

CPS209 Lab 3

Inheritance & Interfaces

Preamble

In this lab you will continue work on your Polynomial class, adding arithmetic operations and implementing comparison and equality methods. You will also practice simple inheritance by creating a wrapper class for ArrayList.

Lab Description

Part 1: Continuing Polynomial

Complete the methods stubbed out in the Polynomial.java class. Many of these you've completed already, but there are a few new ones explained in PolynomialTwo.pdf and PolynomialThree.pdf.

Two new Polynomial testers are included in this lab as well, in addition to the first one from lab 2. Your Polynomial class must pass all three Polynomial testers.

Part 2: Extending an Existing Class

Add to the class definition found in AccessCountArrayList.java. The description for this class can be found in AccessCountArrayList.pdf. Your class must pass the tests in AccessCountArrayListTest.java

Reminder

- Your methods should be SILENT. Print statements are fine for testing and debugging but remove them from your code before you submit.
- No method should take longer than a couple of seconds to pass the tester. Methods that take too long will be rejected. Writing efficient code is an important part of this course.

Submission

Labs are to be completed and submitted *individually*. Submit your completed **Polynomial.java** and **AccessCountArrayList.java** on D2L, under the submission for Lab 3.