```java
import java.util.*;
abstract class Shape
{
    double a,b;
    abstract void printArea();
}
class Triangle extends Shape
{
    //Scanner sc=new Scanner(System.in);
    Triangle(Double x,Double y)
    {
        a=x;
        b=y;
    }
    void printArea()
    {
        double area;
        area=(0.5*a*b);
        System.out.println("area of triangle:" +area);

    }
}
class Circle extends Shape
{
    double area;
    Circle(Double r)
    {
        a=r;
    }
    void printArea()
    {
        area=(3.14*a*a);
        System.out.println("area of circle:" +area);

    }

}
class Rectangle extends Shape
{
    double area;
    Rectangle(Double x,Double y)
    {
        a=x;
        b=y;

    }
    void printArea()
    {
        area=(a*b);
        System.out.println("area of Rectangle:" +area);
```

```java
49        }
50
51    }
52
53    class ShapeMain
54    {
55        public static void main(String args[])
56        {
57            Scanner sc=new Scanner(System.in);
58            double b,h,l,br,r1;
59            System.out.println("enter the base and height of triangle");
60            b=sc.nextDouble();
61            h=sc.nextDouble();
62            Triangle t=new Triangle(b,h);
63            t.printArea();
64            System.out.println("enter the lenght and breadth of rectangle");
65            l=sc.nextDouble();
66            br=sc.nextDouble();
67            Rectangle r=new Rectangle(l,br);
68            r.printArea();
69            System.out.println("enter the radius of circle");
70            r1=sc.nextDouble();
71            Circle c=new Circle(r1);
72            c.printArea();
73        }
74    }
```

```
Command Prompt

Microsoft Windows [Version 10.0.18363.1139]
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C:\Users\rahul>cd C:\workspace

C:\workspace>javac Shape.java

C:\workspace>java ShapeMain
enter the base and height of triangle
5
10
area of triangle:25.0
enter the lenght and breadth of rectangle
20
40
area of Rectangle:800.0
enter the radius of circle
5
area of circle:78.5

C:\workspace>_
```