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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**

**File 1: Area.java**

package Graphics;

import java.util.Scanner;

interface figure{

void rectangle();

void triangle();

void square();

void circle();

}

public class area implements figure {

int x,y,b,h,r;

double a,ar,are,circle\_ar;

Scanner sc=new Scanner(System.in);

public void rectangle()

{

System.out.print("Enter the length of Rectangle: ");

x=sc.nextInt();

System.out.print("Enter the breadth of Rectangle: ");

y=sc.nextInt();

a=x\*y;

System.out.println("Area of Rectangle: "+a);

}

public void triangle()

{

System.out.print("Enter the base length of Triangle: ");

b=sc.nextInt();

System.out.print("Enter the height of Triangle: ");

h=sc.nextInt();

ar=0.5\*b\*h;

System.out.println("Area of Triangle: "+ar);

}

public void square()

{

System.out.print("Enter the side length of Square: ");

a=sc.nextInt();

are=a\*a;

System.out.println("Area of Square: "+are);

}

public void circle()

{

System.out.print("Enter the radius of Circle: ");

r=sc.nextInt();

circle\_ar=Math.PI\*r\*r;

System.out.println("Area of Circle: "+circle\_ar);

}

}

**File 2: Shape.java**

import Graphics.area;

public class shape

{

public static void main(String[] args)

{

area ar=new area();

ar.rectangle();

ar.triangle();

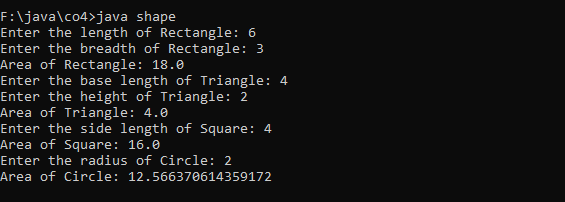
ar.square();

ar.circle();

}

}

**Output**

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