LAB8: Yacc for sample language.

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Code:

**calc.y**

%{

#include<stdio.h>

#include<math.h>

int yyerror();

%}

%union{

float f;

}

%token<f> NUM NEWLINE

%type<f> expr

%type<f> start

%left '+' '-'

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

%%

start: expr NEWLINE{

int answer=$1;

printf("Answer of given Expression: %d\n",answer);

return 0;

}

;

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

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

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

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

| NUM {$$=$1;}

;

%%

int yyerror(char \*message)

{

printf("YACC error: %s\n",message);

exit(1);

}

int main()

{

while(1){

printf("Enter the Expression: ");

yyparse();

}

}

**calc.l**

%{

#include<stdio.h>

#include"y.tab.h"

%}

integer [0-9]+

float ([0-9]+)[.][0-9]+

%%

{integer} { yylval.f=atof(yytext);

return NUM;

}

{float} { yylval.f=atof(yytext);

return NUM;

}

. return \*yytext;

[\n] return NEWLINE;

%%

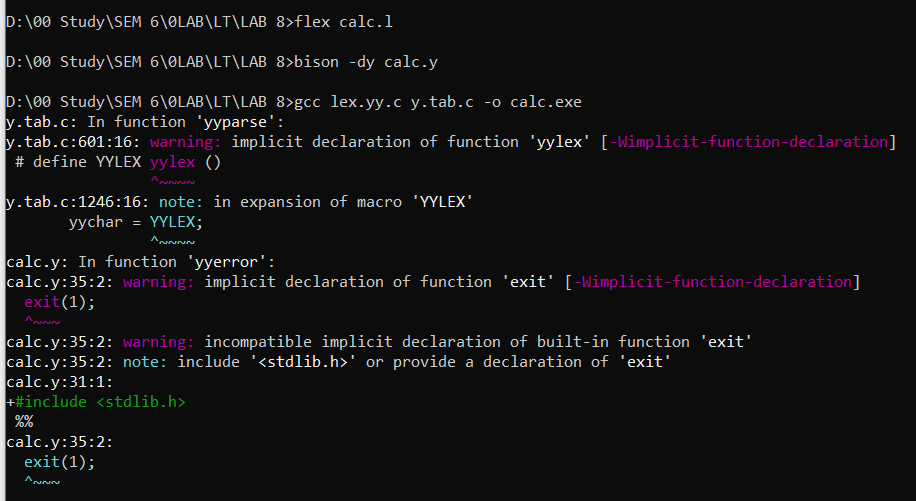
int yywrap()

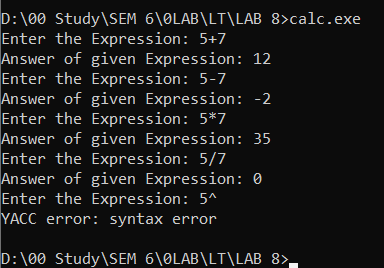
{

return 1;

}

Output:



****