**CPSC 323 Documentation**

**Assignment 2: Lexical Analyzer**

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# Problem Statement

The second assignment is to write a syntax analyzer. You may use any top-down parser such as a RDP, a predictive recursive descent parser or a table driven predictive parser.

# How to use your program

# *This program is programmed on VisualStudio 2017. When running the program, it will ask for an text file. “test1.txt” and “test2.txt” were tested in the process*

# Design of your program

The design of our program uses our lexical analyzer program to parse the source file into tokens and lexemes. The lexemes goes into the syntax analyzer to check if the format is correct. The syntax analyzer implements its own starting symbol so we will not be using the “$$” or “%%”. The syntax analyzer uses a predictive tables using the first and follow set.

# Any Limitation

*When reading the text file during the lexical analysis, it does not detect the last character of the file. So to compensate for this error is to have an extra space or a new line at the end of the text file.*

# Any shortcomings

This syntax analysis did not implement the optional implementations such as declaration, if-else, while, function