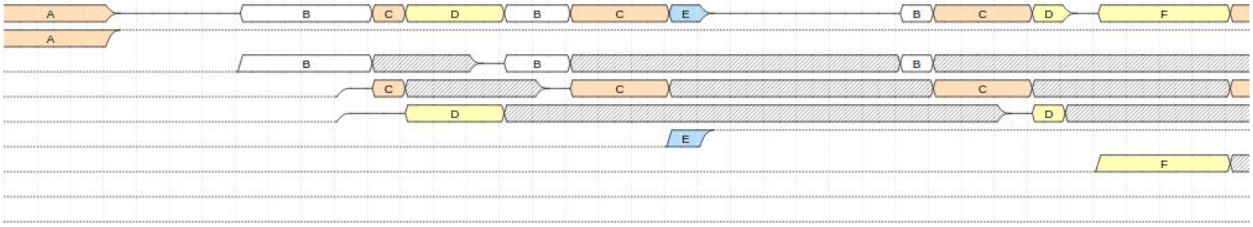
Akira DeMoss
Lab 6
CPRE 308
Section M

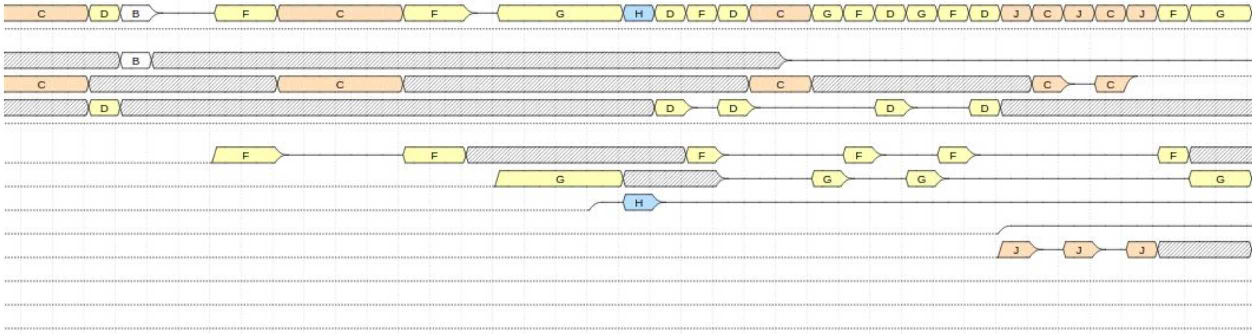
Summary

Overall this lab was challenging. I did this on my own personal Linux Ubuntu machine and got a rather archane make error, as happens, however I was able to fix it by changing the linking order in one of the make files. It was really satisfying to be able to generate the process schedules into a form that we could visualize. Personally as a visual learning seeing the way this worked with the provided fcfs algorithm was beneficial to my understanding of the material.

