

```
import java.util.Scanner;
abstract class Shape
{
    double d1;
    double d2;
    abstract void printArea();
}
class Rectangle extends Shape
{
    Rectangle()
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the dimensions of rectangle:");
        d1=sc.nextDouble();
        d2=sc.nextDouble();
    }

    void printArea()
    {
        System.out.println("Area of rectangle: "+d1*d2);
    }
}
class Triangle extends Shape
{
    Triangle()
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the dimensions of triangle:");
        d1=sc.nextDouble();
        d2=sc.nextDouble();
    }
    void printArea()
    {
        System.out.println("Area of triangle: "+(d1*d2)/2);
    }
}
class Circle extends Shape
{
    double radius;
    Circle()
```

```
{
    Scanner sc=new Scanner(System.in);
    System.out.println("Enter the radius of circle:");
    radius=sc.nextDouble();
}
void printArea()
{
    System.out.println("Area of circle:
" +(3.14*radius*radius));
}
}
class ShapeMain
{
    public static void main(String args[])
    {
        Rectangle r=new Rectangle();
        r.printArea();
        Triangle t=new Triangle();
        t.printArea();
        Circle c=new Circle();
        c.printArea();
    }
}
```

java — -bash — 80×24

```
Ishas-MacBook-Air:~ isha$ cd Documents/java/
Ishas-MacBook-Air:java isha$ javac lab4.java
Ishas-MacBook-Air:java isha$ java ShapeMain
Enter the dimensions of rectangle:
4 5
Area of rectangle: 20.0
Enter the dimensions of triangle:
4 6
Area of triangle: 12.0
Enter the radius of circle:
5
Area of circle: 78.5
Ishas-MacBook-Air:java isha$
```

