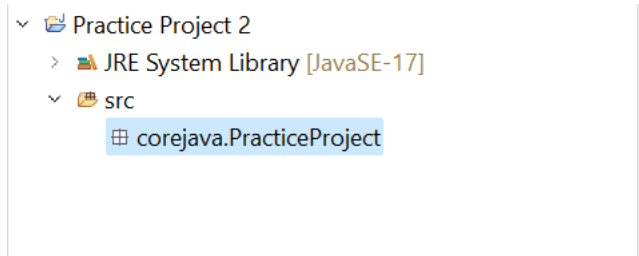


Practice Project 2 :

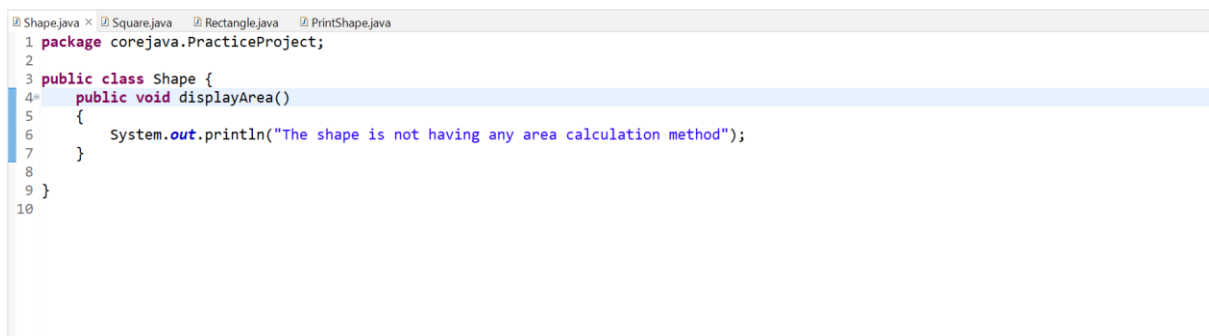
Step 1:

Create new Java Project and Package



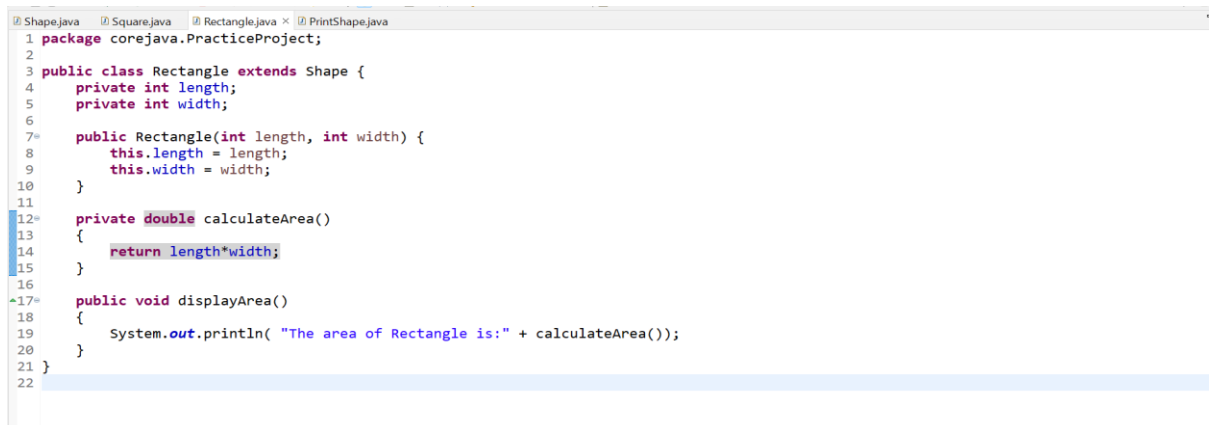
Step 2:

Create Parent Class which has displayArea() method



Step 3:

Create Child class Rectangle with calculateArea() and displayArea() methods



Step 4:

Create Child class Square with calculateArea() and displayArea() methods

```
1 package corejava.PracticeProject;
2
3 public class Square extends Shape{
4     private int length;
5
6     public Square(int length) {
7         this.length = length;
8     }
9     private double calculateArea()
10    {
11        return length*length;
12    }
13
14    public void displayArea()
15    {
16        System.out.println("The area of square is:" + calculateArea());
17    }
18 }
19 }
20 }
```

Step 5:

Create PrintShape class to print the all objects

```
1 package printshapes;
2 import java.util.ArrayList;
3
4 import corejava.PracticeProject.Rectangle;
5 import corejava.PracticeProject.Shape;
6 import corejava.PracticeProject.Square;
7
8 public class PrintShape {
9
10    public static void main(String[] args) {
11
12        ArrayList<Shape> shapes=new ArrayList<Shape>();
13        shapes.add(new Square(20));
14        shapes.add(new Rectangle(20, 30));
15        shapes.add(new Shape());
16
17        try {
18            for(Shape shape: shapes)
19            {
20                shape.displayArea();
21            }
22        } catch(Exception e)
23        {
24            e.printStackTrace();
25        }
26        finally {
27            System.out.println("program executed Successfully");
28        }
29    }
30 }
```

Step 6:

Run the PrintShape class

```
<terminated> PrintShape [Java Application] C:\eclipse\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.1.v20211116-1657\jre\bin\javaw.exe (29-Dec-2023, 2:51:18 pm - 2:51:18 pm)
The area of square is:400.0
The area of Rectangle is:600.0
The shape is not having any area calculation method
program executed Successfully
```

GitHub Link: [chandumj/simplilearnprojects \(github.com\)](https://github.com/chandumj/simplilearnprojects)