**CD Practical 15:**

**Create Yacc and Lex specification files to recognizes arithmetic expressions involving +, -, \* and /**

Prac15\_L.l FILE

%{

#include<stdio.h>

#include"y.tab.h"

extern int yylval;

%}

%%

[0-9]+ {

yylval=atoi(yytext);

return NUM;

}

[\t] ;

\n return 0;

. return yytext[0];

%%

yywrap()

{

return(1);

}

Prac15\_Y.y FILE

%{

#include<stdio.h>

%}

%token NUM

%left '+' '-'

%left '\*' '/'

%left '(' ')'

%%

expr: e{

printf("result:%d\n",$$);

return 0;

}

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

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

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

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

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

| NUM {$$=$1;}

;

%%

main()

{

printf("\n enter the arithematic expression:\n");

yyparse();

printf("\nvalid expression\n");

}

yyerror()

{

printf("\n invalid expression\n");

exit(0);

}

**Program output:**

