```
%{
#include <stdio.h>
%}

%option noyywrap

/* Patterns */
OPERATOR   (\+|\-|\*|\/|=|==|<|>|<=|>=|!=|&&|\|\||%)
IDENTIFIER  [A-Za-z_][A-Za-z0-9_]*
CONSTANT   [0-9]+(\.[0-9]+)?
COMMENT    (\/\/[^\n]*)|(\/\*([^*]|\*+[^*/])*\*+/)

%%

{OPERATOR}    { printf("%s is an operator\n", yytext); }
{IDENTIFIER}   { printf("%s is an identifier\n", yytext); }
{CONSTANT}    { printf("%s is a constant\n", yytext); }
{COMMENT}     { printf("%s is a comment\n", yytext); }
[ \t\r\n]+    { /* Ignore whitespace */ }
.         { printf("%s is not a recognized pattern\n", yytext); }

%%

int main(void)
{
    printf("Enter the expression:\n");
```

```
    yylex();

    return 0;

}
```