Develop a Java program to create an abstract class named shape that contains two integers and an empty method named printArea() Provide three classes named Rectangle, triangle and circle such that each one of the classes named extends class Shape. Each one of the classes contain only the MethodArea() Print that prints the area of the given shape.

```java
import java.util.Scanner;
class InputScanner {
    Scanner s = new Scanner(System.in);
    double getInput(String prompt) {
        System.out.println(prompt);
        return s.nextDouble(); } }

abstract class Shape extends InputScanner {
    double side1, side2;
    abstract void area() {;  }

class Rectangle extends Shape {
    Rectangle() {
        side1 = getInput("Enter rectangle length:");
        side2 = getInput("Enter rectangle breadth:")
    }
```

```java
void area(){
    double area = side1 * side2;
    System.out.println("Area of rectangle=" + area);
}}

class triangle extends Shape {
    triangle(){
        side1 = getInput("Enter base of triangle");
        side2 = getInput("Enter height of triangle");
    }
    void area(){
        double area = 0.5 * side1 * side2;
        System.out.println("Area of triangle=" + area);
    }}

class circle extends Shape {
    circle(){
        side1 = getInput("Enter radius of circle:");}
    void area(){
        double area = Math.PI * side1 * side1;
        System.out.println("Area of circle=" + area);
    }}
```

```
class Main {
    public static void main () {
        Rectangle rectangle = new Rectangle ();
        Triangle Triangle = new triangle ();
        circle Circle = new Circle ();


        rectangle . area ();
        Triangle . area ();
        Circle . area (); }
    }
```

If negative values to be
checked


```
class Input Scanner {
    Scanner. s = new Scanner (System.in);
    int get Input (String prompt) {
    double input;
        do {
            System . out. println (prompt);
            input = s. nextDouble;
            if ( Input < 0) {
                System.out.println (" Enter positive
                                        values only "); }
        } while (input < 0);
    return input; } }
```

Enter rectangle length : 12

Enter rectangle breadth : 10

Enter base of triangle : 5

Enter height of triangle : 10

Enter radius of circle : 10

Area of rectangle = 120.000

Area of triangle = 25.000

Area of circle = 314.000