COP4020 Homework Assignment 1

The material for this homework assignment covers Chapter 1 (1.1 to 1.3 and 1.5 to 1.7) and lecture notes. (Numbering from Edition 3.)

1. Textbook exploration 1.9 (page 37).
   a. What was the first programming language you learned? If you chose it, why did you do so? If it was chosen for you, why do you think it was the choice? What parts of the language did you find most difficult to learn?
   b. For the language with which you are most familiar (possibly different from your first one), list three things you wish had been differently designed. Why do you think they were designed the way they were? How would you fix them if you had the chance to do it over? Would there be any negative consequences, for example, in terms of compiler complexity or program execution speed?

2. Find the person(s) who were instrumental to the development of
   a. Lisp
   b. Pascal
   c. Simula 67
   d. C
   e. C++
   f. Java

3. Which organization(s) developed PL/I and why is PL/I not considered a successful programming language?

4. Search the Web for "What is the most frequently used programming language?"
   In what area(s) is this language used? Cite your sources.

5. Search the Web for "What is the most popular programming language?" If different from #4, explain why. How did you make sure that you can trust your search result? Cite your sources.
6. Which language(s) is/are good for manipulating symbolic data and complex data structures according to the textbook?

7. Read “The Semicolon Wars” (see online organizer.html). Argue when and why using CamelCase and sulkingCamelCase makes sense when writing a program in your favorite programming language, in your opinion.