Course: CPSC 323

Assignment #3:

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Date:

1. **Problem Statement**
2. **How to use the program**

a. Using the Windows Command Prompt:

Extract the folder on the Desktop: Compiler

Locate the extracted folder, PRDP, from the terminal using ‘cd Desktop/Compiler/Syntax/PRDP

Compile the program using: g++ -std=c++14 main.cpp -o main -Wl,--stack,268435456

Type, main.exe, to run the program

Note:

Enter only the test file names i.e., ‘2.txt’

b. Using the Executable File

Extract the folder: Compiler

Double click on the extracted folder and locate to the PRDP folder

Double click on the executable file: main.exe

My program had already navigated into the test folder directory; therefore, you would only need to type the test file names with the file extension, i.e., ‘1.txt’. My program allows for console navigation. Thus, all test files can be tested by running the executable file once. Once you have successfully opened a text file, you will be prompted with a table structure that asks for user input. Keep in mind only for the menu; your keystroke will be automatically read. Hence, no <Enter> key will be required after input. You can view all tokens and lexemes by hitting the number 1. There is an additional option for the syntax analyzer to turn on productions by hitting the number 0. This allows the user to control their output. If view productions are turned on, the output file will print a list of all productions for each token that is accepted by the parser. Otherwise, the output file will only contain the list of accepted lexemes. You can also access the symbol table by hitting the number 3. You will be presented with another table. The next section will describe the functionalities of the implementations.

1. **Design of the program**

PRDP:

Stack:

Parse Tree Implementation:

Symbol Table:

Error Table:

1. **Limitations**

None

1. **Shortcomings**

None