28. SEPARATE TOKENS

CODE:

digit [0-9]

letter [A-Za-z]

%{

int count\_id,count\_key;

%}

%%

(stdio.h|conio.h) { printf("%s is a standard library\n",yytext); }

(include|void|main|printf|int) { printf("%s is a keyword\n",yytext); count\_key++; }

{letter}({letter}|{digit})\* { printf("%s is a identifier\n", yytext); count\_id++; }

{digit}+ { printf("%s is a number\n", yytext); }

\"(\\.|[^"\\])\*\" { printf("%s is a string literal\n", yytext); }

.|\n { }

%%

int yywrap(void) {

return 1;

}

int main(int argc, char \*argv[]) {

yyin = fopen(argv[1], "r");

yylex();

printf("number of identifiers = %d\n", count\_id);

printf("number of keywords = %d\n", count\_key);

fclose(yyin);

}

INPUT SOURCE CODE:

#include<stdio.h>

void main()

{

int a,b,c = 30;

printf("hello");

}

OUTPUT:

C:\Users\prith>cd desktop

C:\Users\prith\Desktop>cd flex

C:\Users\prith\Desktop\FLEX>flex seperate\_tokens.l

C:\Users\prith\Desktop\FLEX>gcc lex.yy.c

C:\Users\prith\Desktop\FLEX>a.exe sample.c

include is a keyword

stdio.h is a standard library

void is a keyword

main is a keyword

int is a keyword

a is a identifier

b is a identifier

c is a identifier

30 is a number

printf is a keyword

"hello" is a string literal

number of identifiers = 3

number of keywords = 5



