Lecture 12: October 21, 2019

Reading: *C text*, §8, 9

Assignments: Extra Credit #1: due October 21, 2019
Homework #2, due October 24, 2019

1. Greetings and felicitations!
   (a) General: there are a couple of aids to learning the Bourne-Again shell, *bash*(1)
   (b) Homework 2: I posted an announcement to answer some of the questions.
   (c) Extra Credit assignment, problem 2; you just need to give the command, not execute it; but you can replace "/usr" with "/home" if you like.
2. Operators
   (a) Comma operator `,`; use `while(printf("> "), scanf("%d", &x) != EOF)` and `y = 3; x = y++, 20`
   (b) Order of evaluation of function arguments; use `i = 10; f(i, ++i)` and `f(i, i++)`
3. C characters
   (a) Characters as integers and numbers (*caesar-enc.c*, *caesar-dec.c*)
4. String library functions
   (a) Prototypes in include file *string.h*
   (b) String length: `strlen(str)`
   (c) String copy: `strcpy(dest, src)`; `strncpy(dest, src, number_chars)`
   (d) String catenation: `strcat(dest, src)`; `strncat(dest, src, number_chars)`
   (e) String comparison: `strcmp(dest, src)`; `strncmp(dest, src, number_chars)`
5. Recursive greatest common divisor
   (a) Go through Euclidean algorithm for computing gcd
   (b) Walk through function `gcd`, with $m = 4$ and $n = 6$
   (c) Do it again with $m = 126$ and $n = 28$
   (d) Go through program *gcd.c*