CoinSerializable.java:

```java
import java.io.*;

/**
 * Circle class is a circle object class
 *
 * @author Peng Gso(pgaooscar@gmail.com)
 * @version 0.0.1 Novmber 29 2020
 */

class Circle implements Serializable {
    /**
     * java 11 defalut serial version ID
     */
    public static final long serialVersionUID = 890;
    /**
     * radius is circle radius
     */
    private double radius;

    /**
     * constructor
     *
     * @param radius is circle radius
     */
    public Circle(double radius) {
        this.radius = radius;
    }

    /**
     * get circle radius function
     *
     * @return radius
     */
    public double getRadius() {
        return radius;
    }

    /**
     * toString function, print out circle object
     */
    public String toString() { // override Objects toString()
        return "Radius: " + radius;
```

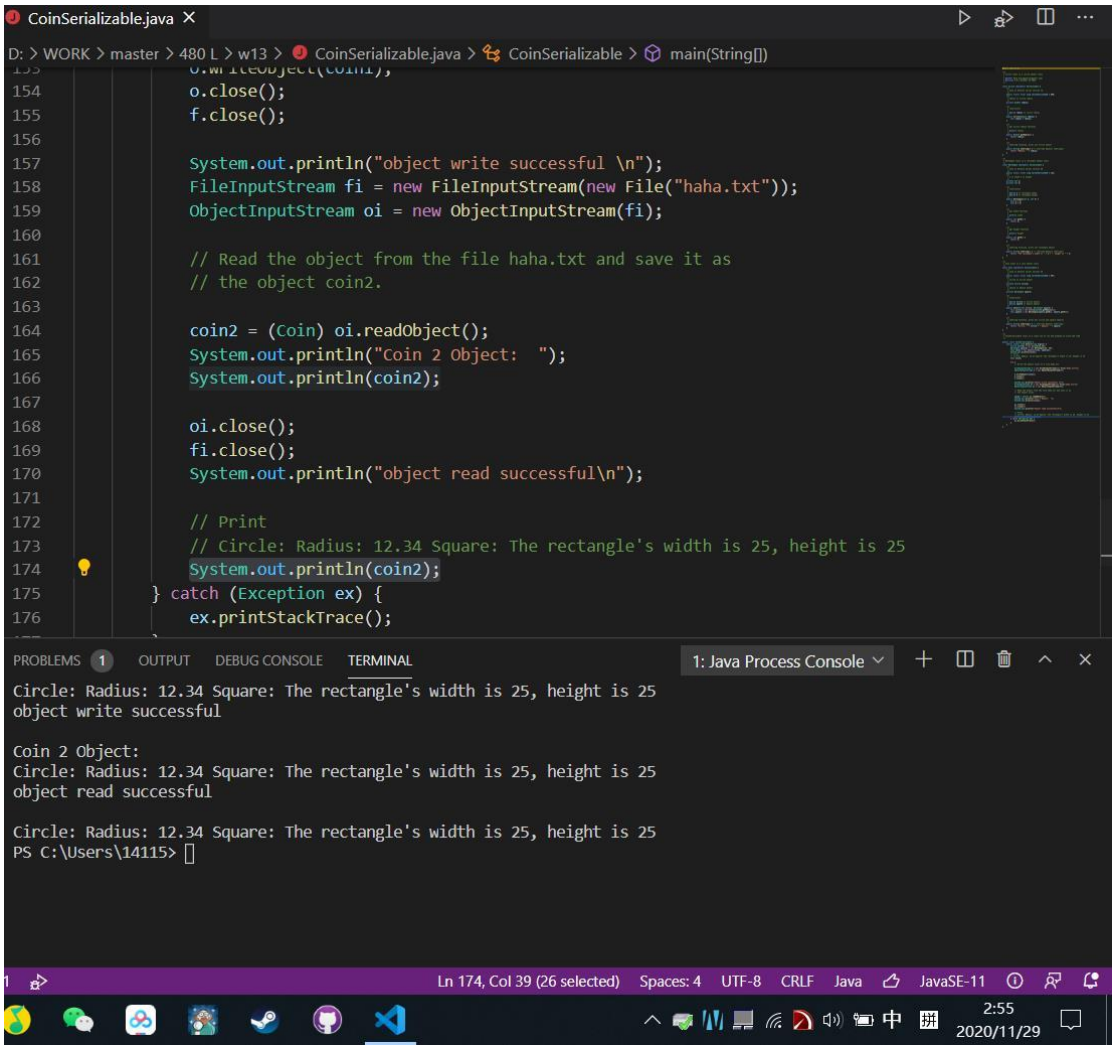
```java
    }
}

/**
 * Rectangle class is a rectangle object class
 */
class Rectangle implements Serializable {
    /**
     * java 11 defalut serial version ID
     */
    public static final long serialVersionUID = 123;
    /**
     * w is width h is height
     */
    private int w;
    private int h;

    /**
     * constructor
     *
     * @param w is rectangle width
