1.)

**package** assignment12;

**public** **interface** Shape {

**public** **void** calArea();

}

**package** assignment12;

**public** **class** Rectangle **implements** Shape {

**private** **int** len;

**private** **int** bred;

**public** Rectangle(**int** len, **int** bred) {

**this**.len=len;

**this**.bred=bred;

}

@Override

**public** **void** calArea() {

**int** Area = len\*bred;

System.***out***.println(Area);

}

}

**package assignment12;**

**import java.util.ArrayList;**

**import java.util.Iterator;**

**import java.util.LinkedList;**

**import java.util.List;**

**import java.util.Vector;**

**public class Driver {**

**public static void main(String []args) {**

**// ArrayList li = new ArrayList();**

**// List li = new ArrayList();**

**// List li = new LinkedList();**

**// List li = new Vector();**

**// Vector li = new Vector();**

**// li.add(new Rectangle(10,20));**

**// li.add(540);**

**List<Rectangle> li = new LinkedList();**

**li.add(new Rectangle(10, 20));**

**/\***

**Iterator it = li.iterator();**

**while(it.hasNext()) {**

**Object obj = it.next();**

**if(obj instanceof Rectangle)**

**((Rectangle)obj).calArea();**

**System.out.println("Element in arraylist is " + obj);**

**}**

**\*/**

**for(Rectangle rectangle:li) {**

**rectangle.calArea();**

**}**

**}**

**}**