

322 Compilers Assignment: 1

The L1→x86 compiler

Due Tuesday April 3rd, noon

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 handin must run on the t-lab machines (under linux).

Hand in your assignment by sending email with the subject 1 to `robby@eecs.northwestern.edu`. The email should include an attachment named `name.1.tar.gz`. The `name` should be your last name in all lowercase letters unless you are pair programming, in which case it should be both last names in alphabetical order, separated by `+`. For example, if Robert Jordan and Brandon Sanderson were pair programming and handing in this assignment, they'd send in a tarfile named `jordan+sanderson.1.tar.gz`.

The attachment must contain (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 `L1c`.

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 handin instructions above I will just ignore your handin; it will count as if you handed nothing in (see the course webpage for grading details).