Sanjit Sama

1. (9 pts) Compare and contrast the advantages and disadvantages of the original XINU scheduling policy described in Chapter 5 of your book and the policy you implemented in this lab.

Advantages: With our newly created scheduled we might be considered more “fair”. The reason being that we are giving IO bound process more CPU time by constantly recalculating priority and the QUANTUM.

Disadvantages: When it comes to the disadvantages of the original scheduler. One main important idea is that the original scheduler is static. If a process has a lot of interrupts being called within it will cause for “starvation”. “Starvation” would not allow for any process with a lower priority value to get CPU time.

(6 pts) Describe how you designed test cases to test your implementation.
As far as test cases go the most successful technique has been inserting print statements EVERYWHERE. With XINU I feel that collecting the most amount of data rather than making assumptions has been the most helpful. That being said in addition to the plethora of print statements, I have also done a lot of manual calculation ensuring that my variable values were being calculated properly. Finally, I could further test my program by creating multiple process each with a different priorities ensuring that they are being printed in the right order while also manipulating a function to print the ready list ensuring that the processes are being ordered properly.