

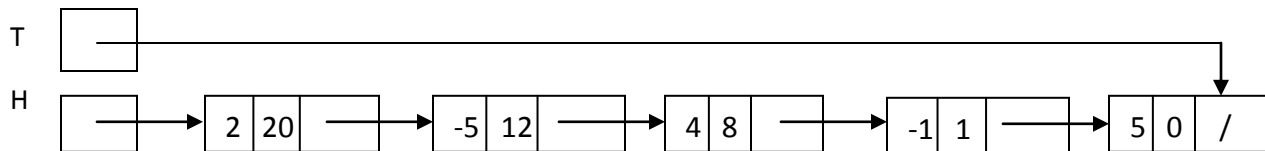
The George Washington University
School of Engineering and Applied Science
Department of Computer Science
CSci 1112 - Algorithms and Data Structures
Spring 2014 Project 2
Due Date: April 3, 2014
Instructor: A. Bellaachia
Polynomial Operations

Description

Your assignment is to write a program that implements polynomial operations.

Your program should implement a polynomial using a singly linked list with head and tail. Each node of the list contains the coefficient and the power of x of each tem. For example:

- Given a polynomial $p(x) = 2x^{20} - 5x^{12} + 4x^8 - x + 5$
- P(x) will be represented by the following terms: (2,20), (-5, 12), (4,8), (-1,1), and (5,0) and its linked representation is as follows:



You program should implement the following operations:

- (1) AddPoly: Add two polynomials
- (2) SubPoly: Subtract two polynomials
- (3) MultPoly: Multiply two polynomials
- (4) DegPoly: A method that returns the degree of a polynomial
- (5) PrintPoly: Print a polynomial

Deliverables

1. All code used for implementing you project
2. Specification and implementation of your program.
3. Listing of your implemented test plan, and of the output produced by your program.
Include different test cases, some of which are invalid input.