CSCD 240 Lab9

File IO and Sorting

**Rules:** Your code must use C Language**. If your program shows a compilation error or a segmentation fault on cslinux**, you get a zero credit for this assignment. You have to use gcc compiler. If you turned in a wrong file, or a corrupted file or a file not readable, you get a zero. **So please make sure your program works properly on the cslinux machine.**

**Problem Description:**

I have provide a **lab9.c,** wherea main() function has been set up. Please do not change main() function and the signature of the provided functions. But you are free to add more function definitions in lab9.c file.

You have to write two following functions that are called in the main(). **The descriptions of the functions, regarding parameters, what to do and how to implement are provided as comments in the source code. PLEASE read these specifications first.**

The first function reads in a **provided input file input.txt** and create an output file **outFile1**.

int processTextFile(char \* inputFileName, char \* outputFileName);

The second function reads in the **outFile1** (created by the previous function call) and create an output file **outFile2**.

int sortLines(char \* inputFileName, char \* outputFileName);

**Submission:**

1. Your completed c file as lab9.c, as well as the input file(named as input.txt) and two output files(outFile1 and outFile2).
2. A simple makefile compiles your code into executable lab9.
3. Run your program against valgrind and include a screenshot of the valgrind report. Also please make sure there is no memory error or memory leak in the report.
4. Zip up all your source files, input and output files, the valgrind report and the makefile above into a zip file, name it using our naming convention. **Please submit your single zip file on EWU Canvas by following CSCD240-01 Course** 🡪**Assignments**🡪**lab9**🡪 **Submit Assignment to upload your single zip file.**

**Test Cases:**

A **provided** input file **input.txt** contains the following contents.

good morning hello 34 127

ann 20 45

10 11

fun program and you find the same 90 120

news paper said that 56 11

how do you like 20 5

line number 90 34

Your outFile1 is supposed to contain the following contents, if everything is correct.

good morning hello 161

ann 65

21

fun program and you find the same 210

news paper said that 67

how do you like 25

line number 124

Your outFile2 is supposed to contain the following contents, if everything is correct.

21

how do you like 25

ann 65

news paper said that 67

line number 124

good morning hello 161

fun program and you find the same 210