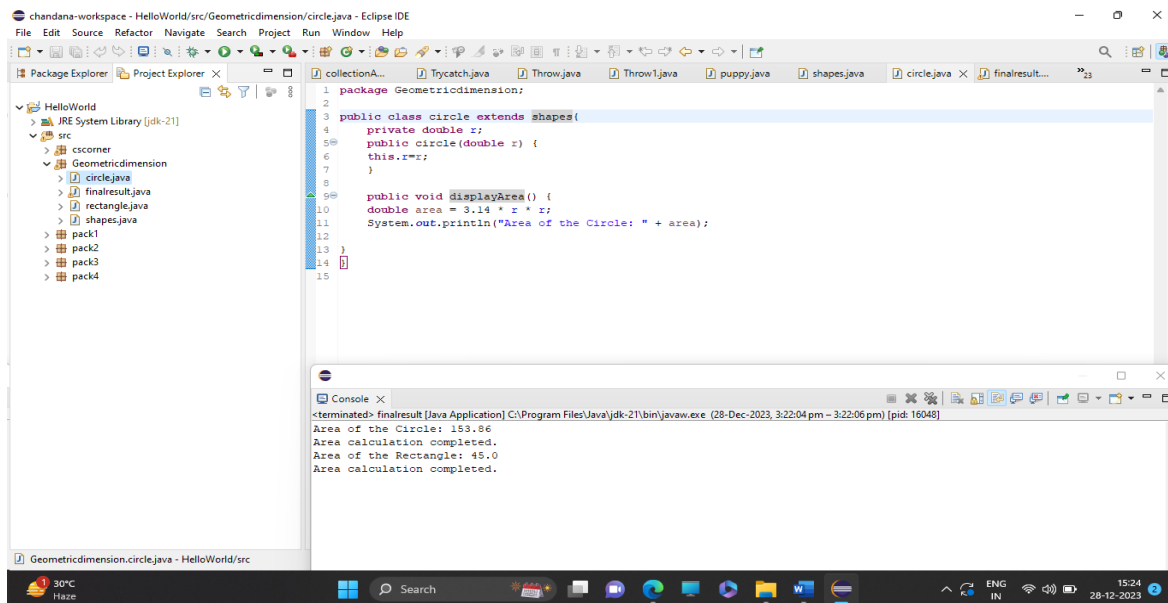
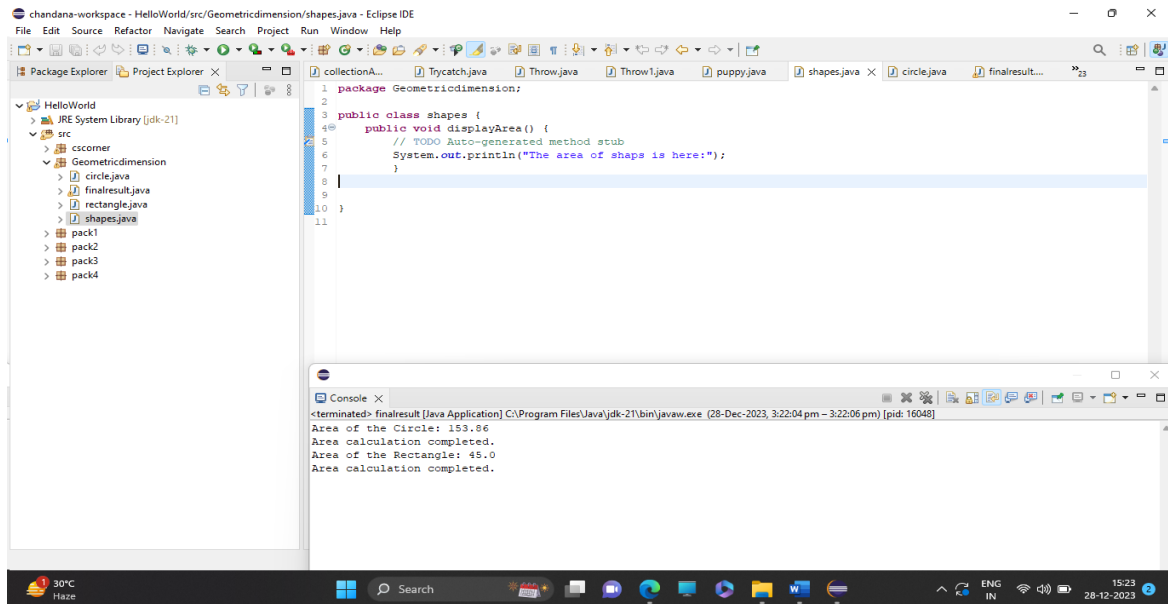


Functionality to Calculate the Area for Different Geometric Dimensions for Mathematics Project.



The screenshot shows the Eclipse IDE interface. The Package Explorer on the left displays the project structure: HelloWorld > JRE System Library [jdk-21] > src > cscorner > GeometricDimension > circle.java, finalresult.java, rectangle.java, shapes.java, pack1, pack2, pack3, pack4. The main editor shows the `rectangle.java` file with the following code:

```
1 package GeometricDimension;
2
3 public class rectangle extends shapes {
4     private double l;
5     private double b;
6     public rectangle(double l, double b) {
7         this.l = l;
8         this.b = b;
9     }
10    public void displayArea() {
11        double area = l * b;
12        System.out.println("Area of the Rectangle: " + area);
13    }
14 }
15
16
```

The Console window at the bottom shows the output of the program:

```
<terminated> finalresult [Java Application] C:\Program Files\Java\jdk-21\bin\javaw.exe (28-Dec-2023, 3:22:04 pm - 3:22:06 pm) [pid: 16048]
Area of the Circle: 153.86
Area calculation completed.
Area of the Rectangle: 45.0
Area calculation completed.
```

The screenshot shows the Eclipse IDE interface. The Package Explorer on the left displays the project structure: HelloWorld > JRE System Library [jdk-21] > src > cscorner > GeometricDimension > circle.java, finalresult.java, rectangle.java, shapes.java, pack1, pack2, pack3, pack4. The main editor shows the `finalresult.java` file with the following code:

```
1 package GeometricDimension;
2 import java.util.*;
3 public class finalresult {
4     public static <Shape> void main(String[] args) {
5         ArrayList<Shape> shapes = new ArrayList<>();
6         shapes.add((Shape) new circle(7.0));
7         shapes.add((Shape) new rectangle(9.0, 5.0));
8         for (Shape shape : shapes) {
9             try {
10                 ((Shape) shape).displayArea();
11             } catch (Exception e) {
12                 System.err.println("An error occurred: " +
13                     e.getMessage());
14             } finally {
15                 System.out.println("Area calculation completed.");
16             }
17         }
18     }
19 }
20
21
```

The Console window at the bottom shows the output of the program:

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<terminated> finalresult [Java Application] C:\Program Files\Java\jdk-21\bin\javaw.exe (28-Dec-2023, 3:22:04 pm - 3:22:06 pm) [pid: 16048]
Area of the Circle: 153.86
Area calculation completed.
Area of the Rectangle: 45.0
Area calculation completed.
```

GitHub link:

https://github.com/chandana161/lesson2_java-geometric-.git

Submitted by
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