

**CODE****For the Given function:****Boa.java**

```
package Testing;
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;
        202001108 Lab-8
        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;
    }
    public int lengthInInches()
    {
        // you need to write the body of this method
        return this.length*12;
    }
}
```

**BoaTest.java**

```
package Testing;
import static org.junit.Assert.*;
import org.junit.Before;
import org.junit.Test;
public class BoaTest {
    private Boa jen;
    private Boa ken;
    @Before
    public void setUp() throws Exception {
        jen = new Boa("Jennifer", 2, "grapes");
        ken = new Boa("Kenneth", 3, "granola bars");
    }
    @Test
    public void testIsHealthy_1() {
        boolean output = ken.isHealthy();
        assertEquals(output, true);
    }
    @Test
    public void testIsHealthy_2() {
        boolean output = jen.isHealthy();
        assertEquals(output, false);
    }
    @Test
    public void testFitsInCage_1() {
        202001203 Lab-8
        int cage = 4;
        boolean output = jen.fitsInCage(cage);
        assertEquals(output, true);
    }
    @Test
    public void testFitsInCage_2() {
        int cage = 4;
        boolean output = ken.fitsInCage(cage);
        assertEquals(output, true);
    }
}
```

```
@Test
public void testFitsInCage_3() {
    int cage = 6;
    boolean output1 = ken.fitsInCage(cage);
    assertEquals(output1,true);
}
@Test
public void testFitsInCage_4() {
    int cage = 2;
    boolean output1 = ken.fitsInCage(cage);
    assertEquals(output1,false);
}
@Test
public void lengthInInches_1() {
    202001203 Lab-8
    int output1 = ken.lengthInInches();
    assertEquals(output1,36);
}
@Test
public void lengthInInches_2() {
    int output1 = jen.lengthInInches();
    assertEquals(output1,24);
}
}
```

## SCREENSHOTS



