Code:

import re  
keyword = ['break','case','char','const','countinue','deafult','do','int','else','enum','extern','float','for','goto','if','long','register','return','short','signed','sizeof','static','switch','typedef','union','unsigned','void','volatile','while','range']  
built\_in\_functions = ['clrscr()','printf','scanf(','getch()','main()']  
header\_file\_func = ['<stdio.h>','<conio.h>','<stdlib.h>']  
operators = ['+','-','','/','%','==','!=','>','<','>=','<=','&&','||','!','&','|','^','~','>>','<<','=','+=','-=','=']  
specialsymbol = ['@','#','$','\_','!']  
separator = [',',':',';',"\n",'\t','{','}','(',')','[',']']  
file = open('cprogram.txt','r+')  
contents = file.read()  
splitCode = contents.split() #split program in word based on space  
length = len(splitCode) # count the number of word in program  
k = 0  
bi = 0  
h = 0  
o = 0  
ss = 0  
s = 0  
for i in range(0,length):  
 if splitCode[i] in keyword:  
 print("Keyword -->",splitCode[i])  
 k=k+1  
 continue  
 if splitCode[i] in operators:  
 print("Operators --> ",splitCode[i])  
 o=o+1  
 continue  
 if splitCode[i] in specialsymbol:  
 print("Special Operator -->",splitCode[i])  
 ss=ss+1  
 continue  
 if splitCode[i] in header\_file\_func:  
 print("Header File Functions -->",splitCode[i])  
 h=h+1  
 continue  
 if splitCode[i] in built\_in\_functions:  
 print("Built\_in Function -->",splitCode[i])  
 bi=bi+1  
 continue  
 if splitCode[i] in separator:  
 print("seperator -->",splitCode[i])  
 s=s+1  
 continue  
print("Number of seperator: ", s)  
print("Number of built in function: ", bi)  
print("Number of header function: ", h)

Input:

#include <stdio.h>

int main() {

int a=5;

int b=2;

int c = a+b;

printf ("Hello, World! ");

return c;

}

Output: 