**096985 CAREY WADAWI ICS 4A**

**LAB 1 EXPLANATION**

Link: <https://github.com/careywadawi/Compiler-Construction/tree/main/Lab%201>

The lexical analyzer has been divided into these tokens:

* Identifiers

[a-z] +

* Separators

"\\;|\\(|\\)|\\{|\\}|\\<|\\>|\\[|\\]|\\&|\\:"

* Operators

"\\+|\\-|\\\*|\\/|\\>|\\<|\\=|\\++|\\==|\\--|\\&&|\\!=|\\+="

* Numbers

[0-9] +

* Keywords

if|else|do|while|switch|case|break|continue|default|for|auto|const|int|float|double|string|void|char|char\*|bool|return|cin|cout|endl|main"

The input is passed through the program which breaks it down into tokens and its specific role.

The input x=y\*3; would return the following output

x – identifier

= - operator

y – identifier

\* - operator

3 - number