Java lab program – 4

import java.util.Scanner;

abstract class Shape {

double d1,d2;

Shape(double d1,double d2) {

this.d1=d1;

this.d2=d2;

}

abstract double printarea();

}

class Rectangle extends Shape {

Rectangle(double a,double b) {

super(a,b);

}

double printarea() {

System.out.println("Area of the rectangle is: ");

return d1\*d2;

}

}

class Triangle extends Shape {

Triangle(double a,double b) {

super(a,b);

}

double printarea() {

System.out.println("Area of the Triangle is: ");

return d1\*d2/2;

}

}

class Circle extends Shape {

Circle(double a) {

super(a,1);

}

double printarea() {

System.out.println("Area of the circle is: ");

return 3.14\*d1\*d2;

}

}

class areas {

public static void main(String args[]) {

System.out.println("Aparna Sankar, 1BM23CS047");

double d1,d2;

Scanner s=new Scanner(System.in);

System.out.println("Enter the dimensions of the rectangle:");

d1=s.nextInt();

d2=s.nextInt();

Rectangle r = new Rectangle(d1,d2);

System.out.println("Area is :"+r.printarea());

System.out.println("Enter the dimensions of the Triangle:");

d1=s.nextInt();

d2=s.nextInt();

Triangle t = new Triangle(d1,d2);

System.out.println("Area is :"+t.printarea());

System.out.println("Enter the dimensions of the Circle:");

d1=s.nextInt();

Circle c = new Circle(d1);

System.out.println("Area is :"+c.printarea());

}

}

