**PRACTICAL-12**

**AIM: Create Yacc and Lex specification files are used to generate a calculator which accepts, integer and float type arguments.**

**CODE:**

**Calc.l:**

%{

#include<stdio.h>

#include "y.tab.h"

extern float yylval;

int op = 0,i;

float a, b;

%}

%%

[0-9]+|([0-9]\*)"."([0-9]+)

{

yylval=atof(yytext);

return NUMBER; }

[\t] ;

. return yytext[0];

%%

main()

{

yylex();

}

int yywrap()

{

return 1;

}

**Calc.y:**

%{

#include<stdio.h>

int flag=0;

%}

%token NUMBER

%left '+' '-'

%left '\*' '/' '%'

%left '(' ')'

%%

ArithmeticExpression: E{

printf("\nResult=%f\n", $$);

return 0;

};

E:E'+'E {$$=$1+$3;}

|E'-'E {$$=$1-$3;}

|E'\*'E {$$=$1\*$3;}

|E'/'E {$$=$1/$3;}

|E'%'E {$$=$1%$3;}

|'('E')' {$$=$2;}

| NUMBER {$$=$1;}

;

%%

void main()

{

yyparse();

}

**OUTPUT**:

