**CODE**

%{

#include <stdio.h>

double a, b;

char op;

%}

%%

[0-9]+(\.[0-9]+)?[ \t]\*[\+\-\\*/][ \t]\*[0-9]+(\.[0-9]+)? {

if (sscanf(yytext, "%lf %c %lf", &a, &op, &b) != 3) {

sscanf(yytext, "%lf%c%lf", &a, &op, &b);

}

switch(op) {

case '+': printf("%g\n", a + b); break;

case '-': printf("%g\n", a - b); break;

case '\*': printf("%g\n", a \* b); break;

case '/':

if (b == 0) printf("Error: Division by zero\n");

else printf("%g\n", a / b);

break;

}

}

.|\n ;

%%

int yywrap(){ return 1; }

int main() {

printf("Enter expression (e.g. 12+5, 7\*8, 10/2): ");

yylex();

return 0;

}

**SCREENSHOT**

