

Exercise 1

```
public interface MyFirstInterface {  
    int x = 10;  
    void display();  
}  
  
public class InterfaceImplemented implements MyFirstInterface {  
    @Override  
    public void display()  
{  
        x = 20;  
        System.out.println("Value of x: " + x);  
    }  
}
```

Exercise 2

```
public interface Speaker {  
    void speak();  
}  
  
public class Politician implements Speaker {  
    @Override  
    public void speak() {  
        System.out.println("vote me.");  
    }  
}  
  
public class Priest implements Speaker {  
    @Override  
    public void speak() {  
        System.out.println("god bless you.");  
    }  
}
```

```

public class Lecturer implements Speaker {
    @Override
    public void speak() {
        System.out.println("Listen to me.");
    }
}

public class SpeakerObj {
    public static void main(String[] args) {
        Speaker politician = new Politician();
        Speaker priest = new Priest();
        Speaker lecturer = new Lecturer();
        politician.speak();
        priest.speak();
        lecturer.speak();
    }
}

```

Exercise 3

Compilation Error

Can't inherit final forms.

Exercise 4

```

abstract class Shape {
    abstract float calculateArea();
    void display() {
        System.out.println("Shape: " + this.getClass().getSimpleName());
        System.out.println("Area: " + calculateArea());
    }
}

class Rectangle extends Shape {

```

```
private float width;
private float height;
public Rectangle(float width, float height) {
    this.width = width;
    this.height = height;
}
```

```
@Override
```

```
float calculateArea() {
    return width * height;
}
```

```
}
```

```
public class TestShape {
    public static void main(String[] args) {
        Rectangle rectangle = new Rectangle(5.0, 10.0);
        rectangle.display();
    }
}
```