

CS 4550 Final Exam. Spring, 2021. 2 hours. 100 points.

NAME: \_\_\_\_\_

Enhance your compiler with these ideas.

Show me your working solutions as you complete them.

Open book, notes, computer, Internet, and calculator.

No Human help, including humans through the Internet.

1. After you are done taking the final, email me a copy of your compiler code (with or without the final modifications), so I can run my test suite on it. Remove any of your print statements other than the output, so my automated test cases will work, but keep my print statements. Remove all Debug and Release directories, zip it, and rename the .zip file to .zpi..

2. Support the “Multiply-By” operator using “\*=”, for both interpreting and coding. Follow the same pattern used in “+=”.

3. Support do-while. This should work for interpreting and coding.

do

    <statement>

while (expr) ;

4. Support “and” and “or” strings as well as “&&” and “||” symbols. That is, your compiler should both interpret and code expressions like:

X = M and N && P or Q || R