

Administrivia

- Online syllabus updated to reflect decision made last time about projects and homeworks. (Fewer points for homeworks than originally estimated, projects optional.)
- Alleged paraphrase from an article by Brian Kernighan on the origins of Unix:

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The tab in makefile was one of my worst decisions, but I just wanted to do something quickly. By the time I wanted to change it, twelve (12) people were already using it, and I didn't want to disrupt so many people.

“What Command Do I Use To ...”

- You know about `apropos` as a way to discover new commands. You probably also know that it's not perfect.
- So today, a tour of some commands I have found useful ...

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Commands for Working With Text and Other Data

- `script` to capture all terminal input/output. (`exit` to stop capturing.)
- `strings` to search a file for printable strings. (A crude but effective way to peek at an MS Word file!)
- `grep` to search a file or files. Can search on regular expressions too.
- `diff` to compare two files.
- `ispell` or `aspell` to check/correct spelling. (No man page on our machines. `locate` to find documentation.)
- `od` to show data in various forms (binary, hexadecimal, etc.).

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Commands for Printing

- `lpr` to print PostScript or text. `lpq` to check print queue; `lprm` to cancel a print job.
- `enscript` or `pr` to pretty-print text.

Commands to Compress and Archive Data

- `gzip` and `gunzip` to compress/uncompress data. Or use `compress` and `uncompress`.
- `tar` to create Unix-standard-format "archive" file. (Conceptually similar to ZIP archive files — which you can generate, using `zip`.)

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A sometimes useful sequence (copies a directory, preserving any symbolic links):

```
(cd sourceDir; tar cf - . ) | ( cd target; tar xf - )
```

Web-Related Commands

- `wget` or `curl` to download a Web page or pages.
- `lynx`, `links`, or `w3m` to browse in text mode.

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Commands for Working with Numbers

- `bc` and `dc` calculators.
- `gnuplot` to generate plots.

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Commands for “Batch” Programs

- `batch` and `at` to run something “in batch mode” / at specified time. If output is not redirected, it’s sent to you by e-mail.
- `crontab` to set up “cron job” to execute periodically.

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Commands for Working with Programs

- `-E` (show preprocessor output) and `-S` (generate assembly-language output) flags on most compilers.
- `gdb` source-level debugger. Semi-graphical version available from `xemacs`.

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Minute Essay

- Any other things you'd like to be able to do from the command line?
- Reminder: Homework 6 due today (by e-mail).

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