

Slide 1

Administrivia

- Homework 9 on the Web. Due December 6 (right after reading days).
- Not-accepted-past deadline for all homeworks December 11.
- ACM tutors will not be available after last day of class. I plan to have office hours a couple of days the week of December 2. Tentative schedule 3pm to 5pm W and F, but I will let you know by e-mail.

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More Administrivia

- Small changes to how your grade will be computed:
 - Only 5 points for attendance.
 - No late penalty on video quizzes.
- Questions?

Just For Fun — “Extreme” ASCII Art?

- Some of you may have heard of “ASCII art”? a truly over-the-top example, from quite a while ago, can still be found, via
`telnet towel.blinkenlights.nl`
(to interrupt control-] then “quit” or control-d — although this doesn’t seem to work in a terminal window??)
- (What some people choose to do with their time can be — interesting?)

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Quotes of the Day/Week/?

- From a key figure in the early days of computing:
“As soon as we started programming, we found to our surprise that it wasn’t as easy to get programs right as we had thought. Debugging had to be discovered. I can remember the exact instant when I realized that a large part of my life from then on was going to be spent finding mistakes in my own programs.” (Maurice Wilkes: 1948)
- From someone in a discussion group for the Java programming language:
“Compilers aren’t friendly to anybody. They are heartless nitpickers that enjoy telling you about all your mistakes. The best one can do is to satisfy their pedantry to keep them quiet :)”

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Course Topics — Recap

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- Basic C programming, for people who already know how to write programs in some other language. Especially useful (I think!) for those who start in a very abstract/high-level language.
- Review of the Linux/UNIX command-line environment and command-line development tools.
- Review of basics of computer arithmetic and data representation. A little more about floating-point representation.

Why Learn C? (For Java/Python/Scala Programmers — Recap)

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- Scala and Python (and Java, less so) provide a programming environment that's nice in many ways — lots of safety checks, nice features, extensive standard library. But they hide a lot about how hardware actually works.
- C, in contrast, has been called “high-level assembly language” — so it seems primitive in some ways compared to many other languages. What you get (we think!) in return for the annoyances is more understanding of hardware — and if you do low-level work (e.g., operating systems, embedded systems), it may well be in C. (Performance *may* also be better, though “measure and be sure”.)

Minute Essay

- None really — just sign in.
- Best of luck with your finals, and best wishes for a good break!

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