Assignment 0409
This assignment is yet another “classic” operating systems programming task dealing with process synchronization, supported by a smattering of exercises.

Not for Submission
We are still very much within chapter 6 of SGG.

For Submission
The Dining Philosophers Problem
Implement a solution to the dining philosophers problem using the POSIX API. The bounded buffer code given out in class may be used as a basis for your solution.
Make sure to include well-placed output statements to report what’s happening in your program and the state of things at any given time — that’s how we’ll know whether your solution is working.
Commit your code to /homework/cmsi387/dp.

Exercises
Do the following exercises from SGG: 6.9 and 6.27. Hint: The answer to 6.27 can be found in one of the “classic papers” given out in class.
Plus, name two things (for a total of four observations) that may happen in incorrect critical section solutions to the dining philosophers and sleeping barber (SGG Exercise 6.39) problems.
Submit your answers on hardcopy.

Extra Credit
The Sleeping-Barber Problem
You will get extra credit if you also implement a solution to the sleeping barber problem (SGG Exercise 6.39). Commit this to /homework/cmsi387/sb.