#include <stdio.h>

#include <stdlib.h>

FILE \*input, \*output;

void chooseFail(void)

{

char outputDir[256];

char inputDir[256];

do{

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

scanf("%s", inputDir);

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, maxRow, maxSymbols, currentRow = 1, symbols = 0;

rewind(input);

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

{

if(currentChar == '\n')

{

if(currentRow == 1)

{

maxSymbols = symbols;

maxRow = 1;

}

else

{

if(symbols > maxSymbols)

{

maxSymbols = symbols;

maxRow = currentRow;

}

}

currentRow++;

symbols = 0;

}

else

{

symbols++;

}

}

if(symbols > maxSymbols) // check last row

{

maxSymbols = symbols;

maxRow = currentRow;

}

printf("Nai-dulgiq red e %d.\n", maxRow);

fprintf(output,"Nai-dulgiq red e %d.\n", maxRow);

}

void func3(void)

{

int simvolCounter = 0, redoveCounter = 0, currentChar;

rewind(input);

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

{

simvolCounter++;

if(currentChar == '\n')

{

redoveCounter++;

}

}

simvolCounter++; // EOF

redoveCounter++; // lastrow

printf("Sredniq broi simvoli na red e %f.\n", (float)simvolCounter/(float)redoveCounter);

fprintf(output, "Sredniq broi simvoli na red e %f.\n", (float)simvolCounter/(float)redoveCounter);

}

void func4(void)

{

int currentRow = 1;

int currentChar;

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

printf("Redovete sudurja6ti komentar sa: ");

fprintf(output, "Redovete sudurja6ti komentar sa: ");

rewind(input);

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

{

if(currentChar == '\n')

{

currentRow++;

}

if(currentChar=='\"')

{

for(;;)

{

currentChar=fgetc(input);

if(currentChar=='\\')

{

currentChar=fgetc(input);

if(currentChar=='\"')

{

continue;

}

}

else if(currentChar=='\"')

{

break;

}

else if(currentChar=='\n')

{

currentRow++;

break;

}

}

continue;

}

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

{

printf(" %d", currentRow);

fprintf(output, " %d", currentRow);

for(;;)

{

currentChar=fgetc(input);

if(currentChar=='\*')

{

check3=1;

continue;

}

if(currentChar == '\n')

{

currentRow++;

printf(" %d", currentRow);

fprintf(output, " %d", currentRow);

}

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

{

check1 = 0;

check2 = 0;

check3 = 0;

break;

}

else

{

check3=0;

}

if(currentChar==EOF)

{

break;

}

}

}

else

{

check1 = 0;

}

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

{

printf(" %d", currentRow);

fprintf(output, " %d", currentRow);

check1 = 0;

check2 = 0;

do{

currentChar=fgetc(input);

if(currentChar==EOF)

{

break;

}

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

if(currentChar==EOF)

{

break;

}

else

{

currentRow++;

continue;

}

}

else

{

check2 = 0;

}

if(currentChar == '/')

{

check1 = 1;

check2 = 1;

}

}

printf("\n");

fprintf(output, "\n");

}

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. Namira nai dulgiq red.\n");

printf("3. Namira sreden broi simvoli na red.\n");

printf("4. Nomerirane na komentarnite redove.\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");

}