Process Scheduler Report
for CS485

Jackson Horton

1. Background

The four algorithms implemented in the process scheduler are:

1) First-come, first-serve
2) Shortest job first
3) Priority Scheduling
4) Round robin

In my program, I made it run all four algorithms on the same set of processes. The processes were provided as follows:

Process #	Arrival	Time Needed	Priority
1	0	5	1
2	1	4	2
3	2	2	4
4	4	1	3
5	6	5	5

2. Usage

The executable generated by the makefile will automatically run all four tests and output the step-by-step results of each. Below I will summarize the results of each test:

Algorithm #	Avg. Wait	Avg. Turnaround	Total Time
Priority	4.6	8	17
SJF	3.6	7	17
RR	5.6	9	17
FCFS	4.8	8.2	17

3. Conclusion

SJF has the fastest turnaround and wait time, which is expected, but this can be a downside since the processes run in large blocks at a time with no breaks. FCFS performs slightly worse by these metrics and has similar potential issues as SJF. RR performed the worst in terms of wait time and turnaround time. And priority scheduling performed slightly better than FCFS which is probably just a result of how the processes in the example were prioritized. Overall, SJF was the fastest.