     * @param h is rectangle height
     */
    public Rectangle(int w, int h) {
        this.w = w;
        this.h = h;
    }

    /**
     * get width function
     *
     * @return width
     */
    public int getW() {
        return w;
    }

    /**
     * get height function
     *
     * @return height
     */
    public int getH() {
        return h;
```

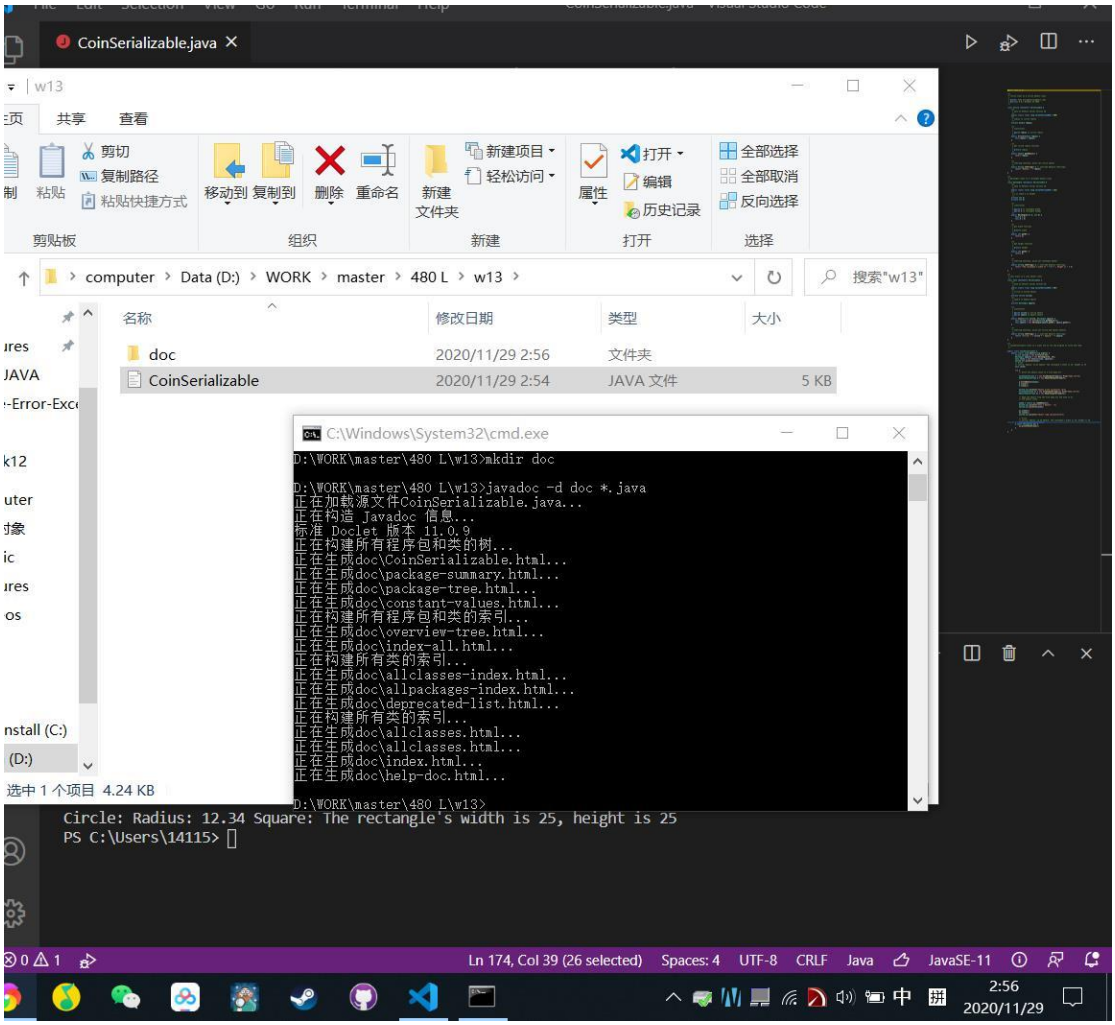
```
    }

    /**
     * toString function, print out rectangle object
     */
    public String toString() { // override Objects toString()
        return "The rectangle's width is " + w + ", height is " + h;
    }
}

/**
 * Coin class is a coin object class
 */
class Coin implements Serializable {
    /**
     * java 11 defalut serial version ID
     */
    public static final long serialVersionUID = 567;
    /**
     * circle is Circle object
     */
    private Circle circle;
    /**
     * square is Square object
     */
    private Rectangle square;

    /**
     * constructor
     *
     * @param circle is Circle object
     * @param square is Square object
     */
    public Coin(Circle circle, Rectangle square) {
        this.circle = new Circle(circle.getRadius());
        this.square = new Rectangle(square.getW(), square.getH());
    }

    /**
