

Week 10 Exercises Submit

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1.1–1.2

Exercise 1: Recursive Function Practice

Starter Code:

https://github.com/sandraleeusc/csci104_fall2020_lecture/blob/master/allproducts.cpp

1. Write a recursive function, `allProducts`, that given a set of primes, returns a vector of all of the products of the primes?
2. Trace the function `allProducts` on the set of primes $\{2,3\}$

Exercise 2: N Queens Code and Tracing

Starter code:

https://github.com/sandraleeusc/csci104_fall2020_lecture/blob/master/nqueens.cpp

1. Modify the given N Queens code to print out all solutions for an $n \times n$ board.
2. Trace the code for 4×4 board until it prints out its first solution. You can use the debugger or you can use a pen and paper trace.
3. [Optional] How would you change this code to use more modern C++ memory management practices?