Hello everybody,

I would like to introduce my most recent project that we worked on for our advanced software engineering class. It is called SIL which stands for Simple Interpreted Language. It is a simple compiler written in high level language. The goal of the project was to provide us with some practical experience on applying OO Design concepts, as well as introduce us to the basic mechanics of a compiler.

The project lasted approximately 3 months, and our goal was to implement a compiler which can compile and run SIL programs. The project was somewhat more involved then appeared at first however we have managed to satisfy all the requirements and go a little beyond the basics.

These are the list of features that our compiler supports (I will demonstrate them next):

General features

* Parameterized Functions and Procedures
* For loop/nested For loop
* While/nested While loop
* IF/nested IF loop

Math

* Integer Datatype
* Arrays
* Math Expressions
* Logic/Boolean Expressions
* Flexible use of various objects such as array elements, functions, mathematical expressions and even Boolean logic in a single expression

Input/Output:

* Print and Read commands
* Concatenation of strings, variables, and integers

Technical