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AIM - Implement a parser that recognizes the infix expression using YACC

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%{

#include<ctype.h>

#include<stdio.h>

#include<math.h>

#define YYSTYPE double

%}

%token NUMBER

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

| line '\n'

| /\*error '\n' { yyerror("Re-enter Last line");

yyerrork; }\*/

;

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

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

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

| expr'/'expr { if($3==0) printf("\n Divide by zero Error ");

else

$$=$1/$3;}

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

| '-'expr %prec UMINUS {$$=-$2;}

| NUMBER

;

%%

yylex()

{

int c;

while((c=getchar())!=' ')

{

if((c=='.') || ( isdigit(c) ))

{

ungetc(c,stdin);

scanf("%lf",&yylval);

return NUMBER;

}

return c;

}

}

yyerror()

{

printf("\n Error");

}

main()

{

yyparse();

}

/\*

OUTPUT

luciousfox@ubuntu:~$ yacc -vd calci1.y

conflicts: 20 shift/reduce

luciousfox@ubuntu:~$ cc y.tab.c

luciousfox@ubuntu:~$ ./a.out

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