```java
1     import java.util.Scanner;
2     import java.lang.Math;
3
4     abstract class Shape
5     {
6         int a;
7         int b;
8         Scanner in = new Scanner(System.in);
9         abstract void printArea();
10    }
11
12    class rectangle extends Shape
13    {
14      int area_rect;
15      rectangle()
16      {
17      System.out.println("Enter dimension of rectangle length breadth");
18      a = in.nextInt();
19      b = in.nextInt();
20      }
21        void printArea()
22      {
23        area_rect = a*b;
24        System.out.println("The area of rectangle is :"+area_rect);
25      }
26    }
27
28    class traingle extends Shape
29    {
30    double area_tri;
31      traingle()
32      {
```

```java
29  {
30    double area_tri;
31      traingle()
32      {
33        System.out.println("Enter dimension of traingle base and height");
34        a = in.nextInt();
35        b = in.nextInt();
36      }
37    void printArea()
38    {
39        area_tri = 0.5*a*b;
40        System.out.println("The area of traingle is :"+area_tri);
41    }
42  }
43
44    class circle extends Shape
45  {
46      double cir_area;
47      circle()
48      {
49        System.out.println("Enter the radius");
50        a = in.nextInt();
51      }
52    void printArea()
53    {
54        cir_area = 3.14*a*a;
55        System.out.println("The area of circle is :"+cir_area);
56    }
57  }
58
59      class Figure
60      {
```

```java
43
44    class circle extends Shape
45    {
46      double cir_area;
47      circle()
48      {
49        System.out.println("Enter the radius");
50        a = in.nextInt();
51      }
52      void printArea()
53      {
54        cir_area = 3.14*a*a;
55        System.out.println("The area of circle is :"+cir_area);
56      }
57    }
58
59    class Figure
60    {
61      public static void main(String args[])
62      {
63        rectangle r = new rectangle();
64        r.printArea();
65        traingle t = new traingle();
66        t.printArea();
67        circle c = new circle();
68        c.printArea();
69      }
70    }
71
72
73
74
```

```
Microsoft Windows [Version 6.3.9600]
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C:\WINDOWS\system32>c:

C:\WINDOWS\system32>cd/

C:\>cd Program Files

C:\Program Files>cd Java

C:\Program Files\Java>cd JDK 8

C:\Program Files\Java\JDK 8>cd bin

C:\Program Files\Java\JDK 8\bin>javac Figure.java

C:\Program Files\Java\JDK 8\bin>java Figure
Enter dimension of rectangle length breadth
2
3
The area of rectangle is :6
Enter dimension of traingle base and height
4
3
The area of traingle is :6.0
Enter the radius
3
The area of circle is :28.259999999999998

C:\Program Files\Java\JDK 8\bin>
```