

Main.java

```
1 import java.util.Scanner;
2 abstract class shape
3 {
4     int a,b;
5     abstract public void printArea();
6 }
7 class rectangle extends shape
8 {
9     rectangle(int x,int y)
10    {
11        a=x;
12        b=y;
13    }
14    public void printArea()
15    {
16        System.out.println("Area of rectangle is:"+(a*b));
17    }
18 }
19 class triangle extends shape
20 {
21     triangle(int x,int y)
22     {
23         a=x;
24         b=y;
25     }
26     public void printArea()
27     {
28         System.out.println("The area of triangle is:"+((a*b)/2));
29     }
30 }
31 class circle extends shape
32 {
33     circle(int y)
34     {
```

```
32 {
33     circle(int y)
34     {
35         a=0;
36         b=y;
37     }
38     public void printArea()
39     {
40         System.out.println("Area of circle is:"+"((3.14)*b*b));
41     }
42 }
43 class Main
44 {
45     public static void main(String[]args)
46     {
47         Scanner sc=new Scanner(System.in);
48         int a,b;
49         System.out.print("Enter the length of rectangle : ");
50         a=sc.nextInt();
51         System.out.print("Enter the breadth of rectangle : ");
52         b=sc.nextInt();
53         rectangle r= new rectangle(a,b);
54         r.printArea();
55         System.out.print("Enter the height of triangle : ");
56         a=sc.nextInt();
57         System.out.print("Enter the base of triangle : ");
58         b=sc.nextInt();
59         triangle t= new triangle(a,b);
60         t.printArea();
61         System.out.print("Enter the radius of circle : ");
62         a=sc.nextInt();
63         circle c= new circle(a);
64         c.printArea();
65     }
66 }
```