```
%{
#include <math.h>
#include <stdio.h>
int lines = 0;
%}
%option noyywrap
NUMBER
              0$|[-|+]?[1-9][0-9]*
            \"[a-zA-Z0-9]*\"
STRING
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 );}
```

%%