Process Improvement Plan

A P.I.P stands for process improvement plan. It is used to track some of the errors that a programmer makes, in hopes that these common errors are caught before the compile of the program. It is useful because it allows the programmer to look at the common mistakes they are making and help them move forward by limiting these mistakes. It also is beneficial for efficiency as the programmer does not have to waste time looking at the countless errors that the compiler has found in the code.

Lab 0

Michele:
A common error in Lab 0 I was making was the use of magic numbers. This led to many confused scans through code trying to determine what numbers were signifying. Going forward I will be naming all numbers as macros.

The second process I want to improve on going forward is the organizational hierarchy of the code. The use of subroutines and documentation is vital to good code and will be used going forward.

Aidan:
A PIP I will be implementing after lab 0 for other labs is using pair programming techniques that allow for my partner and I to spot each others LSD and syntax/logic errors easier.

A PIP I will be implementing for the other labs is making sure to always do my own code walk through to make sure I am catching my own code errors and get better at noticing errors before they develop into defects.

Lab 1

Michele:
Very often I was missing basic syntax such as semicolons and will begin to check all edited lines of code for simple syntax errors going forward.

A common mistake I was making in my code was that I was forgetting to declare ASM functions as extern “C”. This is important as the ASM function can only be seen if it is declared as extern.

Aidan:
A PIP I will be implementing for the next labs is to make sure that I am including” LINK 20” at the start of the assembly code and “UNLINK” at the end of the assembly code for good programming practice.

Another PIP I will be implementing for the next labs is to include more comments and always make sure from the start of the labs and midterm/quiz 3 that I am creating well defined MACROs to stop using “Magic Numbers”.

How did our group work together to complete the lab?

Our group used GitHub to work on our lab. We would each work on certain parts of the lab, then push each other changes in the lab so we could each have the new code on our own personal computers. We also made use of connecting the HP-USB ICE cable to our own laptops.