

OBJECT ORIENTED PROGRAMMING LAB**Experiment No.: 21**

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Roll No: 10

Batch: S2 MCA

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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:**1.Graphics.java:**

```
package graphics;
import java.util.Scanner;
interface fig{
    public double recArea();
    public double cirArea();
    public double squArea();
    public double triArea();
}
public class Graphics implements fig {
    Scanner s = new Scanner(System.in);
    int r,l,b,a;
    double pi = 3.14,area;
    public double recArea(){
        System.out.println("Enter length of rectangle:");
        l=s.nextInt();
        System.out.println("Enter breadth of rectangle:");
        b=s.nextInt();
        area=l*b;
```

```
        return area;
    }

    public double cirArea(){
        System.out.println("Enter radius of circle:");
        r = s.nextInt();
        area = pi * r * r;
        return area;
    }

    public double squArea(){
        System.out.println("Enter the side of the square:");
        a = s.nextInt();
        area = a * a;
        return area;
    }

    public double triArea(){
        System.out.println("Enter the width of the Triangle:");
        double base = s.nextDouble();
        System.out.println("Enter the height of the Triangle:");
        double height = s.nextDouble();
        double area = (base* height)/2;
        return area;
    }
}
```

2.AreaGraphics.java:

```
import graphics.*;

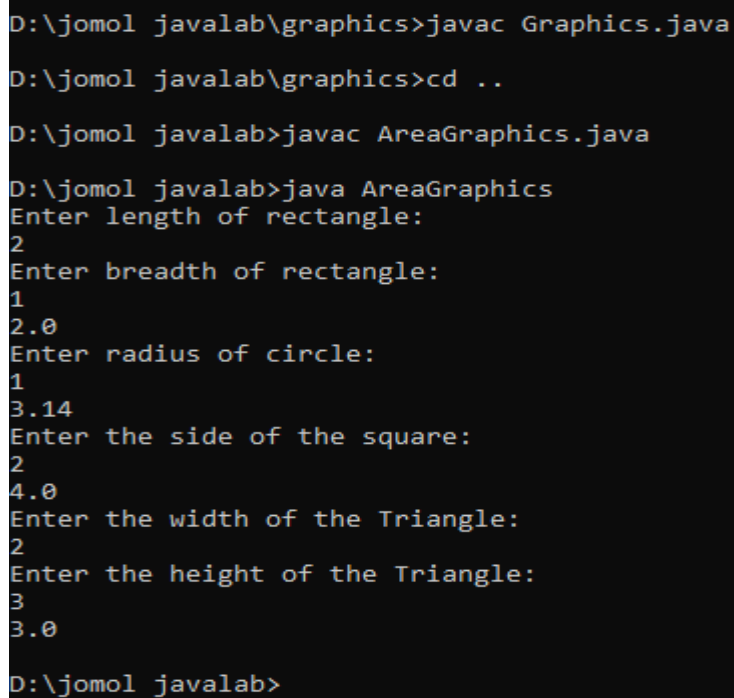
public class AreaGraphics {

    public static void main(String []args){

        Graphics Ob = new Graphics();
```

```
System.out.println(Ob.recArea());  
System.out.println(Ob.cirArea());  
System.out.println(Ob.squArea());  
System.out.println(Ob.triArea());  
}
```

Output Screenshot:



```
D:\jomol javalab\graphics>javac Graphics.java  
D:\jomol javalab\graphics>cd ..  
D:\jomol javalab>javac AreaGraphics.java  
D:\jomol javalab>java AreaGraphics  
Enter length of rectangle:  
2  
Enter breadth of rectangle:  
1  
2.0  
Enter radius of circle:  
1  
3.14  
Enter the side of the square:  
2  
4.0  
Enter the width of the Triangle:  
2  
Enter the height of the Triangle:  
3  
3.0  
D:\jomol javalab>
```