Lecture 20: November 8, 2019

Reading: Handout, The Dynamic Debugger gdb

Assignments: Homework #3, due November 8, 2019

1. Greetings and felicitations!
   (a) Homework
      i. Homework 1 grades are out
      ii. Homework 3: submit through Gradescope
      iii. Homework 2 is now reopened until Wednesday so you can fix things that you lost points for on homework
   (b) In discussion section, ask questions of the TAs — they are there to help! And when they ask something, try to answer.
   (c) Some errors by the TAs and me are because we’re human; others are deliberate, to see who will spot it; this tells us if we need to cover something more thoroughly
   (d) If you get a message like “Attempted stack smashing”, look at your local arrays; it probably means you overflowed one of them

2. Static debugging
   (a) How to narrow down where the problem is using printf [sample1.c, sample2.c]
   (b) Handle multiple bugs [sample3.c]

3. Dynamic debugging with gdb [sample1.c, sample2.c, sample3.c, nfact2.c]
   (a) Bringing a program into gdb
   (b) Breakpoints, conditions, commands
   (c) Stepping through it
   (d) Printing values
   (e) Watchpoints