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## Design Document

We started with the given template for while loops, the main method, addition, and comparison instructions. For this project, we implemented the subtraction, addition, while loops, integer, and void type instructions of the C- language. We were also able to successfully compile it to the 60502 machine code. Pseudo-code for other instructions were written, but we didn't have enough time to implement them in machine code. The lexer follows the C- spec, however the parser has partial implementations for division, multiplication, and if-then-else instructions. All other instructions are accounted for. Other functions outside of main are also not implemented. The program works through loading values into the accumulator and doing the instruction, saving the result back into the location of memory.