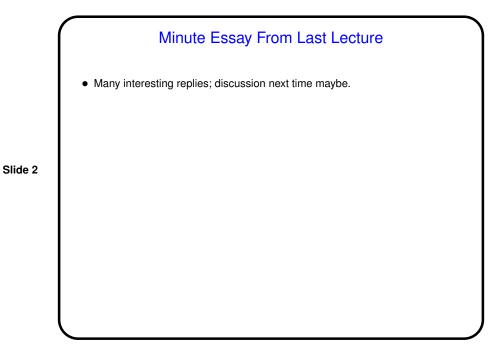


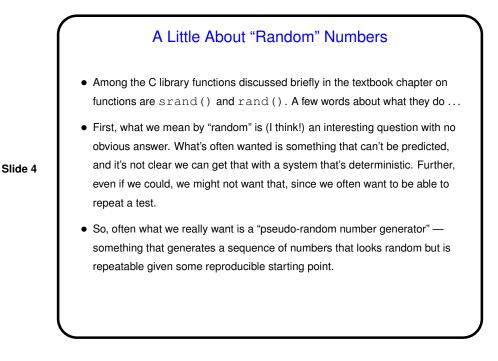
Slide 1

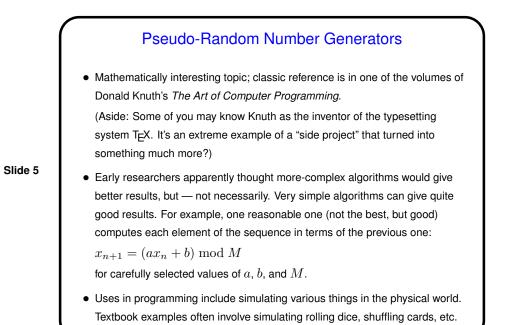




- Programs written in class do two things: for loop to iterate over fixed range, do while loop to loop until convergence.
- We might usefully have them do one more thing compare result with the best-available library value for π. (Surprisingly, there's a library constant M_PI, but it isn't standard, so use acos () to compute?)

Slide 3





Pseudo-Random Number Generators in C

• C library includes functions srand(), rand. srand() uses a "seed" to initialize some behind-the-scenes variables, after which you call rand() repeatedly to generate a sequence of "random" numbers. If you do this more than once with the same seed you get the same sequence; using different values of the seed gives different sequences.

Slide 6

"Monte Carlo" algorithms are based on "random" numbers. An example is a
program to estimate π by simulating throwing darts into a board containing a
quarter circle. (Example program.)

