

Lab 9: Code Generation for x86 Architecture

This program, from a high level, generates intermediate code using the given lexer and parser similar to the csem form (which we've used in lab and in project). This intermediate code is generated using the code I have written for this lab in the cgen.y file. Depending on the operation, a different line of assembly code is outputted to standard output where it is then stored in test.t.s which contains all of the operations in their x86 assembly form.

When writing this program, I ran into a small problem when starting out simply because the documentation was a little cryptic. However, after I learned how to read, I was able to generate valid code for each function we were tasked with implementing. A lot of the code for binary operations was duplicated for every operation except for maybe one or two lines, so that was easy to get a hold of. Lastly, getting the "call" function to work took some time. I ended up not having to use GDB to debug any issues because it was simple enough to try a few different things to get it working correctly.