#include <stdio.h>

#include <stdlib.h>

#include <string.h>

#include <ctype.h>

int main(int argc, char \*argv[]) {

if (argc != 3) {

printf("Usage: %s [-c|-w] [input\_file\_name]\n", argv[0]);

return 1;

}

char \*filename = argv[2];

FILE \*file = fopen(filename, "r");

if (!file) {

perror("Error opening file");

return 1;

}

int count\_chars = 0;

int count\_words = 0;

int is\_word = 0;

char ch;

if (strcmp(argv[1], "-c") == 0) {

// Character count

while ((ch = fgetc(file)) != EOF) {

count\_chars++;

}

printf("Character count: %d\n", count\_chars);

} else if (strcmp(argv[1], "-w") == 0) {

// Word count

while ((ch = fgetc(file)) != EOF) {

if (isspace(ch) || ch == ',') {

if (is\_word) {

count\_words++;

is\_word = 0;

}

} else if (!isspace(ch) && ch != ',') {

is\_word = 1;

}

}

// Check for the last word if it is not followed by space or comma

if (is\_word) {

count\_words++;

}

printf("Word count: %d\n", count\_words);

} else {

printf("Invalid parameter. Use -c for character count or -w for word count.\n");

}

fclose(file);

return 0;

}