```
import java.util.Scanner;
abstract class Shape{
      double height, width;
      public void getShapeData() {
             Scanner s=new Scanner(System.in);
             System.out.println("Enter information of given Shape ");
             System.out.println("Enter Shape height & width ");
             height=s.nextDouble();
             width=s.nextDouble();
      }
      abstract void compute area();
class Rectangle extends Shape{
       public void compute_area() {
              System.out.println("Area of rectangle "+ (width*height));
class Triangle extends Shape{
      public void compute_area() {
             System.out.println("Area of triangle "+ (0.5*width*height));
public class AreaDemo {
      public static void main(String[] args) {
             Shape r=new Rectangle();
             System.out.println("Area calculation of rectangle shape ");
             r.getShapeData();
             r.compute_area();
             Shape t=new Triangle();
             System.out.println("Area calculation of triangle shape ");
             t.getShapeData();
             t.compute area();
      }
}
```