

Lecture 11: April 26, 2023

Reading: zyBooks text, §10.1–10.2, 10.5, 10.8

Assignments: Homework 2 and Extra Credit 2, due May 10

1. Announcements
 - (a) New TA office hours on Friday, now 12:00 noon–1:00pm
 - (b) Tutoring available from the CS Tutoring Club; sign up information in an announcement
2. Recursion
 - (a) Expressing a problem in terms of a simpler version of itself — use $n!$
 - (b) Function calling itself
 - (c) Similar to mathematical induction, but backwards
 - (d) Structure: base case, recursive case
 - (e) What happens if you omit the base case? (Bad things . . .)
3. How it works
 - (a) Program stack
 - (b) Walk through *nfact.c*, with $n = 4$
 - (c) Note *nfact* calls *nfact*
4. Recursive palindrome program
 - (a) Go through algorithm, working from outside in
 - (b) Write recursive case
 - (c) Write base case
 - (d) Put them together in *ispal.c*