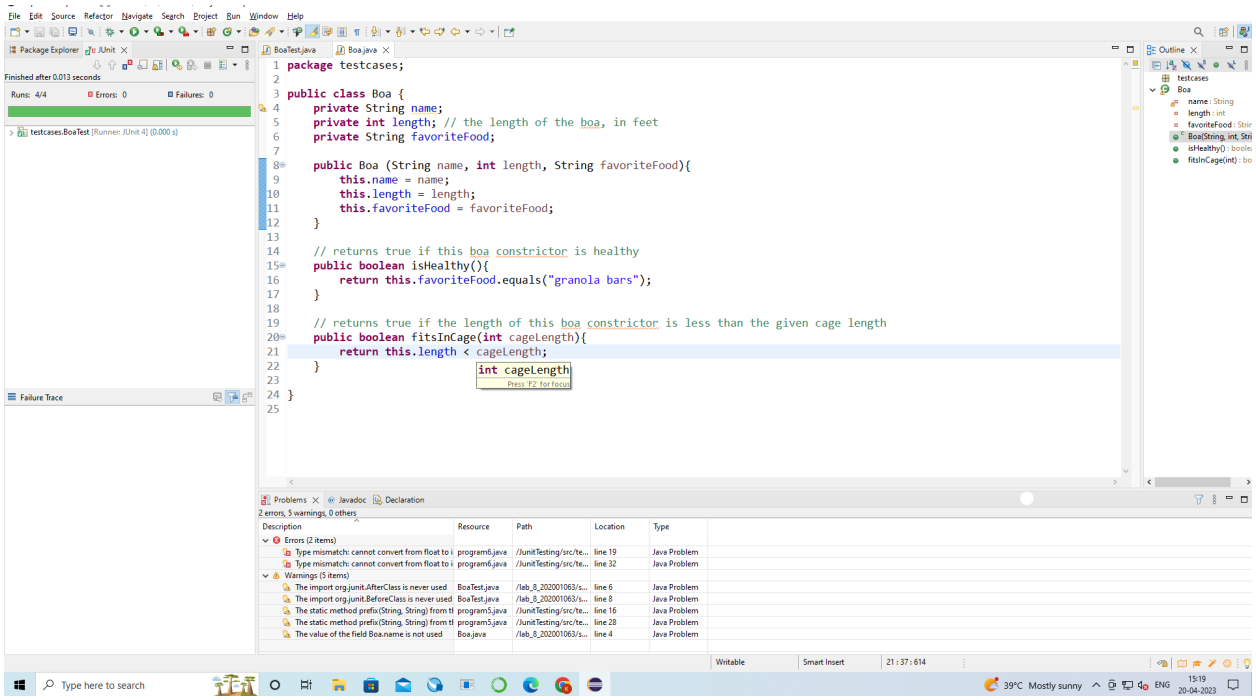
IT314 : Lab-8

Step 1 & 2 : Create a new Eclipse project, and within the project create a package and Created a class for a Boa.



