

# CS211 Lab Assignment - 8

Assigned: 11/25/2019

Due: 12/04/2019 (Midnight)

Write a C++ program that counts the number of characters in the file “file.txt”. Your code should load the provided file “file.txt”. You will need to place this file “file.txt” in the same directory as your source.cpp file.

You do not need to count the whitespace characters. Make sure your output matches the formatting as shown in the expected output below.

Please properly comment your code before submission.

Name your source file as **fileLength\_WSUID.cpp**. For example, if your user ID is A999B999 name your file as **fileLength\_A999B999.cpp**.

## Expected Operation:

file.txt Contents:

Hello world, how are you?  
London bridge

Program Output:

Number of characters: 33

## Hint:

- Open the file “file.txt” as an input file stream *ifstream*
- Read the file character by character, and keep count of the number of characters seen so far
- `char c; ifs >> c;` Loads the characters from the file, while ignoring whitespaces.
  - This is fine
- Keep reading from the file until `ifs.eof()` returns a true. Where `ifs` is your file stream object. You can have other variable names
- `ifs.eof()` returning true indicates that the end of the file has been reached. The number of characters seen so far is the length of your file in bytes
- However, you might notice that using `eof()` to compute the length of your file results in a size of an extra byte. Both ways are fine.
  - Instead of
    - `char c;`
    - `while(ifs.eof() != true) { ifs >> c; ... }`
  - You could also try the following, which would give you the correct count of characters
    - `char c;`
    - `while(ifs >> c) { ... }`