```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);
    }

}
```

```java
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);
    }

}

class ShapeMain
{
    public static void main(String args[])
    {
        Scanner sc=new Scanner(System.in);
        double b,h,l,br,r1;
        System.out.println("enter the base and height of triangle");
        b=sc.nextDouble();
        h=sc.nextDouble();
        Triangle t=new Triangle(b,h);
        t.printArea();
        System.out.println("enter the lenght and breadth of rectangle");
        l=sc.nextDouble();
        br=sc.nextDouble();
        Rectangle r=new Rectangle(l,br);
        r.printArea();
        System.out.println("enter the radius of circle");
        r1=sc.nextDouble();
        Circle c=new Circle(r1);
        c.printArea();
    }
}
```

```
[Arvinds-MacBook-Pro:ooj Arvind$ javac area1.java
[Arvinds-MacBook-Pro:ooj Arvind$ java ShapeMain
enter the base and height of triangle
2
5
area of triangle:5.0
enter the lenght and breadth of rectangle
2
5
area of Rectangle:10.0
enter the radius of circle
2
area of circle:12.56
Arvinds-MacBook-Pro:ooj Arvind$
```