## Lecture 16: May 8, 2023

**Reading:** *zyBooks text*, §10, 8.6–8.7 **Assignments:** Homework 2 and Extra Credit 2, due May 10

- 1. Announcements
  - (a) Class on Wednesday, May 10 is in person
  - (b) Midterm is Friday, May 12, in person
- 2. How to write a recursive program
  - (a) Recursive selection sort (sort.c)
- 3. Dynamic memory allocation
  - (a) Library functions malloc, realloc. calloc, free
  - (b) Example: change *sort.c* to handle any number of numbers (*usort1.c*)
- 4. Structures
  - (a) User-defined datatype for grouping data
  - (b) As fields: var.field, ptrvar->field
  - (c) Use example of list of numbers (usort2.c)
  - (d) Do insertion sort (*linked.c*)