```
1   %{
2   #include <stdio.h>
3   %}
4   %option noyywrap
5   %%
6
7   [ \t]+    ;
8   [\n] {yylineno++;}
9   auto|case|char|const|continue|default|do|double|else|enum|extern|float|for|goto|if|
    int|long|register|return|short|signed|sizeof|static|struct|switch|typedef|union|
    unsigned|void|volatile|while {printf("%s\t\tKeyword\t\t\t%d\n",yytext, yylineno);}
10  [+-/*<>=^]      {printf("%s\t\tOperator\t\t%d\n", yytext, yylineno);}
11  [0-9]+     {printf("%s\t\tNumber\t\t%d\n", yytext, yylineno);}
12  main|stdio|h|printf     {printf("%s\t\tIdentifier\t\t%d\n", yytext, yylineno);}
13  [a-zA-Z]+   {printf("%s\t\tString\t\t\t%d\n", yytext, yylineno);}
14  [.,;:?!|&`~'\"]        {printf("%s\t\tPunctuation\t\t%d\n", yytext, yylineno);}
15  [\[({]   {printf("%s\t\tOpening Brackets\t%d\n", yytext, yylineno);}
16  [)}\]]   {printf("%s\t\tClosing Brackets\t%d\n", yytext, yylineno);}
17  [.#] {printf("%s\t\tSpecial Symbols\t\t%d\n", yytext, yylineno);}
18  .            {printf("%s\t\tInvalid\t\t%d\n", yytext, yylineno);}
19
20  %%
21
22  int main() {
23      yyin = fopen("pgm2.txt", "r");
24      printf("Lexeme\t\tToken\t\tLine No.\n");
25      printf("------------------------------------------\n");
26      yylex();
27      fclose(yyin);
28      return 0;
29  }
30
```