From J.D.Mallen's desk: JD is one of the CSE241 Students who sits in the front (second row)

CSE 115/116/250:

- YouTube playlist of excellent Java tutorial videos
  - There are 94 videos, each about 15 min in length. They move pretty quickly, but can be paused! He uses Eclipse and the videos can be played in 1080p so you can see what the hell he's doing (unless trying to decipher text on 240p videos is your thing).
  - Fellow 115'ers, he will cover many things in the first 4 videos that we have not covered much (or merely skimmed): primitives, operators, conditionals, basic in/out (I/O… we've only done with O with System.out), for loops, while loops, and switches. All good things to know.
- Oracle Java Tutorials
  - It's not as straight-forward in its structure, but the information is excellent. Also, you can't get a much more reliable source than the dudes/dudettes writing the language.
- StackOverflow
  - Great question-and-answer forum that most of you probably know about. Check out the other tags for other languages.
- /r/learnprogramming
  - Great place to ask beginner questions. You might also want to check out /r/programming (trivia: the first "subreddit", IIRC) or /r/compsci for programming news and developments, /r/java for Java news/developments/general chat, or /r/javahelp for asking questions. /r/dailyprogrammer is especially nifty; it's not always updated, but there are numerous challenges posted (with rated difficulty Easy to Hard) for quick programming practice outside of classroom assignments, often with real-world applications. reddit is chock full of programmers, so it's got tons of useful subs to check out.
- VT.edu Data Structures
  - Interactive, abstract, top-down look at data structures. A great introduction for those of us taking this course soon.
- Berkeley Data Structures
  - One of the precious few courses that teaches data structures using Java instead of C++. Obviously, it'd be good to use a C++ reference (good stuff on pointers to structures here) since that's what we'll be using in CSE 250, but I'm sure this could come in useful, especially if you end up taking on water simultaneously learning the data structure concepts and the C++ language (as I fear doing).

CSE 241:

- Logicly
  - This is a very simple, but incredibly useful circuit generator for testing homework.
- Karnaugh Calc
  - Punch in your truth table, it spits back a simplified expression. Test yourself using random functions (with minterms and don't cares) for 3 or 4 variables, then check your final expression using this. Good practice for the final.
- Logisim
  - A surprisingly powerful little program (written in Java!) by the same dude who made the above Karnaugh Calc. This one takes the calc a bit further by adding the option for Window->Combinational Analysis. You're gonna love this. Add your inputs (a, b, c, etc.); on the next tab, add your outputs (f1, f2, etc.); on the next one, type out your full truth table (you don't have to click, you can just type the rows one after another); on the last tab it will *show you the completed K-map* and the simplified expressions for each function. Best part? Click "Build circuit". You have the option to limit it to NAND-only construction, and 2-input-only gates. The circuit's a bit harder to read than Logicly, but it's complete. The inputs on the left can be clicked to toggle them on and off.
- Linux Command
  - If you're new to Linux, this is a great crash course in using the command line (as you would with PuTTY or X-Win32). Wendy also pointed this one out, which is also very good.
- Verilog Quick Reference
  - Just what it sounds like. The site also has a full tutorial, which might be more useful for future courses/jobs, but it goes waaay beyond what Bina's having us do at the moment.
- Verilog Online Simulator
  - Try out Verilog code without a terminal.

CSE 191:

- UPitt's Discrete Structures course
  - I flipped through the lecture slides for Sets (lecture 7) and he seems to explain them very well. He uses the same text and edition.
- Stanford's Discrete Structures course
  - The order of materials is *significantly* different, but it's all there. It reads like a crash-course, so use this only as an additional reference for specific topics.
- Youtube: Basic Set Operations, Elements & Subsets
  - Helpful, clear, relevant, and there ain't nothin' like listening to lessons taught with a Tuscaloosa drawl.
- KhanAcademy: Matrices
  - We'll be learning this next week, so it might be helpful to get an introduction.

MTH ***:

- integralCALC's Playlists: Calculus 1, Calculus 2, Calculus 3 [YouTube]
  - Well-produced videos—I prefer her videos over Khan's for Calc stuff, but here're Khan's, too.
- KhanAcademy: Diff Eq's, Linear Algebra
  - Probably doesn't get much better than his for these topics.

That's about all I got for now, but I can keep you posted with more as I find them. As always, if there's something that I understand well that you're struggling with, I will always take time to help you learn it. Just get a hold of me and we'll work something out.