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**Batch:MCA-B**

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**OBJECT ORIENTED PROGRAMMING LAB**

**Experiment No.: 21**

**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**

Package Graphics

**Area.java**

package g.Graphics;

public interface Area

{

void area();

}

**Rectangle.java**

package g.Graphics;

public class Rectangle implements Area

{

int l,b;

public Rectangle(int l,int b)

{

this.l=l;

this.b=b;

}

public void area()

{

int area;

area=l\*b;

System.out.println("AREA of Rectangle="+ area);

}

}

**Circle.java**

package g.Graphics;

public class Circle implements Area

{

int r;

public Circle(int r)

{

this.r=r;

}

public void area()

{

double area;

area=3.14\*r\*r;

System.out.println("AREA of Circle="+ area);

}

}

**Square.java**

package g.Graphics;

public class Square implements Area

{

int a;

public Square(int a)

{

this.a=a;

}

public void area()

{

float area;

area=a;

System.out.println("AREA of Square="+ area);

}

}

**Triangle.java**

package g.Graphics;

public class Triangle implements Area

{

int b,h;

public Triangle(int b,int h)

{

this.b=b;

this.h=h;

}

public void area()

{

float area;

area=(float) (0.5\*b\*h);

System.out.println("AREA of Triangle="+ area);

}

}

**Shape.java**

package g;

import g.Graphics.Circle;

import g.Graphics.Rectangle;

import g.Graphics.Square;

import g.Graphics.Triangle;

public class Shape{

public static void main(String[] args){

g.Graphics.Area r=new Rectangle(8,9);

g.Graphics.Area T=new Triangle(5,5);

g.Graphics.Area S=new Square(5);

g.Graphics.Area C=new Circle(6);

r.area();

T.area();

S.area();

C.area();

}

}

**Output Screenshot**

