

```

1  import java.util.Scanner;
2
3  abstract class Shape
4  {
5      int a;
6      int b;
7      abstract void printArea();
8
9      public Shape(int a, int b) {
10         this.a = a;
11         this.b = b;
12     }
13 }
14
15 class Rectangle extends Shape
16 {
17     public Rectangle(int a, int b) {
18         super(a, b);
19     }
20
21     void printArea()
22     {
23         System.out.println("Area of rectangle:"+(a*b));
24     }
25 }
26
27 class Triangle extends Shape
28 {
29     public Triangle(int a, int b) {
30         super(a, b);
31     }
32
33     void printArea() {
34         System.out.println("Area of triangle:"+(a*b)/2);
35     }
36 }
37
38 class Circle extends Shape
39 {
40     public Circle(int a, int b) {
41         super(a, b);
42     }
43
44     void printArea() {

```



```

31 }
32
33 void printArea() {
34     System.out.println("Area of triangle:"+(a*b)/2);
35 }
36 }
37
38 class Circle extends Shape
39 {
40     public Circle(int a, int b) {
41         super(a, b);
42     }
43
44     void printArea() {
45         System.out.println("Area of Circle:"+(3.142*a*b));
46     }
47 }
48
49 class prog7 {
50
51     public static void main(String[] args) {
52         Scanner sc = new Scanner(System.in);
53         System.out.print("Enter length of rectangle:");
54         int l_rec = sc.nextInt();
55         System.out.print("Enter breadth of rectangle:");
56         int b_rec = sc.nextInt();
57
58         System.out.print("Enter height of triangle:");
59         int l_tri = sc.nextInt();
60         System.out.print("Enter base of triangle:");
61         int b_tri = sc.nextInt();
62
63         System.out.print("Enter radius of circle:");
64         int r_cir = sc.nextInt();
65
66         Rectangle r = new Rectangle(l_rec,b_rec);
67         Triangle t = new Triangle(l_tri,b_tri);
68         Circle c = new Circle(r_cir,r_cir);
69         System.out.println("-----");
70         r.printArea();
71         t.printArea();
72         c.printArea();
73     }
74 }

```

Java source file


```
C:\Users\Deepu K\java>java prog7
```

```
Enter length of rectangle:12
```

```
Enter breadth of rectangle:3
```

```
Enter height of triangle:10
```

```
Enter base of triangle:4
```

```
Enter radius of circle:5
```

```
-----
```

```
Area of rectangle:36
```

```
Area of triangle:20
```

```
Area of Circle:78.55
```

```
C:\Users\Deepu K\java>
```