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APCS pd7

Final Project Proposal

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time spent: .5 hrs

For our final project, we will create a minimal Lisp/Scheme/Racket interpreter. Here is a prioritized list of the features we want our interpreter to be able to understand:

- Prefix notation math

- Variable declarations/instantiations

- A basic type system: int, float, String, boolean

- Control flow: if/else, while

- Function definitions and function calls

- User input

- Cons-style linked lists

We are likely going to only allow local variables, as this will make calling functions much easier. Similar to the Lisp calculator, we will be using a stack as the main data type to interpret the Lisp code. We will also be using a HashMap as a way to hold variables and perhaps functions.