Homework for Week 14
(Due Date: Check Canvas)

1. (variation of [1]) Describe the modifications to a log-structured file system that would happen when a process requests the creation of a new file `/tmp/foo` and writes to that file sequentially until the file size reaches 20 KB. (This question is vague. Try the best you can.)

2. You have a NAND Flash Solid State Drive in your system. Which among the following files systems will give the best performance? You can choose among: UNIX Original File System, UNIX Fast File System, Log-Structured File System. Argue why yours is the best choice for a mixed workload, with a combination of file creations, deletions, random, and sequential accesses. (Feel free to speculate.)

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