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**Batch:B**

**Date:31/05/22**

**OBJECT ORIENTED PROGRAMMING LAB**

**Experiment No.: 1**

**Aim**

Create a Graphics package that has classes and interfaces for figures Rectangle, Triangle,Square and Circle. Test the package by finding the area of these figures.

**PROCEDURE**

**Shapes.java**

package Graphics;

import java.util.Scanner;

interface cal

{

void carea();

void rarea();

void tarea();

void sarea();

}

public class Shapes implements cal

{

Scanner sc=new Scanner(System.in);

public void carea()

{

System.out.println("Enter radius:");

int r=sc.nextInt();

System.out.println("Area of circle:"+(Math.PI\*r\*r));

}

public void rarea()

{

System.out.println("Enter length:");

int l=sc.nextInt();

System.out.println("Enter breadth:");

int b=sc.nextInt();

System.out.println("Area of Rectangle:"+(l\*b));

}

public void tarea()

{

System.out.println("Enter the base:");

int b = sc.nextInt();

System.out.println("Enter the height:");

int h = sc.nextInt();

System.out.println("Area of the triangle:"+(0.5\*b\*h));

}

public void sarea()

{

System.out.println("Enter the side:");

int s = sc.nextInt();

System.out.println("Area of the square:"+(s\*s));

}

}

**Area.java**

import Graphics.Shapes;

public class Area{

public static void main(String args[])

{

Shapes obj=new Shapes();

System.out.println("Area of different Shapes"+"\n"+"-------------------------------");

System.out.println("Circle"+"\n"+"-------------");

obj.carea();

System.out.println("Rectangle"+"\n"+"-------------");

obj.rarea();

System.out.println("Triangle"+"\n"+"--------------");

obj.tarea();

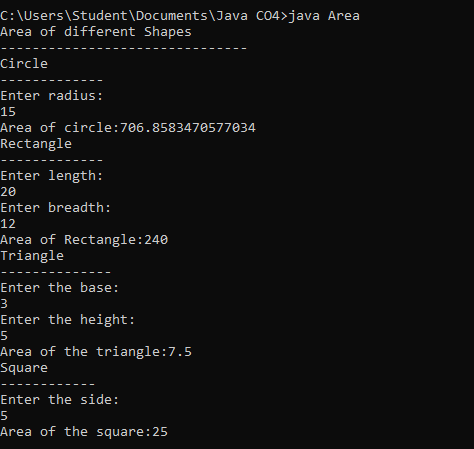
System.out.println("Square"+"\n"+"------------");

obj.sarea();

}

}

**OUTPUT**

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