OBJECT ORIENTED PROGRAMMING LAB

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Batch: MCA B

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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.java

```
package package_graphics;

interface interface_graphics{

  public float recArea(int l, int h);

  public float cirArea(int r);

  public float squArea(int a);

  public float triArea(int l, int h);

}

public class package_graphics implements interface_graphics {

   public float recArea(int l, int h){

      return l*h;

   }

   public float cirArea(int r){

      return r*r*(float)3.14;

   }

   public float squArea(int a){

return a*a;
```

```
}
public float triArea(int l, int h){
return l*h*(float)(.5);
}
}
```

main_graphics.java

```
import package_graphics.*;
import java.util.*;
public class main_graphics {
public static void main(String []args){
package_graphics testObj = new package_graphics();
int l,h,r,a,c,d;
Scanner s=new Scanner(System.in);
System.out.println("Enter the length for rectangle");
l=s.nextInt();
System.out.println("Enter the breadth for rectangle");
h=s.nextInt();
System.out.println("Enter the radius of circle");
r=s.nextInt();
System.out.println("Enter the side for Square");
a=s.nextInt();
System.out.println("Enter the breadth for triangle");
c=s.nextInt();
```

```
System.out.println("Enter the height for triangle");

d=s.nextInt();

System.out.println(testObj.recArea(l,h));

System.out.println(testObj.cirArea(r));

System.out.println(testObj.squArea(a));

System.out.println(testObj.triArea(c,d));

}

}
```

Output Screenshot

```
C:\Users\Student\Documents\java>javac main_graphics.java

C:\Users\Student\Documents\java>java main_graphics
Enter the length for rectangle
4
Enter the breadth for rectangle
5
Enter the radius of circle
4
Enter the side for Square
5
Enter the breadth for triangle
3
Enter the height for triangle
4
area of rectangle:20.0
area of circle :50.24
area of square:25.0
area of  triangle6.0
```