ANTRIKSH SHARMA 20070122021

CC LAB 02 | Lex Program

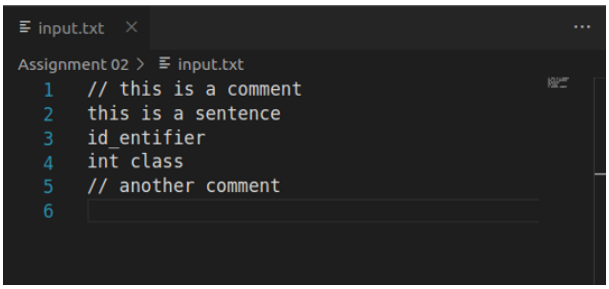
Aim: Count the number of comments, keywords, identifiers, words, lines and spaces from input file.

Implementation:

```
%option noyywrap
%{
#include <stdio.h>
int comments = 0;
int keywords = 0;
int identifiers = 0;
int words = 0;
int lines = 0;
int spaces = 0;
%}

%%

"//"(.*[ \t]*.*)* { comments = comments + 1; }

"if" |
"else" |
"int" |
"class" { keywords = keywords + 1; }

^[a-zA-Z][a-zA-Z]* {words = words + 1;}
^[a-zA-Z][a-zA-Z0-9_]* {identifiers = identifiers + 1; }
[\n] { lines = lines +1; }
[ \t] { spaces = spaces + 1;}

%%

int main(int argc, char *argv[])
{
if (argc==2) {
yyin=fopen(argv[1],"r");
}
else {
printf("\nEnter the input:\n");
yyin=stdin;
}
yylex();
```

```
printf("\n\nComments Encountered: %d", comments);
printf("\nKeywords Encountered: %d", keywords);
printf("\nIdentifiers Encountered: %d", identifiers);
printf("\nWords Encountered: %d", words);
printf("\nSpaces Encountered: %d", spaces);
printf("\nLines Encountered: %d", lines);
printf("\n");
return 0;
}
```

Input File



Output: