

## OBJECT ORIENTED PROGRAMMING LAB

**Name: VYSHNAVI BABU S**

**Roll No: 55**

**Batch: B**

**Date: 31-05-2022**

### **Experiment No.: 17**

#### **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.

#### **Program**

##### **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;
    }
}
```

### **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());
```

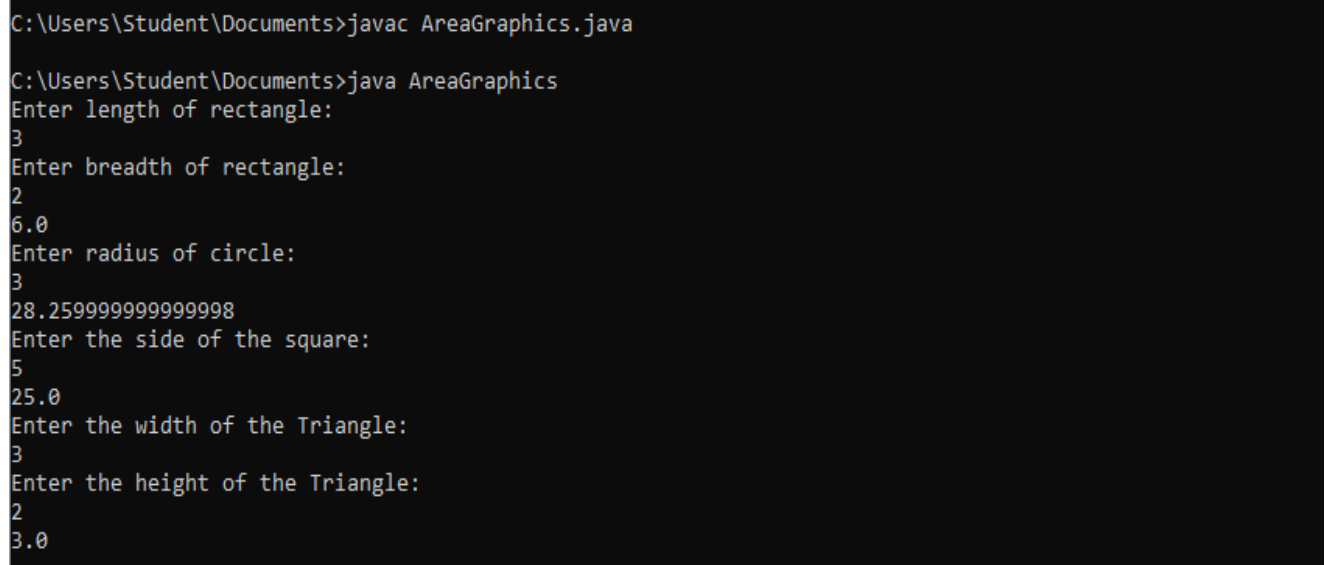
```
    System.out.println(Ob.squArea());
```

```
    System.out.println(Ob.triArea());
```

```
    }
```

```
}
```

### **Output Screenshot**



```
C:\Users\Student\Documents>javac AreaGraphics.java
C:\Users\Student\Documents>java AreaGraphics
Enter length of rectangle:
3
Enter breadth of rectangle:
2
6.0
Enter radius of circle:
3
28.259999999999998
Enter the side of the square:
5
25.0
Enter the width of the Triangle:
3
Enter the height of the Triangle:
2
3.0
```