

Inheriting One Interface Into Another

```
interface I1
{
    void m1();
}
interface I2
{
    void m2();
}
interface I3 extends I1,I2
{
    void m3();
}

class C implements I3
{
    // override all 3 methods
}
```

```
interface I1
{
    void m1();
}
interface I2 extends I1
{
    void m2();
}
```

```

interface Shape {
    double area();
}

```

```

interface Figure {
    double getName();
}

```

```

interface MyShape extends Shape, Figure {
}

```

```

class Circle implements MyShape {
    private int radius;
    public Circle(int radius) {
        this.radius = radius;
    }
    @Override
    public double area() {
        return Math.PI*Math.pow(radius,2);
    }
    @Override
    public String getName() {
        return "Circle";
    }
}

```

```

class Rectangle implements MyShape{
    private int l,b;
    public Rectangle(int l, int b) {
        this.l = l;
        this.b = b;
    }
    @Override
    public double area() {
        return l*b;
    }
    @Override
    public String getName() {
        return "Rectangle";
    }
}

```

```
class UseMyShape {  
    public static void main(String[] args) {  
        MyShape S;  
        S=new Circle(10);  
        System.out.println("Shape is "+S.getName());  
        System.out.println("Its area is "+S.area());  
        S=new Rectangle(5,7);  
        System.out.println("Shape is "+S.getName());  
        System.out.println("Its area is "+S.area());  
    }  
}
```

Abstract Class

Interface(Prior To Java 8)