# Practical-2

%{

#include <stdio.h>

#include <string.h>

int lc = 0, sc = 0, wc = 0, ch = 0;

int kw = 0, idf = 0, cm = 0;

char \*keywords[] = {

"auto", "break", "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"

};

int isKeyword(char \*text) {

for (int i = 0; i < sizeof(keywords) / sizeof(keywords[0]); i++) {

if (strcmp(text, keywords[i]) == 0)

return 1;

}

return 0;

}

%}

%%

"//".\* { cm++; ch += yyleng; }

"/\*"([^\*]\*|\\*+[^\*/])\*"\*""/" { cm++; ch += yyleng; }

[\n] { lc++; ch++; }

[ \t] { sc++; ch++; }

[a-zA-Z\_][a-zA-Z0-9\_]\* {

wc++;

ch += yyleng;

if (isKeyword(yytext)) kw++;

else idf++;

}

. { ch++; }

%%

int yywrap() {

return 1;

}

int main() {

printf("Enter your input (press Ctrl+D to finish):\n");

yylex();

printf("\n--- Token Analysis ---\n");

printf("Lines : %d\n", lc);

printf("Spaces/Tabs : %d\n", sc);

printf("Words : %d\n", wc);

printf("Characters : %d\n", ch);

printf("Keywords : %d\n", kw);

printf("Identifiers : %d\n", idf);

printf("Comments : %d\n", cm);

return 0;

}



