HW #1 -- Robbie Selwyn

- 1. Computer Science is the study of computers.
 - a. That is false, computer science is the study of, "What can be computed?"
- 2. The CPU is the brain of the computer.
 - a. True, the CPU makes all the decisions in the computer.
- 3. Secondary Memory is also called RAM.
 - a. False, RAM is primary or main memory.
- 4. All information that a computer is currently working on is stored in main memory.
 - a. True, main memory stores the computer's current tasks.
- 5. The syntax of a language is its meaning, and semantics is its form.
 - a. False, the syntax of a language can be compared to the grammar of the language.
- 6. A function is a sequence of statements that defines a new command.
 - a. True, a function is made up of statements and the name of the function is what a person can call as a command.
- 7. A programming environment is where programmers work.
 - a. False, a programming environment is the software application where a programmer writes code.
- 8. A variable is used to give a name to a value so it can be referred to in other places.
 - a. True. For example, if someone wanted to have the number π , they could let pi = 3.14159265. Now, they can refer to "pi" instead of typing the entire number in.
- 9. A loop is used to skip over a section in a program.
 - a. False, a loop is set to iterate a certain amount of times over a set selection of code.
- 10. A chaotic function can't be computed by a computer.
 - a. False, we wrote and computed a chaotic function in chapter 1.

Multiple choice:

- 1. What is the fundamental question of CS?
 - b. "What can be computed?" is the fundamental question of CS.
- 2. An algorithm is like a ...
- d. recipe. A recipe tells a person how to do a process. An algorithm tells the computer how to do a process.
- 3. A problem is intractable when...
 - d. An intractable problem is not practical to solve.
- 4. Which is not an example of secondary memory?
 - a. RAM. RAM is an example of main memory.
- 5. Computer languages designed to be used and understood by humans are...
 - b. High level computer language
- 6. A statement is a...
 - b. complete computer command
- 7. One difference between a compiler and an interpreter is...
 - c. A compiler is no longer needed after a program is translated.
- 8. By convention, the statements of a program are often placed in a function called...
 - b. The statements of a program are often placed in a function called main.
- 9. Which of the following is not true of comments?
 - a. They make a program more efficient. Comments are skipped over by the compiler; therefore, they do not affect the program.
- 10. The items listed in a parenthesis of a function definitions are called
 - d. parameters. A parameter is how you can pass values into functions.