/\* Bedemariam Degef

Project 1

11/3/2020

File description: Approach, lesson learned and test cases \*/

The way I approached this project was by reading the content material and watching the videos. The videos were helpful in getting the project started and putting me in the right path. The reading material helped me with modifications to the lexical analyzer. There are different lessons I learned while working on this project. There were different terminal commands used to run make and different test cases. I also delved into different interesting shell commands. In addition, I learned how programming languages work. Learning the magic under the hood of how programming language works is very interesting.

When it comes to the test cases I had an issue with REAL\_LITERAL. No mater what I tried I keep triggering invalid character for the point in a real number. Everything else works fine. These were my attempts

{digit}+.{digit}\*({Ee}{+-}?{digit}+)?

[digit]+[.][digit]\*([Ee][+-]?[digit]+)?

[0-9]+.[ 0-9]\*([Ee][+-]?[ 0-9]+)?

[0-9]+\.[ 0-9]\*([Ee][+-]?[ 0-9]+)?

\[0-9]+\.\[ 0-9]\*([Ee][+-]?[ 0-9]+)?

{0-9}+{.}{0-9}\*({Ee}{+-}?{ 0-9}+)?

From my understand of the reading: {digit}+ is one or more digits , . any characters except newline , {digit}+ zero or more digits, ? optional . For some reason the point “.” in a real number is being recognized as an invalid character.

**Test cases** Text

Description automatically generatedText

Description automatically generatedFigure 1: Test1.txt It should have no error but as I mentioned the “.” is triggering the invalid character.

Text

Description automatically generatedText

Description automatically generated

Figure 2: Test 2.txt This a test case has multiple errors in the same line.

Text

Description automatically generatedText

Description automatically generated

Figure 3: Test1.txt similar to figure 1 it shouldn’t have any errors except the “.”triggering the invalid character.