

```
import java.util.*;  
class Dclass {  
    public static void main () {  
        Rectangle ob1 = new Rectangle ();  
        ob1.printArea ();  
        Circle ob2 = new Circle ();  
        ob2.printArea ();  
        Triangle ob3 = new Triangle ();  
        ob3.printArea ();  
    }  
}
```

3

```
abstract class Shape {
```

```
    int i, j;
```

```
    void printArea ();
```

3

```
class Rectangle extends Shape {
```

```
    void printArea () {
```

```
        Scanner sc = new Scanner (System.in);
```

```
        System.out.println ("Enter length");
```

```
        super.i = sc.nextInt();
```

```
        System.out.println ("Enter height");
```

```
        super.j = sc.nextInt();
```

```
        System.out.println ("Area = " + (super.i * super.j));
```

3

3

```
class Circle extends Shape {
```

```
    void printArea () {
```

```
        Scanner sc = new Scanner (System.in);
```

```
        System.out.println ("Enter radius");
```

```
        super.i = sc.nextInt();
```

```
        System.out.println ("Area = " + (3.14 * super.i * super.i));
```

3 3

```
class Triangle extends Shape {  
    void printArea() {  
        Scanner sc = new Scanner(System.in);  
        System.out.println("Enter base");  
        super.i = sc.nextInt();  
        System.out.println("Enter height");  
        super.j = sc.nextInt();  
        System.out.println("Area = " + (super.i * super.j * 0.5));  
    }  
}
```

```
1 import java.util.*;
2 class Dclass {
3     public static void main() {
4         Rectangle ob1=new Rectangle();
5         ob1.printArea();
6         Triangle ob2=new Triangle();
7         ob2.printArea();
8         Circle ob3=new Circle();
9         ob3.printArea();
10    }
11 }
12 abstract class Shape {
13     int i;
14     int j;
15     void printArea() {}
16 }
17 class Rectangle extends Shape {
18     void printArea() {
19         Scanner sc=new Scanner(System.in);
20         System.out.println("Enter length");
21         super.i=sc.nextInt();
22         System.out.println("Enter height");
23         super.j=sc.nextInt();
24         System.out.println("Rectangle Area="+(super.i*super.j));
25     }
26 }
27 class Circle extends Shape {
28     void printArea() {
29         Scanner sc=new Scanner(System.in);
30         System.out.println("Enter radius");
31         super.i=sc.nextInt();
32         System.out.println("Circle Area="+(3.14*super.i*super.i));
33     }
34 }
35 class Triangle extends Shape {
36     void printArea() {
37         Scanner sc=new Scanner(System.in);
38         System.out.println("Enter base");
39         super.i=sc.nextInt();
40         System.out.println("Enter height");
```

**Enter length**

10

**Enter height**

10

**Rectangle Area=100**

**Enter base**

4

**Enter height**

2

**Triangle Area=4**

**Enter radius**

10

**Circle Area=314.0**