## **Lexical Analyzer in C++**

Link to work: https://github.com/mujtaba098/Lexical\_Analyzer

A Compiler converts high level languages to machine language. Several phases are involved in this process and lexical analysis is the first phase. The above code is a sample algorithm which illustrates the process.

After lexical analysis, a symbol table is generated;

|  |  |
| --- | --- |
| **Token** | **Type** |
| c | identifier |
| = | operator |
| a | identifier |
| + | operator |
| b | identifier |
| ; | separator |

The code takes input as following:

int a, b, c;

float d, e;

a = b = 5;

c = 6;

if ( a > b)

{

c = a - b;

e = d - 2.0;

}

else

{

d = e + 6.0;

b = a + c;

}

And breaks it down into the respective types for example,

* Int, float, if, else are all keywords.