

322 Compilers Assignment: 1-test Test Cases for the L1→x86 compiler

Due Monday, April 7th, noon

Design (at least) 25 test cases for the compiler that translates L1 expressions to assembly. For each test case, hand in two files, one called *file.L1* containing an L1 program and one called *file.res* with the expected output of running the L1 program (note that each call to `print` produces one line of output and nothing else produces any output).

Each test case must produce some valid output from the interpreter (on the course web page).

Hand in your assignment by uploading it to the server at <http://penghu.eecs.northwestern.edu:8123/>. The uploaded file should be a gzipped tar file named *name.1-test.tar.gz*. The *name* should be your family name in all lowercase letters (except for the names Liu, Zhou, or Wang, see below) unless you are pair programming, in which case it should be both family names in alphabetical order, separated by +. If your name has any non-alphabetic characters, remove them first. For example, if Conan O'Brien and Shawn Knowles-Carter were pair programming and handing in this assignment, they'd send in a tarfile named *obrien+kowlescarter.1-test.tar.gz*. If your family name is Liu, Zhou, or Wang, then include your first name as well, but also without any spaces. For example, if your name is Liu Bolin, then use *bolinliu* as your name. And if Bolin and Shawn team up, they'd submit *bolinliu+kowlescarter.1-test.tar.gz*.

The file must contain a single directory named *1-test* containing the test cases.

See the lecture notes for the precise description of L1.

The primary goal of this assignment is to familiarize you with L1. That said, I will also run your test cases in all of the L1 compilers (mine and yours) and if the test cases uncover bugs, you will get credit for that (see the course web page for details of how grading works).