Homework for Week 11
(Due Date: Check Canvas)

1. [1] Typically, at the completion of a device I/O, a single interrupt is raised and appropriately handled by the host processor. In certain settings, however, the code that is to be executed at the completion of the I/O can be broken into two separate pieces. The first piece executes immediately after the I/O completes and schedules a second piece of code (sometimes called a "Deferred Procedure Call") to be executed at a later time. What is the purpose of using this strategy in the design of interrupt handlers?

2. Device drivers for USB busses are relying, to a surprising amount, on polling (as opposed to interrupts) to interact with USB devices. Speculate (wildly if necessary) about why designers went with polling.

3. [1] Why is rotational latency usually not considered in disk scheduling?

References

[1] A. Silberschatz, P. Galvin, and G. Gagne, *Applied Operating Systems Concepts*, John Wiley & Sons, Inc., New York, NY, 2000.

[2] Deitel, Deitel, and Choffnes, *Operating Systems*, Pearson / Prentice Hall, 2004.

[3] A. S. Tanenbaum, *Modern Operating Systems*, Pearson / Prentice Hall, 2008.

[4] L. F. Bic, A. C. Shaw, *Operating Systems Principles*, Prentice Hall 2003.

[5] C. Crowley, *Operating Systems, A Design-Oriented Approach*, Irwin 1997.

[6] M. Herlihy, N. Shavit, *The Art of Multiprocessor Programming*, Elsevier, 2008