Lecture 14: October 25, 2019

Reading: *C text*, §11   **Assignments:** Homework #2, due October 25, 2019

1. Greetings and felicitations!

    (a) Extending homework 2's due date through Friday at 11:59pm; *however* if you turn it in by Wednesday at 11:59pm, I will not penalize you. But homework 3 will go out on Friday and will be due November 6.

2. Arrays of strings

    (a) `int main(int argc, char *argv[])` (same as `int main(int argc, char **argv)`)

    (b) Example programs: *echo.c*, *echo2.c*

3. Files

    (a) Review files and file pointers — mention file descriptors as underlying mechanism

    (b) Standard I/O library (*stdio.h*)

    (c) Standard input, output, error (**stdin**, **stdout**, **stderr**)

    (d) Opening, closing files (`fopen`, `fclose`)

4. Reading, writing characters and lines

    (a) Reading text data as lines (`fgets`, `gets` — do not use this!)

    (b) Reading text data as characters (`fgetc`, `getc`, `getchar`, `ungetc`)

    (c) Writing text data as lines (`fputs`, `puts` — latter adds a trailing newline)

    (d) Writing text data as characters (`fputc`, `putc`, `putchar`)

5. Reading, writing text data with a fixed format

    (a) Reading in text data with a fixed format (`fscanf`, `scanf`)

    (b) Outputting text data with a fixed format (`fprintf`, `printf`)