Lab 8 Report

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My program exists entirely in a single file, `main.c`. The first thing I did when writing the program was to define a `struct` to store the three fields of a process: priority, pid and arrival time.

I also created a global array of `process` structs to store the information read in from process.txt.

I created the ascending and descending order comparators using the slides. Because I knew that the parameters passed would be the struct `process`, so I type casted the parameters within the function and then compared the appropriate variables within that struct to produce the correct ordering in the result.

I then moved to creating the method to parse the input file. It is passed the name of the file in question, then utilizes `fscanf()` to parse each space delimited string (in this case purely numbers). I parse 3 strings at a time because I know that, that way, I can assign values to each process struct correctly. I replace each empty struct in the global array by a newly created struct until `fscanf()` reaches `EOF` (end of the file).

Now that the array is populated with data from process.txt, I call qsort in `main` with various comparer functions and print the result.