**TOKEN PARSER**

**CODE:**

#include<stdio.h>

#include<conio.h>

#include<string.h>

int main()

{

char id[10],

key[][50]={{"int"},{"float"},{"double"},{"char"},

{"if"},{"do"},{"for"},{"while"},{"else"}},

sep[50]={'{','}','(',')',';',','},

op[50]={'-','+','\*','/','<','>','='};

char ch[10]={0};

int i,j,k,parsed,keylen;

FILE \*fp1,\*fp2;

keylen=sizeof(key)/sizeof(key[0]);

printf("//This program needs space & case sensitive input !! \nParsing tokens...");

fp1=fopen("tokenFile.txt","r");

while(fscanf(fp1,"%s",ch)!=EOF)

{

parsed=0;

ch[strlen(ch)]=0;

//printf("\n%s",ch);

for(i=0;i<strlen(op)&&parsed==0;i++)

{

if(strstr(op,ch)) //strstr: finds ist occurance of str2 in str1

{

printf("\n%c :Operator",ch[0]);

parsed=1;

break;

}

}

for(i=0;i<keylen&&parsed==0;i++)

{

if(strstr(ch,key[i]))

{

printf("\n%s :Keyword",ch);

parsed=1;

break;

}

}

for(i=0;i<strlen(sep);i++)

{

if(strstr(sep,ch))

{

printf("\n%c :Separator",ch[0]);

parsed=1;

break;

}

}

for(i=0;isdigit(ch[0])&&parsed==0;i++)

{

printf("\n%s :Constant",ch);

parsed=1;

break;

}

if(parsed==0)

{

printf("\n%s :Identifier",ch);

parsed=1;

}

}

fclose(fp1);

return 0;

}

**FILE CONTENTS:**

int i ;

float a , b , c ;

for ( i = 0 ; i < n ; i + + )

{

do {

c = a \* b ;

} while ( a > b )

}

**OUTPUT:**

//This program needs space & case sensitive input !!

Parsing tokens...

int :Keyword

i :Identifier

; :Separator

float :Keyword

a :Identifier

, :Separator

b :Identifier

, :Separator

c :Identifier

; :Separator

for :Keyword

( :Separator

i :Identifier

= :Operator

0 :Constant

; :Separator

i :Identifier

< :Operator

n :Identifier

; :Separator

i :Identifier

+ :Operator

+ :Operator

) :Separator

{ :Separator

do :Keyword

{ :Separator

c :Identifier

= :Operator

a :Identifier

\* :Operator

b :Identifier

; :Separator

} :Separator

while :Keyword

( :Separator

a :Identifier

> :Operator

b :Identifier

) :Separator

} :Separator