

```
import java.util.Scanner;  
  
abstract class shape  
{  
    int a, b;  
    abstract void printarea();  
    abstract void input();  
    Scanner s = new Scanner(System.in);  
}
```

```
class rectangle extends shape  
{  
    void input()  
    {  
        System.out.println("Enter l and b");  
        a = s.nextInt();  
        b = s.nextInt();  
    }  
  
    void printarea()  
    {  
        System.out.println("Area of rectangle  
is: " + (a * b) + " sq units");  
    }  
}
```



class Triangle extends shape .

```
{
    void input()
    {
        system.out.println("Enter b and h");
        a = s.nextInt();
        b = s.nextInt();
    }
    void printarea()
    {
        system.out.println("Area of Triangle is:"
            + (a*b)/2 + "sq units");
    }
}
```

class circle extends shape

```
{
    void input()
    {
        println("enter the radius of circle");
        a = s.nextInt();
    }
    void printarea()
    {
        system.out.println("Area of circle is"
            + (3.14)*a*a + "sq units");
    }
}
```



class area

```
{
    public static void main (String args[])
    {
        rectangle r = new rectangle();
        r.input();
        r.printarea();

        triangle t = new triangle();
        t.input();
        t.printarea();

        circle c = new circle();
        c.input();
        c.printarea();
    }
}
```

output

Enter l and b

4  
5

The area of triangle is : 20 sq units.

Enter b and h

4 5

The area of triangle is : 10 sq units

Enter the radius

2

The area of circle is : 12.56 sq units.