

Stack Lock and Unlock

Description

Build a program to demonstrate the use of stacks. Start with the code in `stackCode.cpp` (posted with this PDF). *While you may (and should) add documentation to the supplied code, you may **not** modify **any** of the code in `main`.* Exactly match the output specified in `stackOutput.txt` (posted with this PDF).

All Stack objects shall share a single stack. Any Stack object can lock the stack for its own exclusive use and unlock it later. The object that locked the stack is the only one that can push values onto the stack, pop values off of the stack, and unlock the stack. You may not use any global variables.

Create member functions to perform the push, pop, lock, and unlock functions. These functions shall output information regarding their operations (as if you were debugging your code).

Output

See `stackOutput.txt`.