

CSCD 437

Lab 1

Worm

SPECIFICATIONS:

Produce a self-replicating worm (running the program produces as output the original source code). The output should compile and run and produce the identical output once again.

You must utilize one of the following languages: C, C++, Java, C#. The fact is, Python and Ruby make this task trivial -- if you know those languages, use them as a starting point!

DO NOT GOOGLE/BING/ETC. FOR ANSWERS!!! I have done so and I have those solutions in hand, including the information from the Wikipedia page. If your work is not original, you will receive 0 points.

Provide output captures that show your program self-replicates (A program that runs once and produces the output that is identical to the original is called a Quine. Run the program, compile the output, run again, then execute a diff command on the two output files to show they are the same.

Once you know the program self-replicates (produces the output of the original program one time) add the feature so your program compiles itself and runs itself. You must limit the worm to three runs.

WHAT TO TURN IN:

Submit a zip file that contains a folder named your last name first letter of first name-worm containing

- your source code
- output captures that proves your solution self-replicates one time (Quine)
- output captures that proves your solution is a worm
- a readme.txt file that includes how to execute your program (both Quine and worm) and discussion of any shortcomings your program has. If the program has no shortcoming just state 'no shortcomings'

Name your zip your last name first letter of your first name lab1.zip (Example: steinerslab1.zip)