CSE 326 Spring 1995
Data Structures
Project 2
April 10, 1995

DUE: Friday, April 18, 1995 at 12:01am

Objectives

- To efficiently implement several operations on polynomials.
- To become familiar with the concept of inheritance by making use of a derived class.

Project Directory

All of the materials you will need are in `/cse/courses/cse326/project2`.

What to Do

1. You will need your own copy of the program to modify, so make a copy of the materials in the project directory above. You probably want to put the copied files into their own subdirectory of your home directory.

2. Once again, your TA has kindly provided you with most of the code for the project. This time, it may even work properly. However, some of the implementations for the Polynomial class methods are missing from `Polynomial.C`. Your job is to fill in these missing implementations. You should not, however, modify any of the other files without permission. In the unthinkable event that they contain flaws, I will publish official updates.

3. To test your Polynomial class, you should write your own `test.C` file with a `main()` function. You can use the extraction operator ("`>>`") to read in polynomials from an input device. The input format is a series of pairs of numbers followed by a terminal 0. Each pair represents a term in the polynomial; the first number is the coefficient and must be non-zero, and the second is the exponent. It is assumed that the polynomial is in simplest terms (i.e., that there is at most one term with any given exponent value). For example, the input

   ```
   1 0  3 1  1 2
   ```

   signifies the polynomial

   $$x^2 + 3x + 1.$$

What to Turn In

To submit your program for grading, type `make submit`. This will cause the makefile to use the `turnin` program to send me an electronic copy of your polynomial code. It is assumed that you are using the same file names for all of the project code that I provide and that you have not modified anything except the polynomial code. Once I have your code, I will run it with a test program of my own. In order for this to work, it is essential that you do not modify the Polynomial class interface.