#include <stdio.h>

#include <stdlib.h>

FILE \*input, \*output;

void chooseFail(void)

{

char outputDir[256];

char inputDir[256];

int i, isItValid = 1;

do{

printf("Vuvedete input faila (C programa koqto SE KOMPILIRA USPE6NO!!!!!!): ");

fflush(stdin);

fgets(inputDir, 256, stdin);

for(i = 0; inputDir[i] != '\0'; i++)

{

if(inputDir[i] == ' ' || inputDir[i] == '@' || inputDir[i] == '$' || inputDir[i] == '!' || inputDir[i] == '#')

{

isItValid = 0;

}

}

if(isItValid == 0)

{

isItValid = 1;

printf("Sudurja specialni simvoli ili intervali!\n\n");

}

else

{

for(i = 0; inputDir[i] != '\n'; i++);

inputDir[i] = '\0';

input = fopen(inputDir, "r");

if(input==NULL)

{

printf("Gre6ka pri otvarqne na faila!\n");

}

}

}while(input == NULL);

printf("Enter output filelocation: ");

scanf("%s",&outputDir);

output=fopen(outputDir,"w+");

}

void func2(void)

{

int currentChar, redoveCounter = 0;

rewind(input);

while((currentChar=fgetc(input))!=EOF)

{

if(currentChar == '\n')

{

redoveCounter++;

}

}

redoveCounter++;

printf("Redovete v programata sa %d.\n", redoveCounter);

fprintf(output, "Redovete v programata sa %d.\n", redoveCounter);

}

void func3(void)

{

int currentChar;

rewind(input);

while((currentChar=fgetc(input))!=EOF)

{

if(currentChar == '\v' || currentChar == '\t')

{

fprintf(output," ");

}

else

{

fprintf(output, "%c", currentChar);

}

}

fprintf(output,"\n");

}

void func4(void)

{

int comentTextCounter = 0;

int unComentTextCounter = 0;

int isEOFinComent = 0;

float result;

int currentChar;

int check1 = 0, check2 = 0, check3 = 0;

rewind(input);

while((currentChar=fgetc(input))!=EOF)

{

if(currentChar=='\"')

{

unComentTextCounter++;

for(;;)

{

currentChar=fgetc(input);

if(currentChar=='\\')

{

unComentTextCounter++;

currentChar=fgetc(input);

if(currentChar=='\"')

{

unComentTextCounter++;

continue;

}

else

{

unComentTextCounter++;

}

}

else if(currentChar=='\"')

{

unComentTextCounter++;

break;

}

else if(currentChar=='\n')

{

unComentTextCounter++;

break;

}

else

{

unComentTextCounter++;

}

}

continue;

}

if( (check1 == 1) && (currentChar == '\*'))

{

comentTextCounter += 2;

unComentTextCounter--;

for(;;)

{

currentChar=fgetc(input);

if(currentChar=='\*')

{

comentTextCounter++;

check3=1;

continue;

}

if((check3==1) && (currentChar=='/'))

{

comentTextCounter++;

check1 = 0;

check2 = 0;

check3 = 0;

break;

}

else

{

check3=0;

}

if(currentChar==EOF)

{

break;

}

comentTextCounter++;

}

continue;

}

else

{

check1 = 0;

}

if( (check2 == 1) && (currentChar == '/'))

{

comentTextCounter += 2;

unComentTextCounter--;

check1 = 0;

check2 = 0;

do{

currentChar=fgetc(input);

comentTextCounter++;

if(currentChar==EOF)

{

break;

isEOFinComent = 1;

}

}while(currentChar!='\n');

if(currentChar==EOF)

{

break;

}

else

{

continue;

}

}

else

{

check2 = 0;

}

if(currentChar == '/')

{

check1 = 1;

check2 = 1;

}

unComentTextCounter++;

}

if(isEOFinComent == 0)

{

unComentTextCounter++; // add EOF

}

result = (float)comentTextCounter/(float)(unComentTextCounter + comentTextCounter);

printf("Broq na simvolite v komentarite kum ob6tiq broi na simvolite e %f \n", result);

fprintf(output, "Broq na simvolite v komentarite kum ob6tiq broi na simvolite e %f \n", result);

}

int main(void)

{

int choice, firstCheck = 0;

do{

system("cls");

printf("1. Izbor na fail za obrabotka i suzdavane na izhoden fail.\n");

printf("2. Broi redove v programata.\n");

printf("3. Zamestva vsi4ki simvoli za tabluaciq s intervali.\n");

printf("4. Procentrno otno6enie komentarniq tekst sprqmo celiq tekst(vkl /\* \*/ i // ).\n");

printf("0. Izxod.\n");

printf("Izberete opciq ot slednoto menu: ");

scanf("%d", &choice);

switch(choice)

{

case 1:

chooseFail();

firstCheck = 1;

break;

case 2:

if(firstCheck == 1)

{

func2();

}

else

{

printf("Purvo prez opciq 1!!\n");

}

system("Pause");

break;

case 3:

if(firstCheck == 1)

{

func3();

}

else

{

printf("Purvo prez opciq 1!!\n");

}

system("Pause");

break;

case 4:

if(firstCheck == 1)

{

func4();

}

else

{

printf("Purvo prez opciq 1!!\n");

}

system("Pause");

break;

case 0:

break;

default:

printf("Nevalidna opciq\n");

system("Pause");

break;

}

}while(choice != 0);

system("Pause");

}