Text

Description automatically generated

/\*gavin skehan

21440824

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#include <stdio.h> // libary's

#include <stdlib.h>

#include <string.h>

#include <ctype.h>

void main() {

FILE\* fptr; // file pointer

fopen\_s(&fptr, "C:\\Users\\skeha\\OneDrive\\Documents\\irishtimes.txt", "r"); // open file

if (fptr == NULL) { // if there is no file

puts("Error Opening File \n Exiting ........");

return;

}

else {

for (int i = 0; i < 5; i++) {

fprintf(fptr, "Line %d of text.\n", (i + 1));

}

}

int ch = 0; // variables

int words = 0;

int sentences = 0;

int syllables = 0;

int i = 0;

while ((ch = fgetc(fptr)) != EOF) { // while it is not the End of File

i++;

// count words

if (ch == ' ' || ch == '\t' || ch == '\n' || ch == '\0') {

words++;

}

// count sentences

if (ch == '.' || ch == ';' || ch == ':' || ch == '!' || ch == '?') {

sentences++;

}

// count syllables

if (ch == 'a' || ch == 'e' || ch == 'i' || ch == 'o' || ch == 'u' || ch == 'A' || ch == 'E' || ch == 'I' || ch == 'O' || ch == 'U') {

syllables++;

}

}

// flesch index

float Flesch = (206.835 - 84.6 \* (double)syllables / (double)words - 1.015 \* (double)words / (double)sentences);

printf("Number of words: %d\n", words);

printf("Number of Sentences: %d\n", sentences);

printf("Number of syllables: %d\n", syllables);

printf("Number of index: %f\n", Flesch);

fclose(fptr); // close the file

}