java实验报告

一．源代码

public class Test{

public static void main(String args[]) throws CloneNotSupportedException{

Octagon o1=new Octagon(5);

System.out.println("the Object1's Area is "+o1.getArea());

System.out.println("the Object1's Perimeter is "+o1.getPerimeter());

Octagon o2=(Octagon)o1.clone();

int result=o1.compareTo(o2);

if(result>0){

System.out.println("the object1 > object2");

}

else if(result<0){

System.out.println("the object1 < object2");

}

else

System.out.println("the object1 = object2");

}

}

class Octagon extends GemometricObject implements Cloneable,Comparable<Octagon>{

private int radius=1;

Octagon(){};

Octagon (int radius){

this.radius=radius;

}

@Override

public double getArea() {

return (2+4/(Math.sqrt(2)))\*radius\*radius;

}

@Override

public double getPerimeter() {

return 8\*radius;

}

@Override

public int compareTo(Octagon a) {

if(getArea()>a.getArea()){

return 1;

}

else if(getArea()<a.getArea()){

return -1;

}

else

return 0;

}

public Object clone() throws CloneNotSupportedException{

return super.clone();

}

}

abstract class GemometricObject{

private String color="white";

private boolean filled;

private java.util.Date dateCreated;

protected GemometricObject(){

dateCreated =new java.util.Date();

}

protected GemometricObject(String color,boolean filled){

this.color=color;

this.filled=filled;

}

public String getColor(){

return color;

}

public boolean isFilled(){

return filled;

}

public void setFilled(boolean filled){

this.filled=filled;

}

1. 实验结果

