CPSC 2430-02 Fall 2017 Lab #4

Friday October 27, 2017 by Midnight

This lab exercises your understanding of using a Heap to create a Priority Queue

Follow these steps:

1) Call your source code file "lab4.cpp"

2) Declare an integer array to use for the heap (size of 20 to 30 elements)

3) Create an insertion function (and any needed helper functions) that creates a **min**-**heap** (smallest priority is most important)

4) Create a remove function (and any needed helper functions) that removes the min value from the heap and returns it

5) In main, call the insertion function with at least 15 random values

6) In main, call the remove function for all values and print them to the screen (format the numbers so they all fit in a single screen – perhaps 5 to 10 columns before pressing enter?)

7) Repeat the insertion and remove/print for a second set of random values before ending the program

Submit your program by typing the following command at the prompt in the same directory where the file is stored:

/home/fac/sreeder/submit/cpsc2430/lab4_runme