

CS 211: Computer Architecture Spring 2016
Programming Assignment 1: A Partial Tokenizer
Alex Jia

Description

This program basically takes a copy of a string input by the user, and 'tokenizes' it. This entails splitting the string up into various float, decimal, hexadecimal, and octal decimal constants. The process of splitting up the string heavily involved the use of "states", which represented a finite state automata. I implemented this process by defining various enumerated token_types, which represented the kind of outputs that we needed to find (i.e float, octal, hexadecimal, decimal, mal). I then gave the TokenizerT_ struct a character pointer named currchar, which I used to traverse through a copy of the user's input. I also included an int named index to serve as the index for said string copy. I had one initial state function, which sorted my token out to either state_1 (which sorts the string as either an octal or a hexadecimal) or state_2 (which sorts the string as either a decimal or float). I included various header files like stdio.h, ctype.h, stdlib.h, and string.h.

Features

I included some documentation to make evaluating my code a tad easier. To be honest, there wasn't much else I did, except formatting the outputs to make it easier to read.