Compiler Construction

Assignment no. 2

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Module 1

Lexical analysis in module 1 is implemented by using regex and findall function of "re" library to generate a list of tokens from expression entered by user.

```
Expression = a + b * (5 + c)
Tokens = ['a', '+', 'b', '*', '(', '5', '+', 'c', ')']
```

Module 2

Syntax analysis in module 2 is implemented by using library ast to parse the expression and then dump it to generate syntax tree.

```
Syntax Tree:
Module(body=[Expr(value=BinOp(left=Name(id='a', ctx=Load()), op=Add(), right=BinOp
    (left=Name(id='b', ctx=Load()), op=Mult(), right=BinOp(left=Constant(value=5, kind
    =None), op=Add(), right=Name(id='c', ctx=Load()))))], type_ignores=[])
```

Github Profile:

https://github.com/jawadch007/compiler-construction