     * toString function, print out circle and square objects
     */
    public String toString() { // override Objects toString()
        return "Circle: " + circle + " Square: " + square;
    }
```

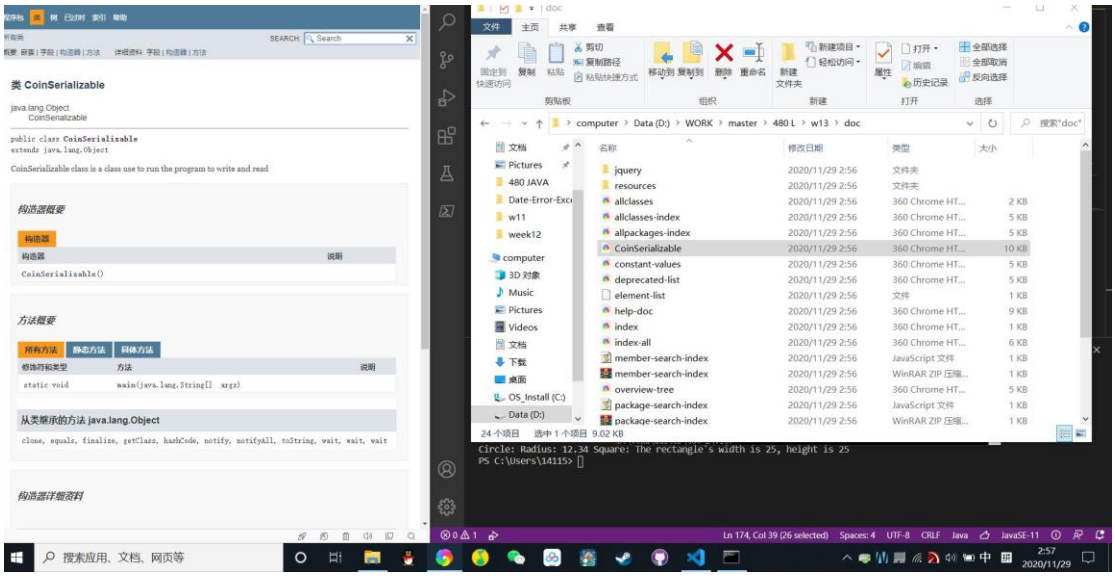
```java
}

/**
 * CoinSerializable class is a class use to run the program to write an
d read
 */

public class CoinSerializable {
    public static void main(String args[]) {
        Circle circle1 = new Circle(12.34);
        Rectangle square1 = new Rectangle(25, 25);
        Coin coin1 = new Coin(circle1, square1);
        System.out.println(coin1);
        // Print
        // Circle: Radius: 12.34 Square: The rectangle's width is 25, h
eight is 25
        Coin coin2;

        try {
            // Write the object coin1 to a file haha.txt

            FileOutputStream f = new FileOutputStream(new File("haha.tx
t"));
            ObjectOutputStream o = new ObjectOutputStream(f);

            o.writeObject(coin1);
            o.close();
            f.close();

            System.out.println("object write successful \n");
            FileInputStream fi = new FileInputStream(new File("haha.txt
"));
            ObjectInputStream oi = new ObjectInputStream(fi);

            // Read the object from the file haha.txt and save it as
            // the object coin2.

