Week 2 Exercises Submit

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1.1–1.2

1. Submit Work on str.h and str.cpp

Exercise code:
https://github.com/sandraleeusc/csci104_fall2020_lecture

Str class mimics the C++ string class, str.h and str.cpp

- Properly handle memory allocation
- Practice treating string like an array using '[i]' indexing
- Practice comparison on string objects with '==' and other operators, etc.
- You may use old C string libraries <cstring> to help you
- To get the address stored in a unique_ptr, use the get() function

The code for tracing is available here:
https://github.com/sandraleeusc/csci104_fall2020_lecture

Trace the output of functiontrace.cpp

- The output is in function_trace_output
- You need to understand what function is being called on each line and why.
- You should understand what function printed each statement. Other functions are called that do no print anything.
- You can add print statements to standard error, cerr
- To compile: g++ --std=c++17 -o test functiontrace.cpp
- To run and redirect standard error to a file:

./test 2> testing_outputfile

Extra Study exercises

1. Write operator+= for Str
2. Be able to trace strtest.cpp and indicate every function being called on each line.
3. For functiontrace.cpp, change the code in order to experiment with when constructors, destructors, and copy assignment operators are called.