**Take-Home: Quiz 1 (15 pts) – Introduction to Computer Programming**

**Print out, and provide your solutions to your TA in lab during the week of January 25th!**

1. (3 pts) Why do we study algorithms in computer science? Explain.

Algorithms are steps to accomplish a task. Computer science requires a lot of tasks for the computer to accomplish. Therefore, we need to study algorithms to improve our skills in computer science.

1. (3 pts) Is the following an algorithm? Why or why not?
   1. Apply small amount of shampoo to hair
   2. Work into scalp for about 1 minute
   3. Rinse thoroughly
   4. Repeat

Yes this is an algorithm. An algorithm is a set of tasks to do in a specific order and that is exactly what is presented above.

1. (3 pts) What is the Software Development Method?

It is a strategy in computer science where one structures plans and controls the process of an information system.

1. (3 pts) Why do we write programs in languages such as *C*, instead of directly writing them in *machine* language?

Machine Language consists entirely of 1s and 0s. This would take too long to do as a human. Programming languages are also much closer to English so they are much more readable.

1. (3 pts) What is the purpose of the main() function in every C program?

It is the main function of a program. It will crash if you do not have a main function.