ASSGINMENT | 3 Polymorphism Interface

**A blue and white logo

Description automatically generated**

**Professional Practices**

**Scandals**

**MADE BY:** WASSAM HUSSAIN

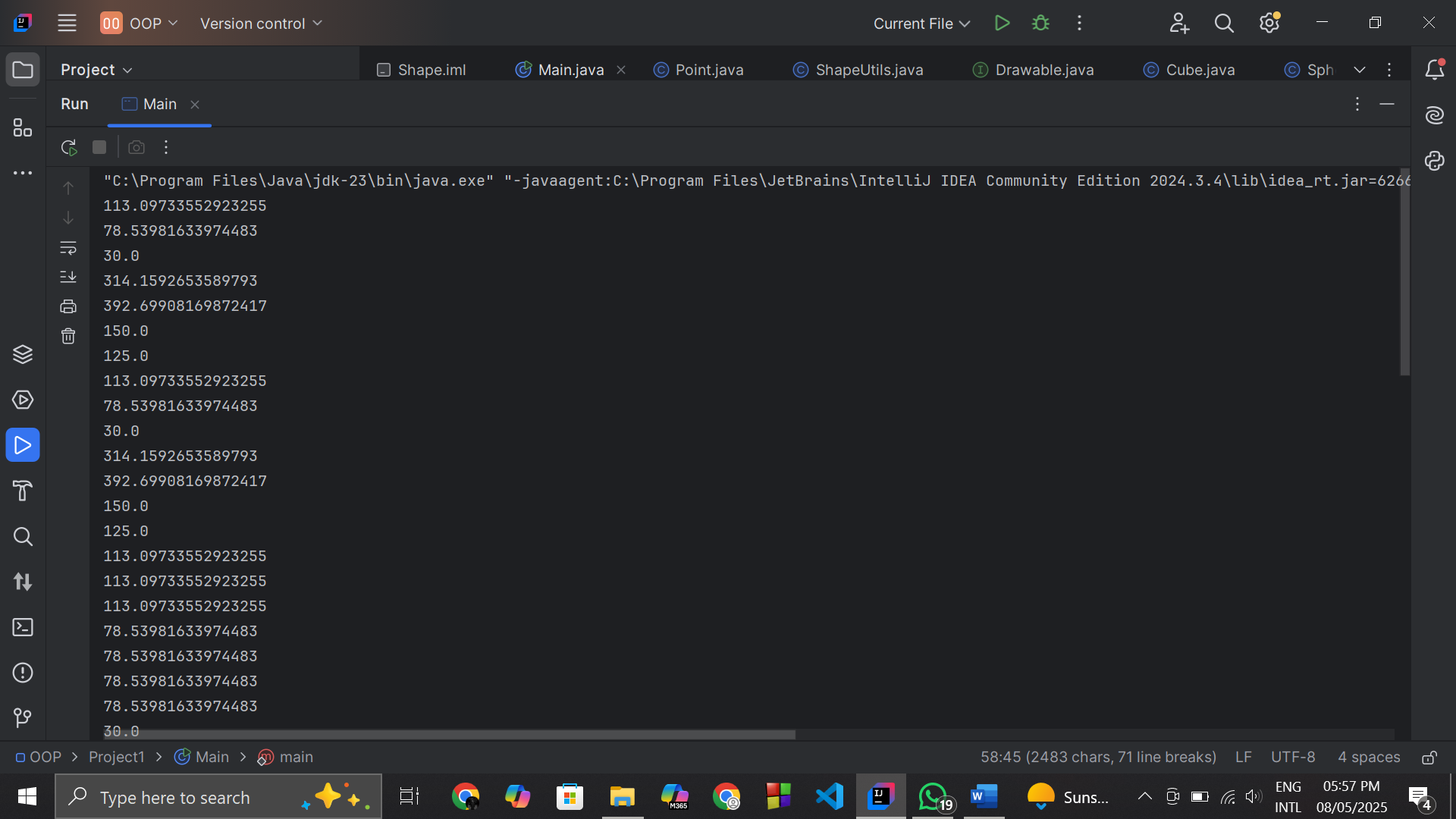
**SUBMITTED TO:** RIMSHA ANAM

**ROLL NO:** FA24-BCS-131

**SECTION:** B

**DATE:** 25/02/25

//TIP To <b>Run</b> code, press <shortcut actionId="Run"/> or  
// click the <icon src="AllIcons.Actions.Execute"/> icon in the gutter.  
public class Main {  
 public static void main(String[] args) {  
 Shape circle=new Circle("c",false,6);  
 Shape circle1=new Circle("c",false,6);  
 Shape circle2=new Circle("c",false,6);  
 Shape circle3 =new Circle("c",false,6);  
 System.*out*.println(circle3.area());  
 Shape2D shape=new Circle("a",true,5.0);  
 Shape2D shape1=new Circle("a",true,5.0);  
 Shape2D shape2=new Circle("a",true,5.0);  
 Shape2D shape3=new Circle("a",true,5.0);  
 Shape2D shape4=new Circle("a",true,5.0);  
 Shape2D shape5=new Circle("a",true,5.0);  
 System.*out*.println(shape.area());  
 Shape2D rectangle=new Rectangle("b",false,5,6);  
 Shape2D rectangle1=new Rectangle("b",false,5,6);  
 Shape2D rectangle2=new Rectangle("b",false,5,6);  
 Rectangle rectangle3=new Rectangle("b",false,5,6);  
 Shape2D rectangle4=new Rectangle("b",false,5,6);  
 Shape2D rectangle5=new Rectangle("b",false,5,6);  
 System.*out*.println(rectangle.area());  
 Shape3D sphere=new Sphere("d",5);  
 Shape3D sphere1=new Sphere("d",5);  
 Shape3D sphere2=new Sphere("d",5);  
 Shape3D sphere3=new Sphere("d",5);  
 System.*out*.println(sphere.area());  
 System.*out*.println(sphere.volume());  
 Shape3D cube=new Cube("e",5);  
 System.*out*.println(cube.area());  
 System.*out*.println(cube.volume());  
  
 Shape[] arr =new Shape[20];  
 arr[0]= circle3;  
 arr[1]=shape;  
 arr[2]=rectangle;  
 arr[3]=sphere;  
 arr[4]=cube;  
 arr[5]=circle1;  
 arr[6]=circle2;  
 arr[7]=circle3;  
 arr[8]=shape1;  
 arr[9]=shape2;  
 arr[10]=shape3;  
 arr[11]=shape4;  
 arr[12]=rectangle1;  
 arr[13]=rectangle2;  
 arr[14]=rectangle3;  
 arr[15]=rectangle4;  
 arr[16]=rectangle5;  
 arr[17]=sphere1;  
 arr[18]=sphere2;  
 arr[19]=sphere3;  
  
 ShapeUtils shapeUtils=new ShapeUtils();  
 shapeUtils.shapedetails(arr);  
 shapeUtils.increasereclength(arr,5);  
 shapeUtils.drawDrawables(arr);  
 Point point=new Point(5,10);  
 Rectangle rectangle6=new Rectangle("f",false,5,5);  
 rectangle6.setTopleftcorner(point);  
 rectangle3.setTopleftcorner(point);  
  
 shapeUtils.intersect(arr,rectangle6);  
  
  
  
  
  
 }  
}



A screenshot of a computer

AI-generated content may be incorrect.

A screenshot of a computer

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