

**Compiler Construction Lab**

**Practical 2**

**Submitted To:**

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VIIth sem , C

**PRACTICAL 2**

**AIM - Count the number of comments, keywords, identifiers, words, lines and spaces from the input file.**

| %{  #include<stdio.h>  #include<string.h>  int lc = 0, sc = 0, wc = 0, ch = 0;  int kw = 0, id = 0, cm = 0;  char \*keywords[] = {  "int", "float", "return", "if", "else", "for", "while", "char", "double", "void", NULL  };  int is\_keyword(char \*word) {  for (int i = 0; keywords[i]; i++) {  if (strcmp(word, keywords[i]) == 0)  return 1;  }  return 0;  }  %}  %%  "//".\* { cm++; ch+=yyleng; } // Single-line comment  "/\*"([^\*]|\\*+[^\*/])\*\\*+"/" { cm++; ch+=yyleng; } // Multi-line comment  [a-zA-Z\_][a-zA-Z0-9\_]\* {  if (is\_keyword(yytext))  kw++;  else  id++;  wc++;  ch += yyleng;  }  [ \t]+ { sc += yyleng; ch += yyleng; }  \n { lc++; ch++; }  . { ch++; } // Any other character  %%  int yywrap() {  return 1;  }  int main() {  printf("Enter the input:\n");  yylex();  printf("Lines : %d\n", lc);  printf("Spaces : %d\n", sc);  printf("Characters: %d\n", ch);  printf("Words : %d\n", wc);  printf("Identifiers: %d\n", id);  printf("Keywords : %d\n", kw);  printf("Comments : %d\n", cm);  return 0;  } |
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| suhami@LAPTOP-OTTF73G6:~/CC$ lex file\_2\_084.l  suhami@LAPTOP-OTTF73G6:~/CC$ cc lex.yy.c -ll  suhami@LAPTOP-OTTF73G6:~/CC$ ./a.out  Enter the input:  I am Suhani Gahukar  /\*SIT Nagpur  \*/  //4th year  if it rained today  else i need to go to collgege  NULL  Lines : 7  Spaces : 12  Characters: 102  Words : 16  Identifiers: 14  Keywords : 2  Comments : 2 |
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