%{

#include <math.h>

#include <stdio.h>

int lines = 0;

%}

%option noyywrap

NUMBER 0$|[-|+]?[1-9][0-9]\*

STRING \"[a-zA-Z0-9]\*\"

CONSTANT {NUMBER}|{STRING}

ID [a-zA-Z][a-zA-Z0-9]\*

%%

"if" {printf("Reserved word: %s\n", yytext);}

"while" {printf("Reserved word: %s\n", yytext);}

"integer" {printf("Reserved word: %s\n", yytext);}

"string" {printf("Reserved word: %s\n", yytext);}

"let" {printf("Reserved word: %s\n", yytext);}

"write" {printf("Reserved word: %s\n", yytext);}

"read" {printf("Reserved word: %s\n", yytext);}

":" {printf( "Separator: %s\n", yytext );}

";" {printf( "Separator: %s\n", yytext );}

"," {printf( "Separator: %s\n", yytext );}

"." {printf( "Separator: %s\n", yytext );}

"-"{NUMBER} {printf("An operator: -\nAn integer: %s\n", yytext + 1);}

"-" {printf("An operator: %s\n", yytext);}

"+"{NUMBER} {printf("An operator: +\nAn integer: %s\n", yytext + 1);}

"+" {printf("An operator: %s\n", yytext);}

"\*"{NUMBER} {printf("An operator: \*\nAn integer: %s\n", yytext + 1);}

"\*" {printf("An operator: %s\n", yytext);}

"/"{NUMBER} {printf("An operator: /\nAn integer: %s\n", yytext + 1);}

"/" {printf("An operator: %s\n", yytext);}

"="{NUMBER} {printf("An operator: =\nAn integer: %s\n", yytext + 1);}

"=" {printf("An operator: %s\n", yytext);}

"==" {printf( "Operator: %s\n", yytext );}

"(" {printf( "Separator: %s\n", yytext );}

")" {printf( "Separator: %s\n", yytext );}

"[" {printf( "Separator: %s\n", yytext );}

"]" {printf( "Separator: %s\n", yytext );}

"}" {printf( "Separator: %s\n", yytext );}

"{" {printf( "Separator: %s\n", yytext );}

"<" {printf( "Operator: %s\n", yytext );}

">" {printf( "Operator: %s\n", yytext );}

{ID} {printf( "Identifier: %s\n", yytext );}

{CONSTANT} {printf( "Constant: %s\n", yytext);}

[ \t]+ /\* elimina spatii \*/ {}

[\n]+ {lines++;}

[0][0-9]+ {printf("Illegal number at line %d\n", lines);}

[0-9]+[a-zA-Z][a-zA-Z0-9]\* {printf("Illegal identifier at line %d\n", lines);}

. {printf("Illegal symbol at line\n");}

%%