

Due: 11:59 PM, April 21, 2020

- 1. Is it fundamentally necessary to store on disk the information about the unallocated disk sectors? Explain why.
- 2. In some early release of an operating system, when a file was deleted, its sectors reverted to the free list but they were not erased. What problems do you think may result from this? Why do you think the blocks were not erased?
- 3. You are designing a file system from scratch. The disk driver allows you complete control over the placement of data on the disk. Assuming that you have settled for a File Allocation Table (FAT) architecture, where would be the best place to store the table on disk?
- 4. Contiguous allocation of files leads to disk fragmentation. Explain why?
- 5. Can we implement symbolic links in DOS (FAT file system)? If so, show how, and if not, explain why.

Submit your responses in a single markdown format file.