## A Minimal Set of UNIX Commands

The following is a very small but useful subset of UNIX operating system commands. Throughout, *fname* stands for the name of a file.

exit Logs you off the system: <u>ALWAYS</u> log off before leaving a lab or any public machine! man command name HELP: explains command name (like man rm).

Is Lists file names.
Is \*fname\* Lists all file names containing the string fname (\* is wildcard)
cat fname Displays fname on screen
less fname Displays fname on screen, one page at a time.
lpr fname Prints fname on the printer in the computer lab (not your printer at home).
rm fname Removes fname, erasing it forever.

mkdir dirname Create subdirectory (like a folder) dirname.
cd dirname Change directory to subdirectory dirname
cd Back to main directory
cd .. Go up a level
pwd Shows pathway (to current directory).

cp fname1 fname2Copies fname1 to fname2cp fname dirnameMakes a copy of fname and puts it in subdirectory dirnamemv fname1 fname2Moves (renames) fname1 to fname2mv fname dirnameMoves fname to subdirectory dirname

emacs fname Starts the EMACS text editor, editing fname (can be new file) sas fname Executes SAS commands in fname.sas, yielding fname.log and (if no errors) fname.lst **R** Starts up the R statistical program. (Not on tuzo or river)

ps Shows active processes.

kill -9 # Kills process (job) number # : Sometimes you must do this when you can't log off because there are stopped jobs.

curl URL > fname A URL is a Web address. This command is intended to help you get a copy of the source code of Web pages. But when the web page contains just a data file, as it sometimes does in this course, this is a great way to get a copy of the data. Copy/paste the complete URL from your browser.

**mail yourname@yourisp.com** < *fname* Email a file to yourself. It will come to you in the body of a text-only email message. Very handy for getting files to your home computer for printing, unless you use as web-based email program like Hotmail or Gmail. In that case, Windows users might try WinSCP. Mac and linux users can use sftp from the command line.

## **Minimal EMACS Commands**

To get into the text editor EMACS from the operating system, type **emacs** *fname*. If *fname* is a previously existing file, it will be brought into EMACS and you will see it on the screen. If *fname* does not already exist, it will be created. Whatever you type will be inserted to the left of the blinking cursor. Pressing the DELETE or the BACKSPACE key will erase the character to the left of the cursor. Move around with the arrows.

EMACS is largely controlled by sequences single keystroke commands. To let EMACS know that a sequence is meant to be a command and not something to be inserted into the text, you must either hold down the CONTROL key and press the command key, or strike the ESC (escape) key first and then press the command key.

In this handout, C- and then a letter means hold down the CONTROL key and press the letter. ESC- and then a letter means strike the ESC key and then press the letter. Here is a very small set of useful commands:

C-x C-c Exit EMACS, saving the file. Really want to? Reply y for yes or n for no.

C-x C-s Saves the file you are working on.

C-g Makes emacs stop whatever it is trying to do, like prompting you with several choices you are not interested in. This is how you back out of a command you wish you had not entered.

C-z Temorarily suspends emacs, escaping to the operating system prompt. Come back with fg.

C-x C-w Save the file under a new name. You are prompted for the new name.

**C-e** Move cursor to end of line.

C-a Move cursor to beginning of line.

C-v Forward a screen.

ESC-v Backward a screen.

**ESC->** Move to end of file.

**ESC-<** Move to beginning of file.

C-k Kill (delete) to end of line; contents are saved in the "kill" buffer.

C-@ Set "mark". (Now move "point" (cursor) to other boundary of text you want to copy or cut.)

C-w Cuts text between point and mark, placing it in kill buffer.

ESC-w Copies text between point and mark, placing it in kill buffer.

C-y "Yank" (paste) contents of kill buffer. If several items have been deleted consecutively, (like with many C-K's) they're all there.

C-x i Insert file at cursor. EMACS will ask for file name.

ESC-% Search & replace. y=yes, n=no, !=yes from here on with no prompt, ESC terminates the search.

C-x u Undo the last command. Keep doing it to keep undoing.

There is a lot more to emacs than this. A tutorial is accessible by typing C-h t . The entire emacs manual is available on line (!) under info, using C-h i.