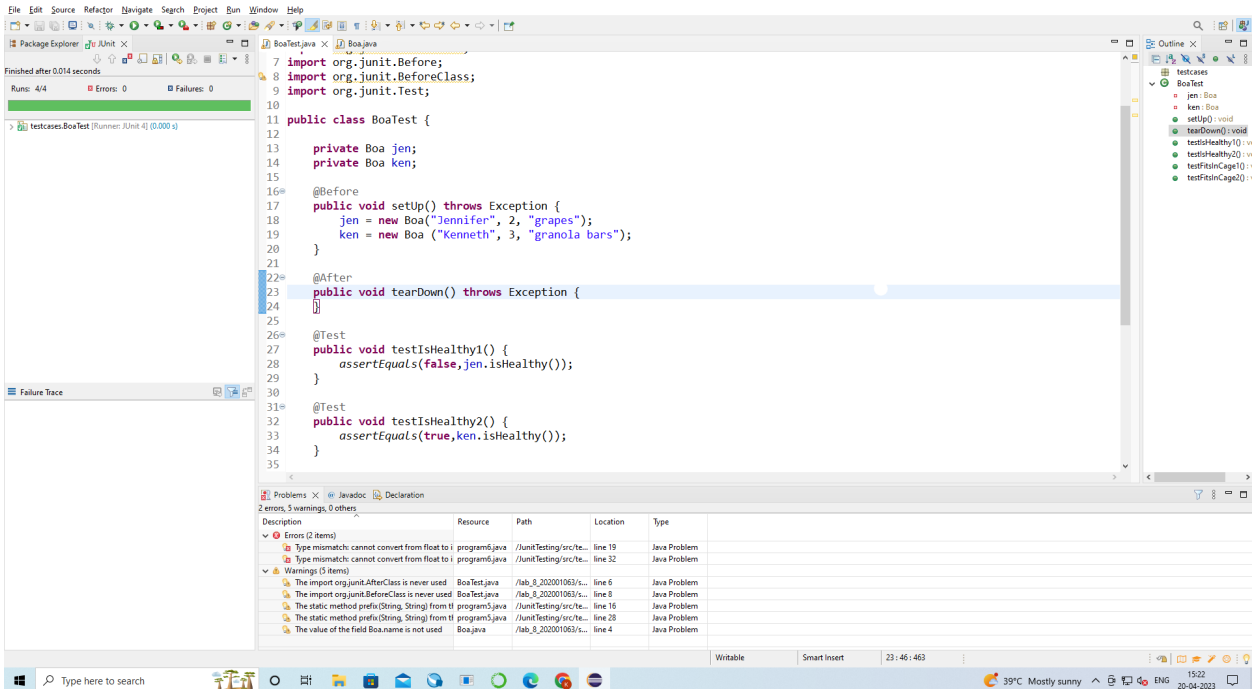
Step 3 : Follow the instructions in the JUnit tutorial in the section "Creating a JUnit Test Case in Eclipse". You'll be creating a test case for the class Boa. When you're asked to select test method stubs, select both isHealthy() and fitsInCage(int).

```
import org.junit.Assert;
import org.junit.Test;
public class BoaTest {

  @Test
  public void testIsHealthy() {
    Boa healthyBoa = new Boa("Lucy", 8, "granola bars");
    Assert.assertTrue(healthyBoa.isHealthy());

    Boa sickBoa = new Boa("Sneaky", 6, "mice");
    Assert.assertFalse(sickBoa.isHealthy());
  }

  @Test
  public void testFitsInCage() {
    Boa smallBoa = new Boa("Tiny", 2, "rats");
    Assert.assertTrue(smallBoa.fitsInCage(5));
    Assert.assertFalse(smallBoa.fitsInCage(1));

    Boa largeBoa = new Boa("Goliath", 20, "chicken");
    Assert.assertTrue(largeBoa.fitsInCage(25));
    Assert.assertFalse(largeBoa.fitsInCage(10));
  }
}
```

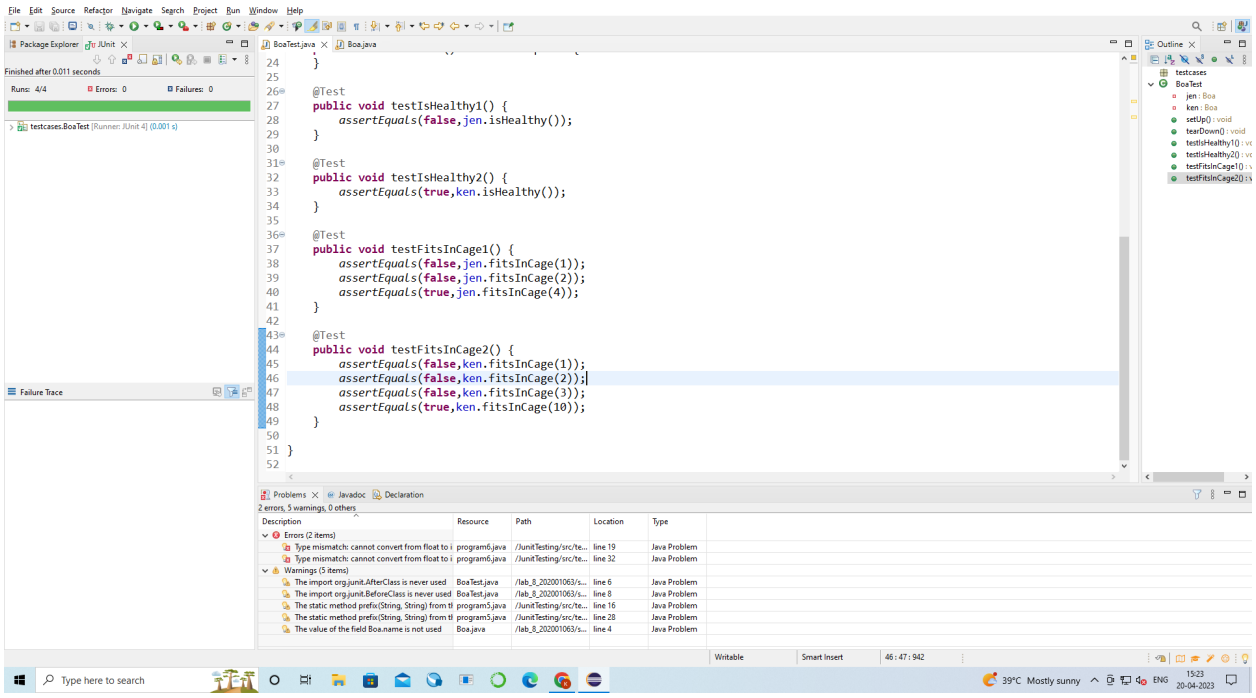
Step 4 : Modify the setUp() method so that it creates a couple of Boa objects, as follows:

```
1  public class BoaTest {
2
3      private Boa jen;
4      private Boa ken;
5
6      @Before
7      public void setUp() throws Exception {
8          jen = new Boa("Jennifer", 2, "grapes");
9          ken = new Boa ("Kenneth", 3, "granola bars");
0      }
1
2      @After
```

