IT314
SOFTWARE ENGINEERING

Lab-08

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CODE

FOR THE GIVEN FUNCTION

1)   Boa.java

```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;
```

```java
            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;
        }

}
```

2)   BoaTest.java

```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() {
```

```java
        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() {
```

```
        int output1 = ken.lengthInInches();
        assertEquals(output1,36);
    }

    @Test
    public void lengthInInches_2() {


        int output1 = jen.lengthInInches();
        assertEquals(output1,24);
    }

}
```

3)   SCREENSHOTS