README.md 10/6/2018

Useful Commands

Basic Running

```
flex myFile.l
gcc -o output -lfl //IF ON MAC OS USE -ll (two L's) instead!!!!!!!!!!
./output
```

The -o output is completely optional. Will default to writing a file called a.out.

Pipe Input and Output

```
cat input.txt | ./a.out > tokens.txt
```

The above feeds in input.txt into a.out, which is generated from my flex file. Then, a.out's output is written to a file called tokens.txt.

Compare Tokens

Reference/Source StackOverflow Answer

Command to compare tokens given from assignment and tokens generated by my file.

```
diff -w -u file1.txt file2.txt | sed -n '1,2d;/^[-+]/p'
```

diff finds difference between files 1 and 2

- -w ignores whitespace
- -u output NUM (default 3) lines of unified context

not 100% sure why or if -u this is necessary, probably makes it easier to parse it with the sed regex

Then it pipes into sed

sed is a stream editor to edit output of diff

-n supress automatic printing of pattern space

Terminal Output: Prints -apple if, for example, apple is present in file1 but *NOT* file2. Prints +apple if apple is present in file2 but *NOT* file1. Essentially, the + and - are with respect to file1. +apple if adding "apple" to **file1** would obtain no difference. -apple if removing "apple" from **file1** would obtain no difference.

No output is printed if there are no differences.

Remove -w if whitespace should not be ignored.

Read man sed and man diff for further options and info.