

CS116 – Lab 7

Due Date: November 9

Purpose: Instead of typing in the input in the console or reading the output in the console, it is often desirable to have that information contained in files that we can read and/or write.

Knowledge: This lab will help you master the following content knowledge:

- How to read and write to a file

Task: Before starting this lab, you should have read Chapter 11 in your text. Follow the steps in this lab carefully and complete the assignments.

Assignment 1:

Create a function `find(sourcefile,targetfile,key)` which reads each line from the sourcefile, line-by-line. If the line contains a match with the keyword, it writes to the targetfile the line number in which it occurs, followed by the line containing the keyword. The line containing the keyword, however, should be changed so that the keyword is now all uppercase letters to highlight where it appears in the line.

Criteria For Success: You can test your function on the input file `gettysburg.txt` that is provided for you. Remember that you will want to use an entire filepath for your sourcefile and targetfile like `"/Users/jzimmer/Desktop/gettysburg.txt"`. Here is what the contents of your output file should look like with the keyword "for":

```
1: Four score and seven years ago our fathers brought FOrth on this
7: that field as a final resting-place FOR those who here gave their
14: FORget what they did here. It is for us the living rather to be
16: have thus far so nobly advanced. It is rather FOR us to be here
17: dedicated to the great task remaining beFORe us--that from these
18: honored dead we take increased devotion to that cause FOR which
22: government of the people, by the people, FOR the people shall
```

Submit your file containing your function. Please indicate both partner names in your submission file.