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CS 372

Assignment 01

The program for Assignment 1 demonstrates three pointer coding anti-patterns. In the function, `pointerAntiPattern1()`, both of the pointers are pointing to the same memory location. When the first pointer is deleted along with the data being pointed at, the second pointer is left as a dangling reference. In the function, `pointerAntiPattern2()`, there are two pointers pointing to the same location in memory. The first pointer is deleted incorrectly. Since the pointer points to an array, it is missing the brackets in the delete statement. The `delete[]` tells the compiler that there are multiple values that need to be deleted. The second pointer still points to the same memory location, but the data values have been deleted. In the function, `stringStack()`, memory is allocated on the heap for a string that is then pushed onto the stack. It would probably be better if the pointer was defined as a pointer to the stack instead and the string was pushed directly onto the stack. Less memory would be used by the program.