

SI 413 Fall 2021: Homework 1

Due Monday, August 21

Your name:

Citations and collaborators:

Comments, suggestions, or questions for your instructor:

Fill out the first row of the table on a 0-5 scale before turning in.

This rubric is also available on the website under “Admin”:

- **5:** Solution is completely correct, concisely presented, and neatly written.
- **4:** The solution is mostly correct, but one or two minor details were missed, or the presentation could be better.
- **3:** The main idea is correct, but there are some significant mistakes. The presentation is somewhat sloppy or confused.
- **2:** A complete effort was made, but the result is mostly incorrect.
- **1:** The beginning of an attempt was made, but the work is clearly incomplete.
- **0:** Not submitted.

Problem	1	2	3	4	5	Total
Self-assessment						
Final assessment						

1 Course Policy

Read over the course policy. Tell me one thing that you like or that you don't like about it.

2 Comparing Languages

List **all** the programming languages you are familiar with or have used before. For each one, answer the following:

- a) What are the most important features or characteristics of this language?
- b) For what purposes is this language most useful?
- c) What are drawbacks to programming in this language?

3 Chicken, meet Egg

Pick one programming language from the list above. Do some Internet research to find out two things:

- a) The name of a popular compiler or interpreter for that language
- b) What programming language *the compiler/interpreter itself* is written in.

Be sure to list out any sources that you used!

4 Errors

Give me a code snippet that causes some kind of error. Do you think it is an error in *syntax* or *semantics*, and why?

Requirement: Everyone must turn in a *unique* example. You can work together, but you still need to come up with as many examples as Midshipmen!

5 Stages of Compilation

List the main stages of compilation, from source code to an executable program. (This is not too hard to find if you read the notes.)

An *interpreted* language is one like bash or PHP that is directly executed instead of being compiled. Circle which stages in your list would be significantly different for an interpreted language.