<u>HW 1</u>

<u>Q1.</u> 1) Develop programming skills:

A) OOP (using C++); and structured programming (using C)

B) Basic algorithms

C) Data structures

D) Scripting (using Python); regex for automation and verification tasks.

E) Software management techniques (versioning, testing, etc.)

2) Get job referrals, and interviews

3) Research/startup: develop skills necessary to conduct reasearch, and tackle open-ended problems.

Q2

1) Stay covid-free and safe
2) Follow the Academic Integrity of USC and this course.
3) Attend lecture and discussion sections (both are mandatory).
4) Take notes during the lecture/discussion sections.

6) Participate in discussions by asking questions and providing answers/arguments.
7) Aim to be at the top of the class.
8) Review any posted material in advance of the corresponding lecture.
9) Do all the mandatory assignments. If you have additional time and interest, try to do at least some of the extra credit parts.
10) Be respectful in class by being quiet and not bringing any food with a strong smell.
11) Check Blackboard regularly for updates.
12) Keep our course material (videos, slides, etc.) confidential.

Q8

The loop will be executed an infinite number of times.

The variable type of the counter variable in the for loop ("i") is unsigned char, which has a range of 0 - 255.

However, the for loop will end when i = 350.

Because the max value of an unsigned char is 255, the value of "i" will wrap around to 0 when the program tries to increment it past 255.

Thus, the variable "i" will never reach 350, so the for loop will never exit, and it will run forever.