**Program**

#include<stdio.h>  
#include<string.h>  
#include<fcntl.h>  
int charcmp (char c)  
{  
 int i,limit=7;  
 char a[100]={'+','-','\*','/','%','=',','};  
 for(i=0;i<limit;i++)  
 {  
 if(c == a[i])  
 return 1;  
 }  
 return 0;  
}  
int main()  
{  
 FILE \*fp, \*r;  
 int check = 0;  
 int count = 0,locastr=0,ctr=0, i, j,op=0,de=0;  
 char c,string[100][100], operatorarr[20], compare[3][10] = {"void","int","main"}, delimiter[10];  
 fp = fopen("program.txt", "r");  
 if (fp == NULL)  
 {  
 printf("Could not open file");  
 return 0;  
 }  
 for (c = getc(fp); c != EOF; c = getc(fp))  
 {  
 if( c == '\n' || c == ' ' || c == ';' || c == '}' || c == '{' || c == '(' || c == ')')  
 {  
 //string[locastr][ctr]=c;  
 if(ctr > 0)  
 {  
 locastr++;  
 ctr=0;  
 }  
 if(c == ';' || c == '}' || c == '{' || c == '(' || c == ')')  
 {  
 delimiter[de++]=c;  
 }  
  
  
 }  
 else if( charcmp(c) != 0)  
 {  
 operatorarr[op++]=c;  
 //string[locastr][ctr]='\0';  
 locastr++;  
 ctr=0;  
 }  
 else if( c == '\0'){  
  
 }  
 else  
 {  
 string[locastr][ctr]=c;  
 //printf("%c",string[locastr][ctr]);  
 ctr++;  
 }  
  
 }  
 for(i=0;i<locastr;i++)  
 {  
 check = 0;  
 for(j=0;j<3;j++)  
 {  
 if(strcmp(string[i],compare[j]) == 0)  
 check = 1;  
 }  
 //printf("key or identifier %s\n",string[i]);  
 if( check == 1 )  
 {  
 printf("key %s\n",string[i]);  
 }  
 else  
 {  
 printf("identifier %s\n",string[i]);  
 }  
 }  
 for(i=0;i<op;i++)  
 {  
 printf("operator %c\n",operatorarr[i]);  
 }  
  
 for(i=0;i<de;i++)  
 {  
 printf("delimiter %c\n",delimiter[i]);  
 }  
  
 // Close the file  
 fclose(fp);  
 printf("The file has %d lines\n ", count);  
  
 return 0;  
  
}

**Test File**

#include<stdio.h>  
void main()  
{  
int a,b,c;  
c=a+b;  
}

**Output**