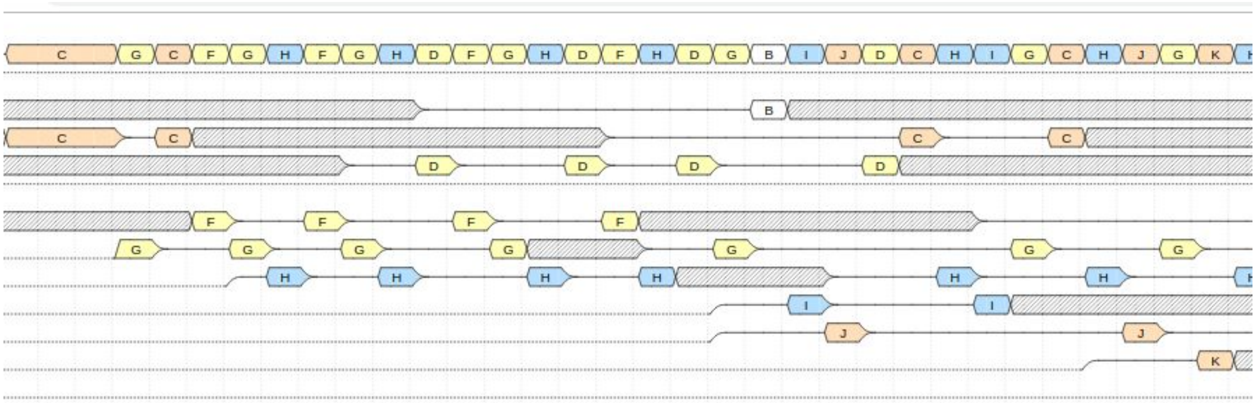
Waveforms



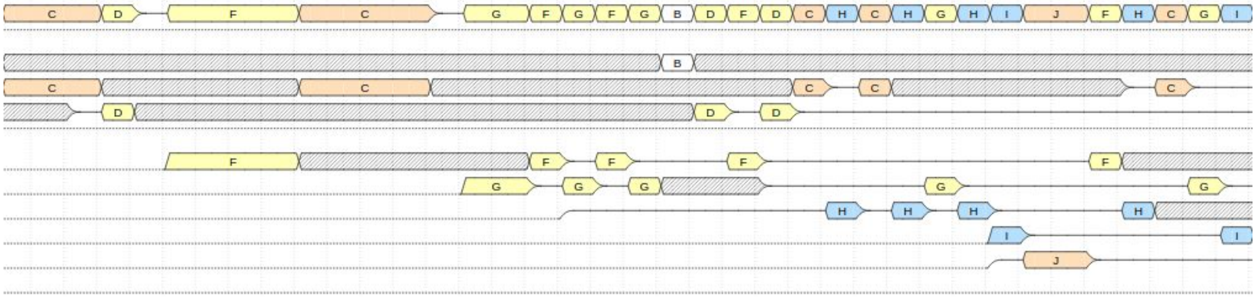
fcfs - algorithms accepts requests one at a time and carries them out in this order. We notice here that each time a process is run it's allowed to run for its fully allotted amount of time.



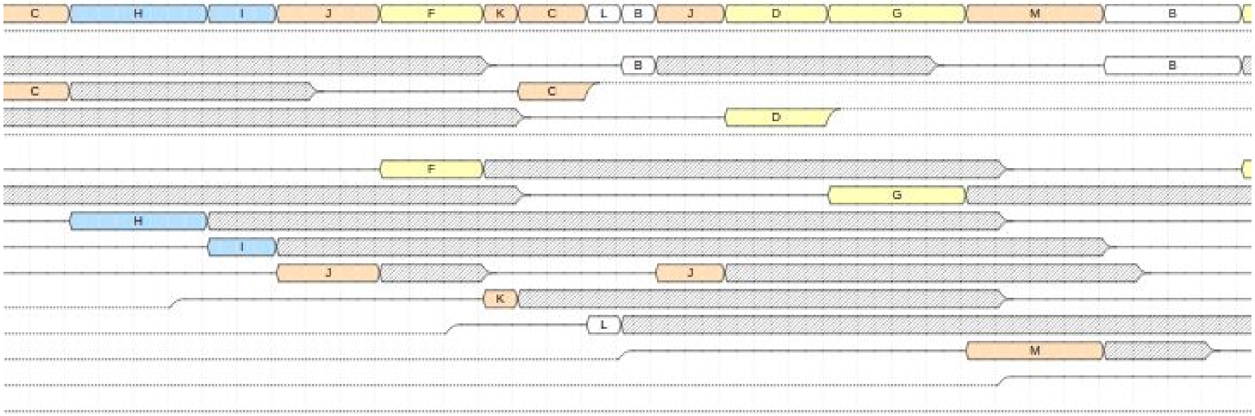
prr - According to Wikipedia Priority scheduling is similar to Round Robin, but allows a hierarchy of processes. Multiple process queues are used, one for each priority. As long as there are processes in a higher priority queue, they are run first. Here we see an example where initially the 2nd B is waiting for D to complete before it runs again.



rr - each algorithm is assigned a time interval called its quantum. We see starting at G that the quantum is 1.



prr2 - this is a rendition of the prr algorithm where each value is quantized but the order in which each is called is slightly randomized.



srtn - Scheduler picks the job/process which has the lowest remaining time to run. Hence when B with smaller run time runs before B with larger runtime in this example.