Day 30 Highlights

1. Reminders
   1. zyBooks exercises due Monday at midnight
   2. Project Five is due on Apr. 3 at 5pm
2. Linked list for polynomials

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| **typedef struct \_term {**  **double coef;**  **int degree;**  **struct \_term \*next;**  **} Term;** |

**Today’s focus – building and iterating through a list**

1. Write the code to declare the polynomial: 5.5x4 + 2.5x2 + 17.3x1
   1. Initialize the polynomial by hand
      1. Write a function to create a term
      2. Link these terms together manually
   2. Write a print routine that prints the polynomial  
      **void printPoly(Term \*head) { ... }**
   3. Write a countTerms routine that counts the number of terms  
      **int countTerms(Term \*head) { ... }**
   4. Search for a term with a specific degree

**Term \*searchTerm(Term \*head, int degree) {}**

* 1. Write an evaluate routine that evaluates the polynomial at a given value of x  
     **double evalPoly(Term \*head, double x) {}**