

## Feb 19, 2015 - Use of Anonymous classes -Example

```
import java.util.*;
class myClass {
    int i1, i2;
    public myClass(int a, int b){
        this.i1=a;
        this.i2=b;
    }
    public String toString(){
        return "i1 = "+i1+", i2 = "+i2;
    }

    public static void main(String[] args) {
        myClass m1=new myClass(10, 120);
        myClass m2=new myClass(-10, 220);
        myClass m3= new myClass(44, 100);
        ArrayList<myClass> AL=new ArrayList<myClass>();
        AL.add(m1);
        AL.add(m2);
        AL.add(m3);
        System.out.println(AL);
        Collections.sort(AL, new comp1());
        System.out.println(AL);
        Collections.sort(AL, new comp2());
        System.out.println(AL);
    }
}

class comp1 implements Comparator<myClass>{
    public int compare(myClass m1, myClass m2){
        return m1.i1-m2.i1;
    }
}

class comp2 implements Comparator<myClass>{
    public int compare(myClass m1, myClass m2){
        return m1.i2-m2.i2;
    }
}
```

```
fobn5:~/00P/Week5$ java myClass
[i1 = 10, i2 = 120, i1 = -10, i2 = 220, i1 = 44, i2 = 100]
[i1 = -10, i2 = 220, i1 = 10, i2 = 120, i1 = 44, i2 = 100]
[i1 = 44, i2 = 100, i1 = 10, i2 = 120, i1 = -10, i2 = 220]
fobn5:~/00P/Week5$ java anonymousComp java
```

```

import java.util.*;
class myClass {
    int i1, i2;
    public myClass(int a, int b){
        this.i1=a;
        this.i2=b;
    }
    public String toString(){
        return "i1 = "+i1+", i2 = "+i2;
    }

    public static void main(String[] args) {
        myClass m1=new myClass(10, 120);
        myClass m2=new myClass(-10, 220);
        myClass m3= new myClass(44, 100);
        myClass m4=new myClass(0,400);
        ArrayList<myClass> AL=new ArrayList<myClass>();
        AL.add(m1);
        AL.add(m2);
        AL.add(m3);
        AL.add(m4);
        System.out.println(AL);
        Collections.sort(AL, new Comparator<myClass>(){
            public int compare(myClass m1, myClass m2){
                return m1.i1-m2.i1;
            }
        });
        System.out.println(AL);
        Collections.sort(AL, new Comparator<myClass>(){
            public int compare(myClass m1, myClass m2){
                return m1.i2-m2.i2;
            }
        });
        System.out.println(AL);
    }
}

```

These classes are used just once. They are created as needed, and have no name. They are **anonymous** classes.

```

fobn5:~/00P/Week5$ java myClass
[i1 = 10, i2 = 120, i1 = -10, i2 = 220, i1 = 44, i2 = 100, i1 = 0, i2 = 400]
[i1 = -10, i2 = 220, i1 = 0, i2 = 400, i1 = 10, i2 = 120, i1 = 44, i2 = 100]
[i1 = 44, i2 = 100, i1 = 10, i2 = 120, i1 = -10, i2 = 220, i1 = 0, i2 = 400]
fobn5: ~/00P/Week5$

```