```java
import java.util.Scanner;

abstract class Shape {
    int l;
    int b;

    abstract void printArea();
}

class Rectangle extends Shape {
    Scanner inp = new Scanner(System.in);
    Rectangle() {
        System.out.println("Enter the length and breadth of rectangle : ");
        System.out.print("Length : ");
        l = inp.nextInt();
        System.out.print("breadth : ");
        b = inp.nextInt();
    }
    double area;

    void printArea() {
        area = (double)l*b;
        System.out.println("Area of Rectangle : "+area);
    }
}

class Triangle extends Shape {
    Scanner inp = new Scanner(System.in);
    Triangle() {
        System.out.println("Enter the height and base of triangle : ");
        System.out.print("Height : ");
        l = inp.nextInt();
        System.out.print("Base : ");
        b = inp.nextInt();
    }
    double area;

    void printArea() {
```

```java
    void printArea() {
        area = (double)0.5*l*b;
        System.out.println("Area of Triangle : "+area);
    }
}

class Circle extends Shape {
    Scanner inp = new Scanner(System.in);
    Circle() {
        System.out.println("Enter the radius of circle : ");
        System.out.print("Radius : ");
        l = inp.nextInt();
    }
    double area;

    void printArea() {
        area = (double)3.14*l*l;
        System.out.println("Area of Circle : "+area);
    }
}

class areaOFshapes {
    public static void main(String args[]) {
        Scanner inp = new Scanner(System.in);
        int opt;
        System.out.println("----Select your choice----");
        System.out.println("1.Find area of Rectangle\n2.Find area of Triangle\n3.Find area of Circle\n4.Exit\n");
        System.out.print("Your Choice : ");
        opt = inp.nextInt();

        while(opt!=4) {
            switch(opt) {
                case 1: Rectangle r = new Rectangle();
                        r.printArea();
                        break;
                case 2: Triangle t = new Triangle();
                        t.printArea();
                        break;
```

```java
55              System.out.println("Area of Circle : "+area);
56          }
57      }
58
59  class areaOFshapes {
60      public static void main(String args[]) {
61          Scanner inp = new Scanner(System.in);
62          int opt;
63          System.out.println("----Select your choice----");
64          System.out.println("1.Find area of Rectangle\n2.Find area of Triangle\n3.Find area of Circle\n4.Exit\n");
65          System.out.print("Your Choice : ");
66          opt = inp.nextInt();
67
68          while(opt!=4) {
69              switch(opt) {
70                  case 1: Rectangle r = new Rectangle();
71                          r.printArea();
72                          break;
73                  case 2: Triangle t = new Triangle();
74                          t.printArea();
75                          break;
76
77                  case 3: Circle c = new Circle();
78                          c.printArea();
79                          break;
80
81              }
82              System.out.print("Enter your choice : ");
83              opt = inp.nextInt();
84          }
85      }
86  }
87
88
89
90
91
92
```

```
[dhruvdubey@Dhruvs-MacBook-Air JavaLab % java areaOFshapes        ]
----Select your choice----
1.Find area of Rectangle
2.Find area of Triangle
3.Find area of Circle
4.Exit

Your Choice : 1
Enter the length and breadth of rectangle :
Length : 15
breadth : 13
Area of Rectangle : 195.0
Enter your choice : 2
Enter the height and base of triangle :
Height : 87
Base : 33
Area of Triangle : 1435.5
Enter your choice : 3
Enter the radius of circle :
Radius : 97
Area of Circle : 29544.26
Enter your choice : 4
dhruvdubey@Dhruvs-MacBook-Air JavaLab % ▮
```