CPSC 2430-02 Fall 2017 Programming Assignment #2

Wednesday, October 11, 2017 at Midnight

P2 exercises your understanding of linked lists, dynamic memory and pointers in C++

Do not use classes in this assignment.

Do not use any of the STL (including the vector type) in this assignment.

1) Create an **ordered linked list** to store integer values.
2) Define routines to:
   a. **Traverse** the linked list
   b. **Insert** an element into the linked list
   c. **Delete** an element from the linked list
3) Test the routines using a random number generator
   a. Construct a linked list of at least size 50
   b. Traverse this linked list, storing values in an output file called **"P2OutputA.txt"**
   c. Delete the smallest element of the linked list
   d. Delete the largest element of the linked list
   e. Delete some value in the middle of the linked list
   f. Traverse the linked list, storing values in an output file called **"P2OutputB.txt"**

Name your file **p2.cpp** and submit by running the following script from the directory where the file is stored.

/home/fac/sreeder/submit/cpsc2430/p2_runme

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