

Programming Assignment 2

due Saturday, Nov. 17, noon, 2012

The basic task is this: implement a stack of float values that has $\Theta(1)$ worst case behavior for PUSH, POP, and MEAN, a function returning the mean of the values in the stack.

This stack should be wrapped in a user interface that asks the user to choose from POP, PUSH, MEAN or QUIT at each turn. If the user enters PUSH, the program should read a number from the keyboard. If the user tries POP or MEAN on an empty stack, the program should notify the user of the error, and again prompt the user to choose from POP, PUSH, MEAN or QUIT. To facilitate testing, please use exactly these commands.

Bring a brief description of your implementation of MEAN to your final exam.

Please hand in your code by committing it to the your course svn repository. Basic information about svn can be obtained at <https://svn.cs.du.edu>. The course repository is <https://svn.cs.du.edu/courses/comp2370/f2012/>

The code should be well-organized and well-documented. Output should be user-friendly.

You may work individually or in pairs. A pair may hand in a single program, but each member of the pair should hand in a separate description of the algorithm.