

```

package JavaFinalProject;
public class Shape {

    public void displayArea()
    {
        System.out.println("The shape is not having
any area calculation method");
    }
}

```

```

package JavaFinalProject;
public class Square extends Shape{

    int length;

    public Square(int length )
    {
        // using the below code, we are initializing
the arguments of the constructor
        this.length = length;
    }

    public double calculateArea()
    {
        return length*length;
    }

    public void displayArea()
    {
        System.out.println( "the area of square is:"
+ calculateArea());
    }
}

```

=====

```

package JavaFinalProject;

```

```

public class Rectangle extends Shape{

    int length;
    int width;

    public Rectangle(int length, int width )
    {
        // using the below code, we are initializing
the arguments of the constructor
        this.length = length;
        this.width = width;
    }
    public double calculateArea()
    {
        return length*width;
    }

    public void displayArea()
    {
        System.out.println( "the area of rectangle
is:" + calculateArea());
    }
}
=====
package JavaFinalProject;
import java.util.ArrayList;
public class PrintShapes {
    public static void main(String[] args) {
        // TODO Auto-generated method stub

        ArrayList<Shape> sh = new ArrayList<>();

        try {
            sh.add(new Rectangle(4,6));
            sh.add(new Square(-1));

            for(Shape shape: sh)

```

```
{
    shape.displayArea();
}
}
catch(Exception e)
{
    e.printStackTrace();
}
finally {
    System.out.println("program executed
Successfully");
}
}
}
```