```java
package Problem4;

final  class Circle {


	private double radius;

	public double computeArea()
	{
		return Math.PI * Math.pow(radius,2);
	}

	public Circle(double radius) {
		super();
		this.radius = radius;
	}
}
```

```java
package Problem4;

final class Rectangle {
	private double width;
	private double  height;
	public Rectangle(double width, double height)
	{
		this.width=width;
		this.height=height;

	}
	public double computeArea()
	{

		return (1.0/2.0) * (this.width * this.height);
	}
	public double getWidth() {
		return width;
	}
	public double getHeight() {
		return height;
	}
```

```java
}
package Problem4;

final class Triangle {


	private double base ;
	private double  height ;


	public Triangle(double base, double height) {
```

```
		super();
		this.base = base;
		this.height = height;
	}


	public double computeArea()
	{
		return  1.0/2.0 *  (this.base * this.height);
	}


	public double getBase() {
		return base;
	}


	public double getHeight() {
		return height;
	}

}
package Problem4;

import java.util.Scanner;

public class TestProblem4 {


	public static  void menuOptions()
	{



		System.out.println("Enter C for Circle");
		System.out.println("Enter R for Rectangle");
		System.out.println("Enter T for Triangle");
		Scanner in = new Scanner(System.in);
		String option=in.nextLine();
		option=option.toUpperCase();
		switch (option) {
		case "C":
			proceesCircle();
			break;

		case "R":
			proceesRectangle();
			break;
		case "T":
			proceesTriangle();
			break;
		default:
			System.out.println("Option no found");
			break;
		}
```

```
			in.close();


		}
		private static void proceesTriangle() {
			Scanner in = new Scanner(System.in);
			System.out.println("Enter the base of the Triangle");
			double base=in.nextDouble();
			System.out.println("Enter the height of the Triangle");
			double height=in.nextDouble();
			Triangle figure=new Triangle(base, height);
			System.out.printf("The area of Triangle is : %s
\n",figure.computeArea());
			in.close();

		}
		private static void proceesRectangle() {

			Scanner in = new Scanner(System.in);
			System.out.println("Enter the width of the Rectangle");
			double width=Double.parseDouble(in.nextLine());
			System.out.println("Enter the height of the Rectangle");
			double height=Double.parseDouble(in.nextLine());
			Rectangle figure=new Rectangle(width, height);
			System.out.printf("The area of Rectangle is : %s
\n",figure.computeArea());
			in.close();




		}
		private static void proceesCircle() {
			Scanner in = new Scanner(System.in);
			System.out.println("Enter the radius of the Circle");
			double radius=in.nextDouble();
			Circle figure=new Circle(radius);
			System.out.printf("The area of Circle is : %s
\n",figure.computeArea());
			in.close();

		}
		public static void main(String[] args)
		{
			menuOptions();

		}
}
```