Homework Assignment 1

**Q1. (5Pts) What is the difference between a compiled program and an interpreted program? Which will run faster and why? Which is easier to debug and why?**

An interpreted program only processes one instruction at a time, whereas a compiled program can process multiple instances and is more closely understood by the computer’s hardware. Therefore, a compiled program would run faster than an interpreted program because it does not utilize extra time processing individual instructions or translating for the hardware to understand. An interpreted program, on the other hand, will be easier to debug because it will show you which line of code is responsible for the error and which ones ran before it.