**PRACTICAL-4**

**AIM:**

Implement a Calculator using LEX and YACC.

**IMPLEMENTATION:**

* lex <filename with .l extension>
* yacc <filename with .y extension>
* gcc <newly created .c file from yacc> -o <file name for exe file>
* <filename of exe file>

**PROGRAM CODE:**

**LEX FILE:**

DIGIT [0-9]

%option noyywrap

%%

{DIGIT} { yylval=atof(yytext); return NUM;}

\n|. {return yytext[0];}

**YACC FILE:**

%{

#include<ctype.h>

#include<stdio.h>

#define YYSTYPE double

%}

%token NUM

%left '+' '-'

%left '\*' '/'

%%

S : E '\n' { printf("Answer: %g \nEnter:\n", $1); }

;

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

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

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

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

| NUM

;

%%

#include "lex.yy.c"

int main()

{

printf("\nPARTH PATEL\n19DCS098\n");

printf("Enter the expression: ");

yyparse();

}

yyerror (char \* s)

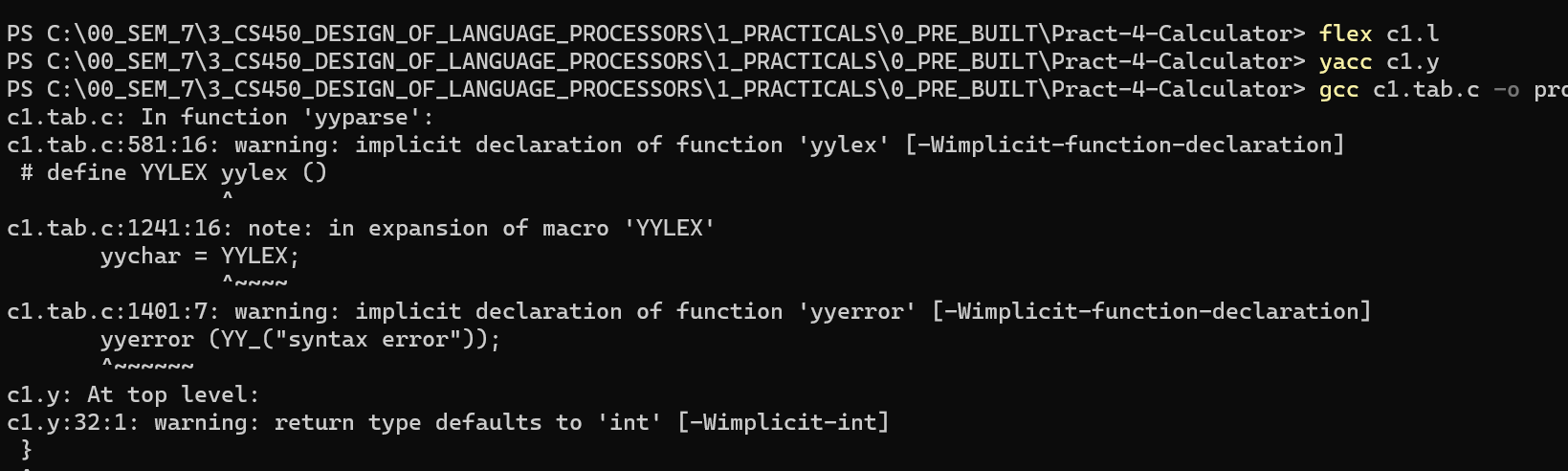
{

printf ("% s \n", s);

exit (1);

}

**OUTPUT:**

****

