Date _____

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8/11/21 Cycle 2 : Expt 4

MDL18CS068
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Roll No : 31

Aim :

To implement a calculator using lex and Yacc.

Algorithm :

1. Step 1 : Start
2. Step 2 : In YACC file, initialize the variable flag with 0.
3. Step 3 : In the rule section add rule for checking y expressions are valid.
4. Step 4 : LEX file helps to compute the expression given and display its result.
5. Step 5 : If step 3's rule is not followed, call yyerror() which prints not an valid expression. and set flag to 1.
6. Step 6 : In main function, input the expression to be tested and evaluated and parse it.
7. Step 7 : If flag = 0, print the expression is valid and display result else go to step 5.
8. Step 8 : Stop.

Result :

Output was obtained sucessfully.

Teacher's Signature _____

Cycle 2

Malavika R Vikraman

CS7B – Roll No :31

Question 2

Implementation of Calculator using LEX and YACC

Output :

```
C:\Users\malav\OneDrive\Documents\CDLab\Cycle2\Pg5>bison -dy
 variable.y
bison: cannot open file `variable.y': No such file or direct
ory

C:\Users\malav\OneDrive\Documents\CDLab\Cycle2\Pg5>bison -dy
 calc.y

C:\Users\malav\OneDrive\Documents\CDLab\Cycle2\Pg5>flex calc
.l

C:\Users\malav\OneDrive\Documents\CDLab\Cycle2\Pg5>gcc lex.y
y.c y.tab.c
```

```
C:\Users\malav\OneDrive\Documents\CDLab\Cycle2\Pg5>a

Enter Any Arithmetic Expression which can have operations Ad
dition, Subtraction, Multiplication, Divison, Modulus and Ro
und brackets:
4+5

Result=9

Entered arithmetic expression is Valid


C:\Users\malav\OneDrive\Documents\CDLab\Cycle2\Pg5>a

Enter Any Arithmetic Expression which can have operations Ad
dition, Subtraction, Multiplication, Divison, Modulus and Ro
und brackets:
5/10

Result=0

Entered arithmetic expression is Valid


C:\Users\malav\OneDrive\Documents\CDLab\Cycle2\Pg5>a

Enter Any Arithmetic Expression which can have operations Ad
dition, Subtraction, Multiplication, Divison, Modulus and Ro
und brackets:
5+

Entered arithmetic expression is Invalid
```