CODE:

%{

#include<ctype.h>

#include<stdio.h>

int yylex();

void yyerror(const char \*str);

%}

%token DIGIT

%%

lines:lines expr '\n' {printf("%d\n",$2);}

|lines '\n'

|

|error '\n' {yyerror("re-enter previous line");yyerrok;}

;

expr:expr '+' term {$$=$1+$3;}

|expr '-' term {$$=$1-$3;}

|term

;

term:term '\*' factor {$$=$1\*$3;}

|term '/' factor {$$=$1/$3;}

|factor

;

factor:'('expr')' {$$=$2;}

|'-' factor {$$=-$2;}

|DIGIT

;

%%

//driver code

int yylex()

{

int c;

c=getchar();

if(isdigit(c)){

yylval=c-'0';

return DIGIT;

}

return c;

}

void main()

{

printf("\nEnter Any Arithmetic Expression which can have operations Addition,Multiplication Round brackets:\n");

yyparse();

}

void yyerror(const char \*str)

{

printf("Invalid Expression : %s\n\n",str);

}

Output:

