

Inner Class Exercise

Exercises

1. Define a class named Factorial that has the following methods:
 - a. Constructor - Factorial(lowerLimit, upperLimit)
 - b. toString() – returns a string with the factorials of numbers starting at lowerLimit (inclusive) and ending at upperLimit (inclusive). For example, for lowerLimit 2 and upperLimit 4 the string returned will be: "2, 6, 24"
2. Expand the Factorial class as follows:
 - a. Make the class implement the Iterable interface
 - b. Use a non-anonymous inner class to implement the iterator
 - c. Define a main method that uses the Factorial class.
3. A Car class is defined as follows:

```
public abstract class Car {  
    private String make;  
    public abstract void start();  
    public void setMake(String make) { this.make = make; }  
    public String getMake() { return make ;}  
}
```

Complete the assignment statement below so we can define a hybrid car object that has an instance variable representing battery power. In addition the object will be associated with a start() method that decreases the battery power by 100 units. The initial battery power is 3000 units. You must use an anonymous inner class.

```
public static void main(String[] args) {  
    Car Hybrid = // COMPLETE THIS ASSIGNMENT  
}
```