

```
import java.util.Scanner;
```

```
abstract class Shape {  
    int a, b;
```

```
    abstract void printArea();
```

```
    public Shape (int a, int b) {
```

```
        this.a = a;
```

```
        this.b = b;
```

```
    }
```

```
}
```

```
class Rectangle extends Shape
```

```
{  
    public Rectangle (int a, int b)
```

```
{
```

```
        super (a, b);
```

```
    }
```

```
    void printArea()
```

```
{
```

```
        System.out.println ("area of rectangle is " + a*b);
```

```
    }
```

```
}
```

```
class Triangle extends Shape
```

```
{
```

```
    public Triangle (int a, int b)
```

```
{
```

```
        super (a, b);
```

```
    }
```



```
void printArea() {
    System.out.println("area of triangle is " + a*b/2);
}
```

```
class Circle extends Shape
{
```

```
    public Circle (int a, int b)
    {
        super (a, b);
    }
    void printArea()
    {
        System.out.println ("area of circle is " + 3.142*a*b);
    }
}
```

```
class Main {
```

```
    public static void main (String args []) {
        Scanner ss = new Scanner (System.in);
        System.out.println ("length of the rectangle");
        int lr = ss.nextInt();
        System.out.println ("length of breadth of rectangle");
        int lb = ss.nextInt();
        System.out.println ("base of triangle");
        int bt = ss.nextInt();
        System.out.println ("height of triangle");
        int ht = ss.nextInt();
        System.out.println ("Radius of circle");
        int cr = ss.nextInt();
    }
}
```

```
Rectangle r = new Rectangle (lt, lbo);
```

```
r.printArea();
```

```
Triangle t = new Triangle (bt, ht);
```

```
t.printArea();
```

```
Circle c = new Circle (cr, cr);
```

```
c.printArea();
```

```
{
```