

## Problem Set 2: Software

*Due Thursday, 20 October 2005, by 5:30 P.M. ET*

The first two questions of this problem set expect that you have watched *Pirates of Silicon Valley*, a movie presented during lecture on Thursday, 6 October 2005. Distant students unable to travel to campus for that lecture and unable to borrow or rent a copy of the movie are not expected to submit this problem set but must notify their grader to that effect prior to this problem set's deadline.

Please type or write your answers, but do not write your answers on the problem set itself.

### Gene's Picks. (20 points each.)

1. *Pirates of Silicon Valley*: thumb's up or thumb's down? In a short paragraph, why? In another short paragraph, what did you learn from the film?
2. In one scene, Steve Jobs walks in on an interview with a professional looking applicant who wants a job with Apple. While the applicant's resume is impressive, Jobs disliked him. Why? What difference do the applicant's background or character make in today's tech industry? Should they make a difference? Why? One or more short paragraphs in total suffice.

### Yesterday's "The World of Tomorrow" Today. (20 points.)

3. Suffice it to say that personal computers, now ubiquitous throughout much of the world, have had no small impact. In one or more paragraphs, what other current technological forces do you see impacting history and society in a global way now and in the near future?

### Kids Today. (20 points.)

4. Suppose that you've just finished typing up your answers to Problem Set 2 on your Mac with Microsoft Word, your favorite word-processing program. It's late in the evening, and so you save your answers to a file on your hard disk and retire for the night. As soon as you're asleep, though, your mischievous nephew sneaks out of his room and decides to play around on your computer. (You should probably suppose, too, that you have a nephew and that he lives with you.)

You awaken the next morning to find that, during the course of his antics, your nephew dragged your homework file to the trash can *and emptied* the trash! Devastated, you break into tears, only to be reassured by your nephew that the file might be recoverable. "But I can't find the file anywhere!" you exclaim. "You deleted it!"

“But there exist programs that can undelete files,” your nephew explains. “Like Norton Utilities.”

Explain in a short paragraph how programs like Norton Utilities can actually undelete files.

**Nerd Power. (20 points.)**

5. Suppose that you own an “experienced” computer with an 800-MHz CPU, 256 MB of RAM, and a 20-GB HDD. You’re constantly using this computer to type up homework for your favorite Extension School course, and so you’re frequently saving files to your hard disk. But, even with a 20-GB drive, you’re pretty tight on disk space, so you tend to delete files a lot, particularly homework-related files as soon as you’ve printed them out. Moreover, you like to play games, so you’re always installing and, two wasted weeks later, uninstalling the latest and greatest shoot-‘em-ups.

Over time, you notice that it’s taking progressively longer to save and open files on this computer as well as to install new programs. But your CPU is still running at 800 MHz. You still have 256 MB of RAM. Your hard drive can still hold 20 GB. So why in the world is your system slowing down? Explain the reasons behind this predicament in two or more sentences. Then, in two or more additional sentences, tell us how you might solve the problem, short of buying a better computer, and why your solution works.

**Extra Credit. (5 points.)**

6. Who is Linus Torvalds? Why do some people love to hate him? Why can’t some people live without him?