Word counter

```c
#include <stdio.h>
#include <stdlib.h>

#define MAX_FILE_NAME 100

int main() {
    FILE *fp;
    char filename[MAX_FILE_NAME];
    char ch;
    int characters = 0, words = 0, lines = 0;

    // Ask user for file name
    printf("Enter the name of the file to analyze: ");
    scanf("%s", filename);

    // Open file
    fp = fopen(filename, "r");

    // Check if file exists
    if (fp == NULL) {
        printf("Could not open file %s\n", filename);
        return 1;
    }

    // Read file character by character
    while ((ch = fgetc(fp)) != EOF) {
        characters++;

        // Count words
        if (ch == ' ' || ch == '\t' || ch == '\n' || ch == '\r' || ch == '\v' || ch == '\f') {
            words++;
        }

        // Count lines
        if (ch == '\n') {
            lines++;
        }
    }

    // Increment word count for the last word
    if (characters > 0) {
        words++;
    }

    // Increment line count if file doesn't end with a newline
    if (characters > 0 && ch != '\n') {
```

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        lines++;
    }

    // Close file
    fclose(fp);

    // Display results
    printf("\nAnalysis of file: %s\n", filename);
    printf("Total characters: %d\n", characters);
    printf("Total words: %d\n", words);
    printf("Total lines: %d\n", lines);

    return 0;
}
```