

322 Compilers: Assignment 1b

The L1→x86 compiler

Due Thursday April 15th, before class

Your job: Write a compiler that translates L1 to x86 assembly code. See the lecture notes for an explanation of the tricky cases.

Handin instructions: Your compiler must run on the t-lab machines (under linux) and it must also produce a binary that runs on the t-lab machines. Note that your compiler does not run the program(!).

Hand in your assignment by sending email with the subject `1b` to `robby@eeecs.northwestern.edu`. The email should include a `.tar.gz` attachment that contains (at the top-level) a shell script or binary executable that is your compiler (and whatever supplementary files it needs). The compiler should be called `L1`.

The compiler should accept a filename on the command-line and it should write the file `a.out` that, when run from a shell prompt, produces the same output that the interpreter would have produced for that program (if the interpreter crashes, your compiler's output program can do whatever it wants).

Note: if you do not follow the instructions above, you will lose 1 point (out of 10) and have 24 hours to try again to submit something that does follow the instructions (after that, no credit).