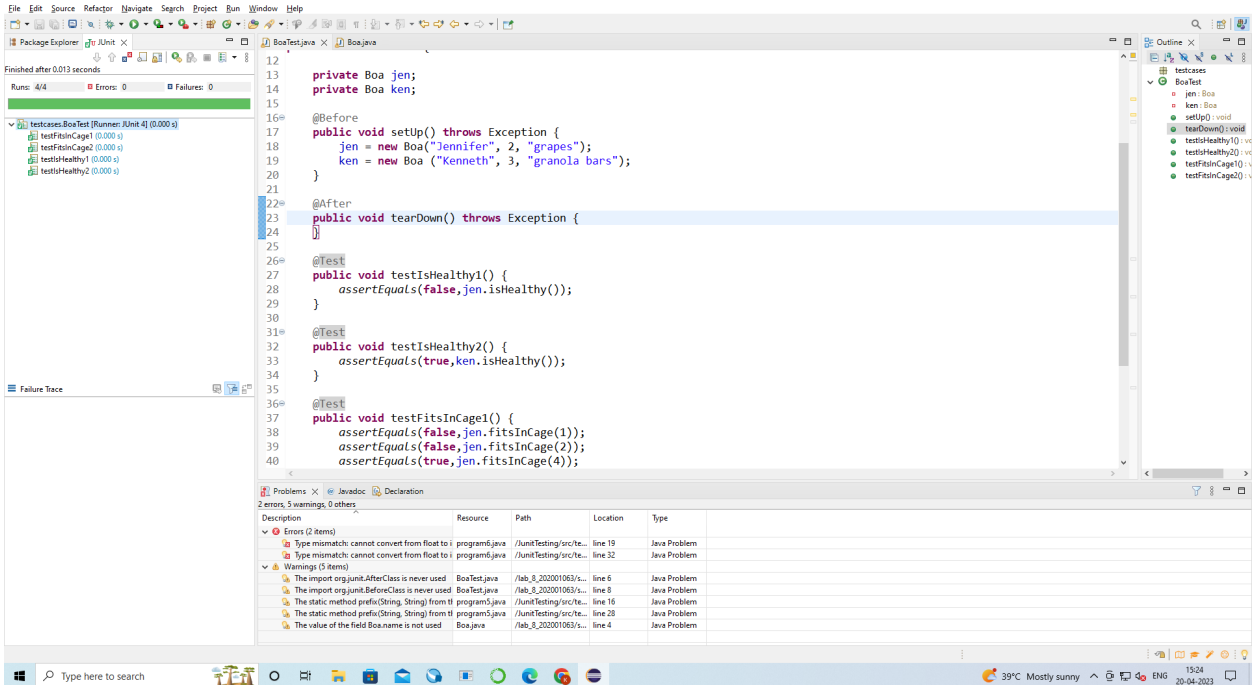
Step 5.1 : Modified testIsHealthy() method in the BoaTest class :



Step 5.2 : Modified testFitsInCage() method in the BoaTest class :



6. Running test cases



7. Here's the modified Boa class with the new lengthInInches() method:

```
    public boolean fitsInCage(int cageLength){
        return this.length < cageLength;
    }

    public int lengthInInches() {
        return this.length * 12;
    }
}
```