

## Outline for April 16 and 18, 2024

**Reading:** *zyBooks text* §5.12, 6.5–6.10

**Assignments:** Homework #1, due April 18, 2024

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1. Pointers and Arrays
  - (a) Arrays as pointers
  - (b) How indexing works
  - (c) Arrays as function parameters
  - (d) Multi-dimensional arrays
2. More on arrays
  - (a) Initializations
  - (b) Contrast with pointer initialization
3. C arrays and strings
  - (a) String representation: array of chars terminated by NUL (ASCII `'\0'`)
  - (b) `gets(buf)`, `fgets(buf, size, fp)` [*bad.c*, *good.c*]
  - (c) Array of strings (pointers to characters)
4. Example: *ptrstew.c*
5. C arrays and strings
  - (a) Strings as arguments to functions [*strcpy.c*]
  - (b) Various idioms
6. C characters
  - (a) Types of characters; include file *ctype.h* [*chartype.c*, *dasc.c*]
  - (b) Characters as integers and *vice versa* [*caesar-enc.c*, *caesar-dec.c*]