            coin2 = (Coin) oi.readObject();
            System.out.println("Coin 2 Object:  ");
            System.out.println(coin2);

            oi.close();
            fi.close();
            System.out.println("object read successful\n");
```

```
            // Print
            // Circle: Radius: 12.34 Square: The rectangle's width is 2
5, height is 25
            System.out.println(coin2);
        } catch (Exception ex) {
            ex.printStackTrace();
        }
    }
}
```

Output & Javadoc:




CoinSerializable.java
w13
共享
查看
剪切
复制路径
粘贴快捷方式
移动到
复制到
删除
重命名
新建文件夹
新建项目
轻松访问
属性
打开
编辑
历史记录
全部选择
全部取消
反向选择
剪贴板
组织
新建
打开
选择
computer › Data (D:) › WORK › master › 480 L › w13 ›
搜索"w13"
名称
修改日期
类型
大小
doc
2020/11/29 2:56
文件夹
CoinSerializable
2020/11/29 2:54
JAVA 文件
5 KB
C:\Windows\System32\cmd.exe
D:\WORK\master\480 L\w13>mkdir doc
D:\WORK\master\480 L\w13>javadoc -d doc *.java
正在加载源文件CoinSerializable.java...
正在构造 Javadoc 信息...
标准 Doclet 版本 11.0.9
正在构建所有程序包和类的树...
正在生成doc\CoinSerializable.html...
正在生成doc\package-summary.html...
正在生成doc\package-tree.html...
正在生成doc\constant-values.html...
正在构建所有程序包和类的索引...
正在生成doc\overview-tree.html...
正在生成doc\index-all.html...
正在构建所有类的索引...
正在生成doc\allclasses-index.html...
正在生成doc\allpackages-index.html...
正在生成doc\deprecated-list.html...
正在构建所有类的索引...
正在生成doc\allclasses.html...
正在生成doc\allclasses.html...
正在生成doc\index.html...
正在生成doc\help-doc.html...
D:\WORK\master\480 L\w13>
选中 1 个项目 4.24 KB
Circle: Radius: 12.34 Square: The rectangle's width is 25, height is 25
PS C:\Users\14115>
Ln 174, Col 39 (26 selected)
Spaces: 4
UTF-8
CRLF
Java
JavaSE-11
2:56
2020/11/29


类 CoinSerializable
java.lang.Object
CoinSerializable
public class CoinSerializable
extends java.lang.Object
CoinSerializable class is a class use to run the program to write and read
构造器概要
构造器
CoinSerializable()
方法概要
所有方法
静态方法
具体方法
static void
main(java.lang.String[] args)
从类继承的方法 java.lang.Object
clone, equals, finalize, getClass, hashCode, notify, notifyAll, toString, wait, wait, wait
构造器详细资料
doc
jquery
resources
allclasses
allclasses-index
allpackages-index
CoinSerializable
constant-values
deprecated-list
element-list
help-doc
index
index-all
member-search-index
overview-tree
package-search-index
Circle: Radius: 12.34 Square: The rectangle's width is 25, height is 25
PS C:\Users\14115>
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