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**Today:** *sed*; technical tutorials; project ideas. **Next class:** build systems: *make*, etc.; project discussions. Reminders: Meet with potential advisors; discuss project details.

- 1. List the members of your group below. Underline your name.
- 2. Indicate the output of each of the following. *Explain* your answers briefly, focusing on the interesting aspects.
  - (a) echo 42 is the answer | sed s/[0-9]\*/&&/
  - (b) echo the answer is 42 | sed s/[0-9]\*/&&/
  - (c) echo 42 is the answer | sed s/[0-9]\*/&&/g'
  - (d) echo the answer is  $42 \mid \text{sed 's/[0-9]}*/\&\&/g'$
  - (e) sed -n 's/a/A/2pw /tmp/file' <old >new
- 3. Comment on the presentation aspects of the sed tutorial.

- 4. Provide sed commands for each of the following. Explain your answers briefly.
  - (a) Replace all negative numbers that use the minus-sign notation (e.g., '-173.289') with equivalent ones using the parenthesized notation sometimes used in financial documents (e.g., '(173.289)').

(b) Print exactly those input lines that contain a 5-letter palindromic word.

(c) Read a file datafile containing one integer per line and write to 10 files dat0 through dat9 such that the file dat*i* consists of the input lines that have numbers whose last digit is *i*.

(d) Replace all instances of /mydir/x/y/z (for any values of the variables x, y, and z) with /mydir/z/y/x on input lines whose first nonblank character is #.