

```
import java.util.Scanner;

abstract class Shape
{
    int a,b;

    abstract void printArea();
}

class Rectangle extends Shape
{
    Rectangle(int x, int y)
    {
        a=x;
        b=y;
    }

    void printArea()
    {
        System.out.println("Area of the rectangle is: "+(a*b));
    }
}

class Triangle extends Shape
{
    Triangle(int x, int y)
    {
        a=x;
        b=y;
    }

    void printArea()
    {
        System.out.println("Area of the triangle is: "+(0.5*a*b));
    }
}
```

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}

class Circle extends Shape
{
    Circle(int x)
    {
        a=x;
    }
    void printArea()
    {
        System.out.printf("Area of the circle is: %.2f", (3.14*a*a));
    }
}

class ShapeMain
{
    public static void main(String args[])
    {
        int x,y;
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the length and width of the rectangle");
        x=sc.nextInt();
        y=sc.nextInt();
        Rectangle ob1 = new Rectangle(x,y);
        ob1.printArea();
        System.out.println("Enter the base length and height of the triangle");
        x=sc.nextInt();
        y=sc.nextInt();
        Triangle ob2 = new Triangle(x,y);
        ob2.printArea();
        System.out.println("Enter the radius of the circle");
    }
}

```

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x=sc.nextInt();  
  
Circle ob3 = new Circle(x);  
  
ob3.printArea();  
  
}  
  
}
```

```
C:\Users\Adithi\Desktop\java_prgs>java ShapeMain  
Enter the length and width of the rectangle  
3  
4  
Area of the rectangle is: 12  
Enter the base length and height of the triangle  
2  
5  
Area of the triangle is: 5.0  
Enter the radius of the circle  
6  
Area of the circle is: 113.04  
C:\Users\Adithi\Desktop\java_prgs>
```