COMP 210 - Homework 2 & Lab 3

Spring 2014

For these assignments you'll play with some basic list processing routines in order to get a hang of OOP thinking and the use of Interfaces.

Homework 2

Due before lab on January 30.

Do all of the following in Eclipse:

1. Write the interface for a list of integers with the following methods:

   (a) *product*
      compute the product of all the numbers in the list

   (b) *evens*
      collect all the evens in the list

   (c) *twoPow*
      compute the list containing two raised to the power of each number in the list.

   (d) *avg*
      compute the average of all the numbers in the list

2. Clearly document each method in the interface.

3. Stub out the empty and cons list classes that implement this interface. Include data fields and the standard set of Eclipse generated methods.[1]

4. Write JUnit tests to cover all the classes and cases of the list methods.

5. Submit your source code as assignment *hwk2* using *handin*

[1] Remember you'll have to write *equals* for the empty list!

Lab 3

Implement and test the list methods you stubbed out in the homework. At the end of lab, submit your code as *lab3* using handin. If you get done early and want to dust off some recursive thinking muscles, try to write a recursive insertion sort for your list type.