Institute of Computer Technology
B. Tech Computer Science and Engineering
Subject: OOP (2CSE303)

PRACTICAL-7

AIM: - Ravi and his friends are playing a multiplayer game which requires each player to compute the area of a shape that is displayed in real time. Thus, overload the function compute() to print the area of different shapes (square, rectangle, circle) using the concept of polymorphism.

SOLUTION

```
import java.util.*;
public class Prac7
{
	float pie=3.14f;

	public double compute(double a)
	{
		double area=a*a;
		return area;
	}
	public double compute(double a,double b)
	{
		double area=a*b;
		return area;
	}
	public double compute(float a,double b)
	{
		double area=a*b*b;
		return area;
	}
	public static void main(String[] args)
	{
		double x,len,width,radius;
		System.out.println("Enter The Size Of A Side Of Square:");
		Scanner Yash=new Scanner(System.in);
		x=Yash.nextDouble();

		System.out.println("Enter The Length Of Rectangle:");
		len=Yash.nextDouble();

		System.out.println("Enter The Width Of Rectangle:");
		width=Yash.nextDouble();
```

```
            System.out.println("Enter Radius Of Circle:");
            radius=Yash.nextDouble();

            Prac7 obj=new Prac7();

            System.out.println("Area Of Square:"+obj.compute(x));
            System.out.println("Area Of Recangle:"+obj.compute(len,width));
            System.out.println("Area Of Circle:"+obj.compute(obj.pie,radius));
        }
}
```

OUTPUT

```
PS C:\Users\admin\Google Drive\B-Tech\SEM-3\OOP\OOP_Practicals\Prac-7> cd "c:\Users\admin\Google Drive\B-Tech\SEM-3\OOP\OOP_Practicals\Prac-7\" ; if ($?) { javac Prac7.java } ; if ($?) { java Prac7 }
Enter The Size Of A Side Of Square:
6
Enter The Length Of Rectangle:
4
Enter The Width Of Rectangle:
3
Enter Radius Of Circle:
2.5
Area Of Square:36.0
Area Of Recangle:12.0
Area Of Circle:19.625000655651093
PS C:\Users\admin\Google Drive\B-Tech\SEM-3\OOP\OOP_Practicals\Prac-7>
```